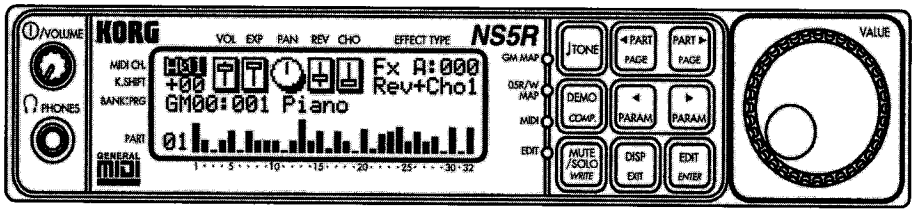
# NS5R

## AI² SYNTHESIS MODULE

GENERAL MIDI INSTRUMENT




# Owner's Manual

AI² Synthesis System

KORG

Ⓔ ③

# Introduction

## Main features of the NS5R

### High-quality sound with ai-squared synthesis system

The NS5R features the ai-squared synthesis system with all-digital processing. From the high-capacity 12 Mbyte tone generator to the filter, amplifier, and effects, all processing is performed in the digital domain, guaranteeing superb sound.

Ai-squared synthesis is a proprietary Korg tone generator system utilizing cutting-edge PCM technology. This system of tone generation has already received acclaim for its implementation in the Korg 01/W series, X2/X3/X5 and i2/i3 instruments, and is now featured on the NS5R, providing unlimited sonic possibilities with audio quality that exceeds that of a compact disk.

### A wide variety of multisamples for infinite variations in sound

The NS5R contains audio waveforms (referred to as "multisamples") which take advantage of today's PCM technology. These provide realistic reproductions of a variety of acoustic instruments, from piano, guitar, and trumpet to drums and percussion. A wide selection of synth sound and sound effect multisamples is also provided, allowing you the freedom to create virtually any type of sound.

The built-in multisamples are not simply played back as they are, but pass through powerful VDF (filter) and VDA (amplifier) sections to become truly playable musical instrument sounds. Keyboard dynamics can be used to add expression, and MIDI modulation messages can adjust brightness or vibrato etc., for a rich assortment of performance possibilities.

### Multi-timbral tone generator compatible with multiple formats

The NS5R is not only compatible with GM system level 1, but is also able to effortlessly playback musical data in other formats such as XG and GS. This makes it possible to continue utilizing the vast amount of musical data that is already available in these formats.

Furthermore, each Part can use not only preset programs (as on other tone generator modules), but also user programs and user combinations which can be freely assigned to create your very own sound.

### Maximum 64 voice polyphony easily handles even large-scale ensembles

The NS5R has a maximum polyphony of 64 notes, providing plenty of power to handle even complex ensembles or fully orchestrated music. In particular, this can be taken advantage by using a Combination (a set containing multiple program sounds) or in Multi mode.

A generous number of voices are a necessity for piano performances which use the damper pedal and multi-part ensembles, but the NS5R can meet all such needs without interrupting the notes.

### 1177 different programs in internal memory

Internal ROM contains a total of 1049 different sound programs, including sounds compatible with the Korg X5DR ai-squared synthesis system, and sounds compatible with GM (General MIDI system level 1). Internal RAM can accommodate 128 user programs, providing a vast array of sounds to select from.

On the NS5R, "Programs" are the most basic level of sound data that you can select and play. The built-in programs can be selected and played individually, or you can bring two or more programs together in "Combinations" for even greater possibilities.

## Combinations allow programs to be freely combined

Combinations allow you to freely combine programs together for performance. Internal ROM contains 384 combinations, and RAM can accommodate 128 more. Up to 8 programs can be assigned to a combination, and you can make key window or velocity window settings to layer or split sounds across the keyboard.

Since combinations allow you to play two or programs at the same time, they are especially suitable for live performances. You can bring together various programs to create layers, splits, and velocity switched effects.

## Drum kits that support a diversity of rhythm performances

The NS5R contains 286 superbly usable drum sounds, including percussion instruments etc. You can create two drum kits, each consisting of a freely-specified mapping of drum sounds to each note of the keyboard. 37 different ROM drum kits are also provided.

These drum kits provide the rhythmic foundation for your music. Since a different drum sound can be mapped to each note, complex rhythm performances are possible. The VDF, VDA and effect units can also be used to add finishing touches to your sound.

## Built-in digital multi-effect units for creative sound-making or sound field simulation

The NS5R has two completely independent stereo digital multi-effect units. They provide not only effect types such as delay and reverb, but also effects such as equalizer, distortion, and rotary speaker, covering a range from creative sound-making to sound field simulation. Since some of the effect types actually provide two different effects simultaneously, this means that it is possible to use a maximum of 4 different effects at once.

Sound processing and adjustments that were possible on previous systems only by connecting external effect units can be performed just by the NS5R itself. Effect Placement settings allow you to change the way in which the effect units are connected, so that effect can be used in a variety of ways from aggressive processing of individual sounds to adding depth and spaciousness. Effect unit parameters can be stored independently for each program and combination sound.

## Multi mode allows operation as a GM tone generator

In Multi mode, the NS5R is compatible with GM (General MIDI system level 1), allowing you to take advantage of the wide variety of GM music data that is commercially available, and is the ideal tone generator for use with a desktop music system. Not only can you playback GM scores (music data for a GM tone generator), but you can utilize original sounds and key window and velocity window settings to create sophisticated ensembles.

The NS5R can also be used as a GM tone generator. In the same way as when using combinations, you can combine various programs and even use your own original sounds, for diverse applications as a desktop music tone generator.

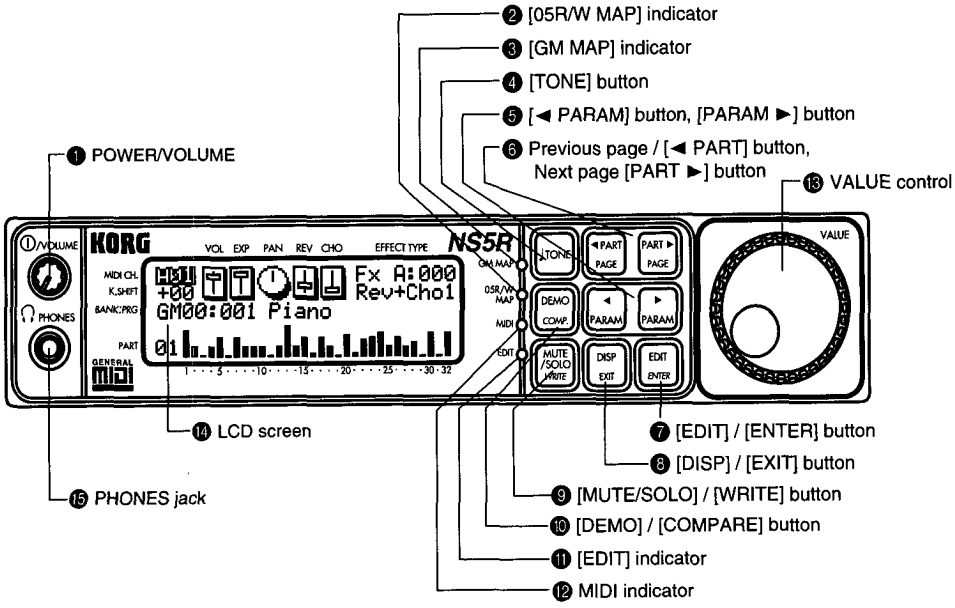
## Personal computer interface for direct connection to a personal computer

In addition to allowing conventional MIDI connections, the NS5R provides a personal computer interface which allows it to be easily connected directly to a personal computer using a single cable. The NS5R can be connected directly to an IBM PC (compatible) or an Apple Macintosh.

The NS5R can be connected to a personal computer not only via a MIDI interface, but also directly using a special cable. When the Korg MIDI Driver is used, the NS5R can be controlled independently from the messages transmitted from MIDI OUT, allowing an additional external MIDI device to be controlled simultaneously.

# Controls

## Front panel




### ❶ POWER/VOLUME

Each time this knob is pressed, the **NS5R** will alternate between power-on and power-off.

This knob is also used to adjust the overall volume of the entire **NS5R**. When the knob is rotated fully toward the left the volume is at minimum, and when rotated fully right the volume is at maximum. This knob simultaneously adjusts both the volume of the **NS5R** itself and the volume of the external device connected to the INPUT jacks (rear panel). This adjustment affects both the volume of the OUTPUT jacks (rear panel) and the volume of the PHONES jack.

### ❷ [05R/W MAP] indicator

This indicator will be lit when the arrangement of sounds is the same as the 05R/W (an earlier Korg tone generator). (05/W and **NS5R** compatibility →p.159).

### ❸ [GM MAP] indicator

This LED will be lit when the arrangement of sounds is compatible with GM System Level 1.

* *The main difference between the sound banks of the GM Map and the 05R/W Map is in the handling of MSB:LSB=00:00 (Capital Bank). In the case of the 05R/W Map, preset program sound are assigned to bank 00:00. Before playing back music data that was created for Korg tone generators such as the 05R/W or the X5DR, you should select the 05R/W Map. Normally you will use the GM Map. (→ Advanced Operation, 3. Global mode, [046] Bank Map type).*

### ❹ [TONE] button

When this button is pressed, the sound of the currently selected part will play. This is a useful way to audition the sound that you have selected. The pitch and velocity of the note which will be played can be specified in Global mode. (→ Advanced Operation, 3. Global mode, [042] Preview Note, [043] Preview Velocity)

### ❺ [◄ PARAM] button, [PARAM ►] button

Use these buttons to select an item from a menu, or to select the parameter that you wish to set.

Pressing [PARAM ►] will move the cursor in the LCD to the right. Pressing [◄ PARAM] will move the cursor to the left.

### ❻ Previous page/[◄ PART] button, Next page [PART ►] button

The action of these buttons depends on the mode.

[When in Multi mode (→p.23) ]

[PART ►] will increment the Part number, and [◄ PART] will decrement the Part number.

[When in Combination Edit mode (→p.28) ]

[PART ►] will increment the Timbre number, and [◄ PART] will decrement the Timbre number.

[When in other modes]

[PART ►] will move to the next page, and [◄ PART] will move to the previous page.

### ❼ [EDIT]/[ENTER] button

When you press this button, the EDIT MENU screen will appear. If you wish to perform detail editing of a Program sound or a Combination sound, press and hold this button for approximately 2 seconds to enter Program Edit mode (→p.30) or Combination Edit mode (→p.28).

*The NS5R automatically determines the appropriate edit mode based on whether the currently selected Part is a Program sound, a Combination sound, or a Drum Kit. This means that, for example, if you wish to enter Combination Edit mode, you must first select a Combination sound. (For details refer to the chapter discussing the applicable Edit mode in the Reference section.)*

### ❽ [DISP]/[EXIT] button

The action of this button depends on the mode.

[When in Multi mode (→p.43) ]

Each time this button is pressed, the screen display format will change. Normally, the lower half of the screen shows a level meter for each part. When this button is pressed so that an indication of [DISP] appears in the right side, the value of the parameter currently selected by the cursor will be displayed for each part 01—32, allowing you to view the values as a bar graph.


[When in other modes]

Use this button to exit the current page.

### ❾ [MUTE/SOLO]/[WRITE] button

The action of this button depends on the mode.

[When in Multi mode (→p.23)]

Each time this button is pressed, the applicable Part will be switched between Muted (silent), Solo (only that Part will sound), and cancel these settings (normal).

If a part is Muted or Soloed, an indication of M (mute) or S (solo) will appear above the part number in the lower left of the LCD, indicating the mute/solo status of that part.

A bar graph also indicates which of the parts 01—32 are muted.


(When parts 01 and 03 are muted)


(When part 01 is soloed)

[When in Program Edit mode (→p.30) or Combination Edit mode (→p.28)]
When this button is pressed, a screen will appear allowing you to save the currently edited Program (or Combination).

### ⑩ [DEMO]/[COMPARE] button

The action of this button depends on the mode.

[When in Multi mode (→p.23)]
When this button is pressed, the demo song select screen will appear.

[When in Program Edit mode (→p.30) or Combination Edit mode (→p.28) ]
Each time this button is pressed, the sound before editing will alternate with the currently edited sound.

This allows you to compare the sound being edited with the sound that you started with.

### ⑪ [EDIT] indicator

While you are comparing the currently edited sound with the un-edited sound (Compare), this indicator will blink.

### ⑫ MIDI indicator

This indicator will light when MIDI playback data is received at the MIDI IN connector or the TO HOST connector.

### ⑬ VALUE control

This is used mainly to modify parameter values. Rotating it toward the right will increase the value, and rotating it toward the left will decrease the value. Rotating the control rapidly allows you to change the value in larger steps.

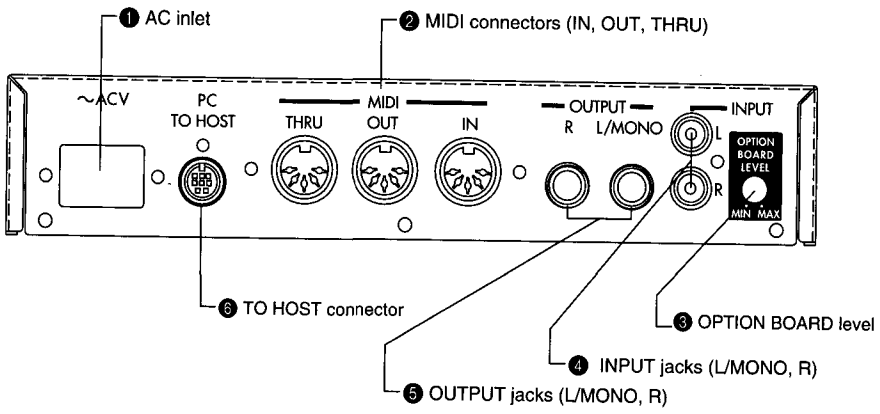
### ⑭ LCD screen

This is a custom two-color backlit 144 x 40 pixel LCD. The NS5R will display necessary information, operation menus, and the status of various parameters in this screen.

### ⑮ PHONES jack

A set of headphones can be connected to this jack. This is a stereo mini-jack.

# Rear panel




## ❶ AC inlet

Connect the included power cable to this inlet.

## ❷ MIDI connectors (IN, OUT, THRU)

These connectors allow external MIDI devices to be connected. MIDI IN receives messages from external devices. MIDI OUT transmits messages from the NS5R to external MIDI devices. MIDI THRU re-transmits the messages that are received at MIDI IN.

## ❸ OPTION BOARD level

If an optional tone generator expansion board has been installed in the NS5R, this knob adjusts the volume from the tone generator expansion board. If a tone generator expansion board has not been installed, this knob has no function.

## ❹ INPUT jacks (L/MONO, R)

These are input jacks (RCA phono jacks x 2). If the appropriate cables are used to connect these jacks to the OUTPUT jacks of another MIDI keyboard etc. that is connected to the NS5R, the sound of the connected keyboard and the sound of the NS5R can be output together from the OUTPUT jacks or PHONES jack of the NS5R.

Use connection cables that are appropriate for the device being connected.

## ❺ OUTPUT jacks (L/MONO, R)

These are output jacks (phone jack x 2). These can be connected to a powered monitor speaker system, a stereo amp, a mixer, or a multitrack recorder etc. If you are using a monaural system, connect the L/MONO jack.

## ❻ TO HOST connector

A personal computer can be connected here. Use a special cable to make connections directly to your computer. For the correct cable to use, refer to page 2 of the Preparations section, "Computer/sequencer connections."

# Table of Contents

## Introduction



## Preparations

# Basic Guide

# Reference Guide (Parameter Guide)

# How to use the owner's manual

In order to provide you with the information appropriate for your setup and needs, this owner's manual is organized as follows.

### *Preparations*

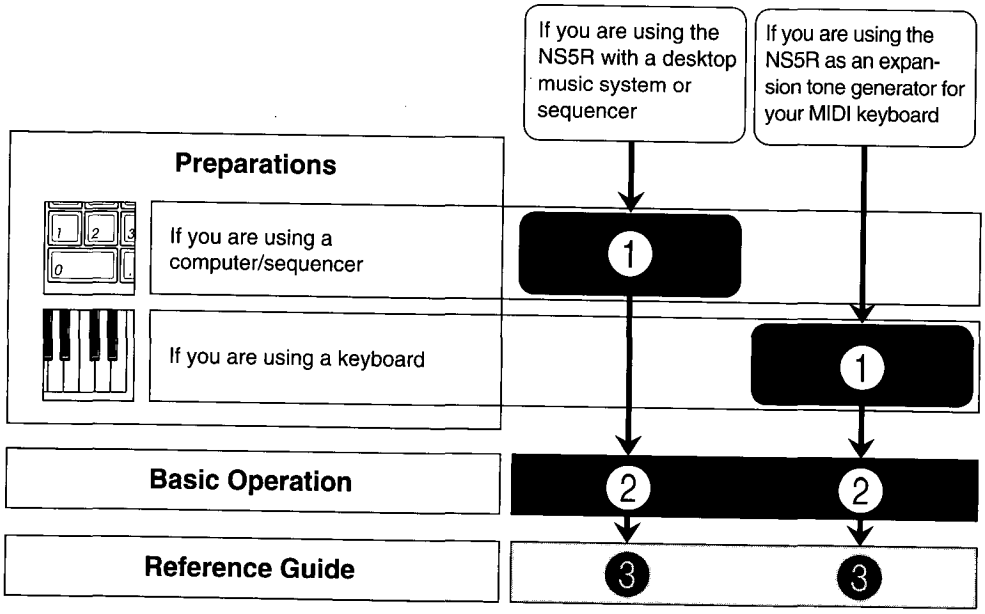
This section explains setup of the NS5R and basic operating procedures. This section is divided into two portions: "If you are using a computer/sequencer" and "If you are using a keyboard." If you will be using the NS5R in a desktop music system or MIDI sequencer-based system, first read "If you are using a computer/sequencer." If you will be using the NS5R as an expansion tone generator for your MIDI keyboard, first read "If you are using a keyboard."

### *Basic Operation*

This part of the manual explains the NS5R's organization and modes. Once you have read the Preparations section and gained an understanding of basic operation, be sure to read this section. This section also explains what you will need to know about sound in order to edit your own sounds. Refer to it in order to take advantage of the NS5R's rich functionality and possibilities.

### *Reference Guide*

This section explains all the parameters of each mode of the NS5R. Refer to this section when you need to know about the NS5R's functions in more detail.




*Please be aware that the names of the programs, combinations and multis which appear in the explanatory LCD screens printed in this manual are provisional, and will not necessarily match the screens that appear on your NS5R.*

# Preparations

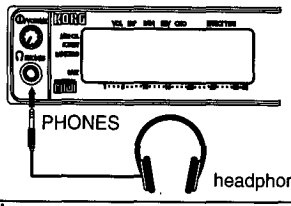
## If you will be using a computer/sequencer to play the NS5R

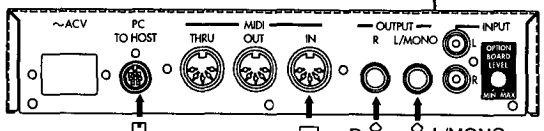
### Connections

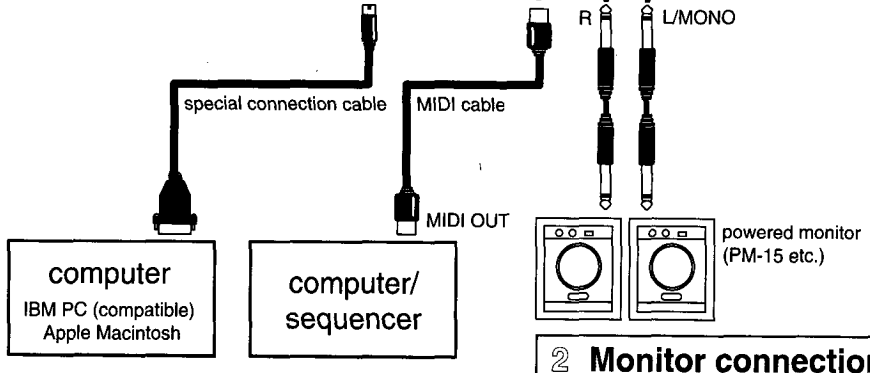
**1 Power supply**

Connect the power cable to the AC inlet, and connect the other end to an AC outlet.

If you are using headphones, plug them into the front panel PHONES jack.




**2 Monitor connections**

Connect the OUTPUT jacks to a powered monitor or a stereo amp.

* *If making monaural connections, use the L/MONO jack.*

**3 Computer/sequencer connections**

There are two ways to connect the NS5R to your computer/sequencer: "Connections using MIDI" or "Connections using a special cable." For details refer to pages 2—7.

**Powered monitor / Stereo amp**

In order to faithfully produce the sounds of the NS5R we recommend that you make connections to a powered monitor system (a speaker with built-in amplifier, such as the PM-15 [optional]). If you are using a stereo audio system or a stereo cassette radio that has an external input, make connections to the LINE IN, AUX IN, or "external input" jacks.

*When using a stereo audio amp to play the NS5R, be careful not to raise the volume excessively, since high volumes can damage your speaker system.*

# Computer/sequencer connections

There are two ways to connect the NS5R to your computer: connections using MIDI cables via a MIDI interface (Connections using MIDI), and direct connection to your computer via a special cable (Connections using a special cable). Read the explanation that is applicable to your computer and system. If you are using a dedicated (hardware) MIDI sequencer, read the section on connections using MIDI.

- If you are connecting a MIDI sequencer ... "Connections using MIDI" (P.3)
- If you are connecting a computer (using a MIDI interface) ... "Connections using MIDI" (P.3)
- If you are connecting an IBM PC (compatible) (using a special cable) ... "Connecting an IBM PC (compatible)" (P.4)
- If you are connecting an Apple Macintosh (using a special cable) ... "Connecting an Apple Macintosh" (P.5)

## Connection to a computer

By using a special cable to connect the NS5R and your computer, you can play the NS5R from your computer. In addition, the NS5R will function as a MIDI interface for your computer, allowing additional MIDI devices to be controlled.

The NS5R can be directly connected to the following computers using a special cable. (p.4, 5)

IBM PC (compatible) : Connection kit AG-001B (connection cable, "Korg MIDI Driver" driver software) (sold separately)

However, this method of connection cannot be used for non-Windows applications unless they specifically support the NS5R.

Apple Macintosh series : Connection kit AG-002B (connection cable, "Korg MIDI Driver" driver software) (sold separately)

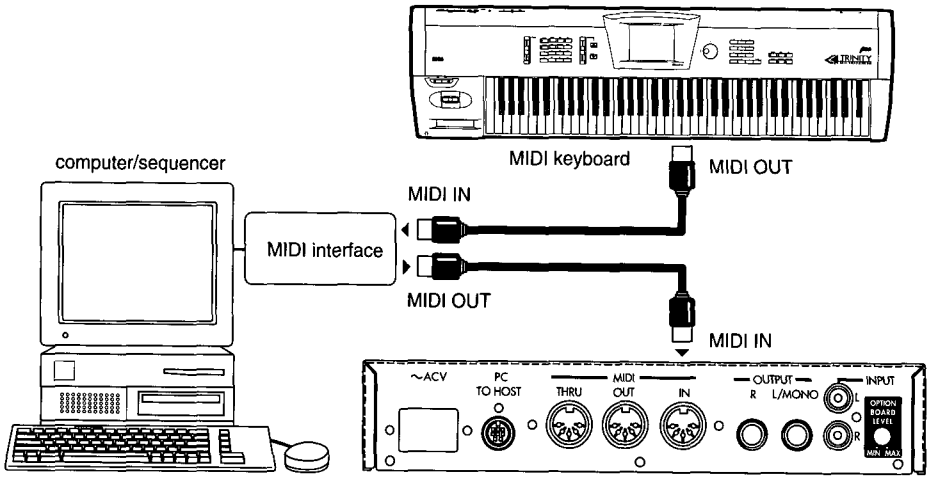
- When using SERIAL2 ..... Connection kit AG-001B (connection cable, "Korg MIDI Driver" driver software) [optional].

However, this method of connection cannot be used for non-Windows applications unless they specifically support the NS5R.

* *Depending on the type of your computer and on your application (software), it may not be possible to use a direct connection.*

# Connections using MIDI

When connecting the NS5R to a stand-alone MIDI sequencer, or to a computer via a MIDI interface, use a MIDI cable to connect the MIDI OUT connector of the sequencer/ computer (MIDI interface) to the MIDI IN connector of the NS5R.



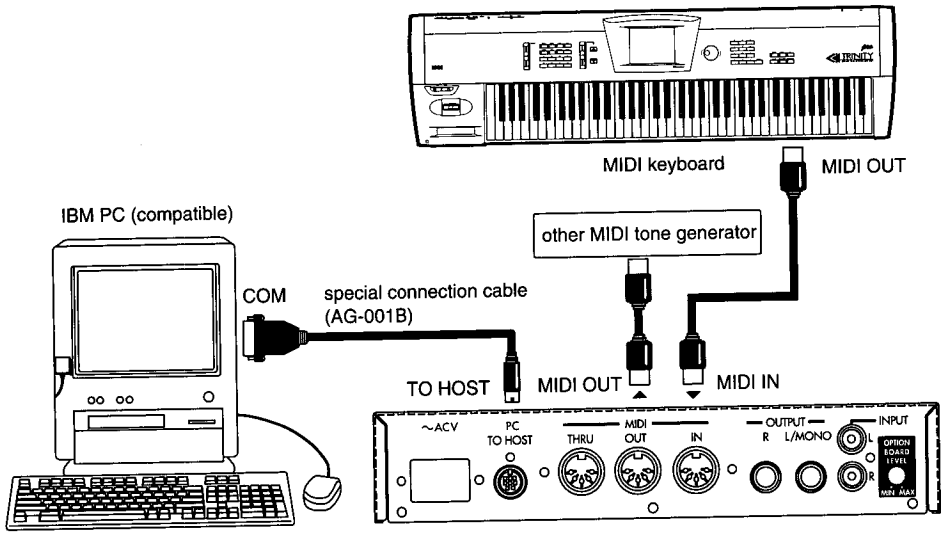

The MIDI OUT connector of the MIDI keyboard that you are using for performance or input can also be connected to the MIDI IN connector of your sequencer/computer (MIDI interface). If you are inputting playback data only from your computer/sequencer, it is not necessary to connect a MIDI keyboard.

If you wish to connect additional MIDI devices, connect them either to the MIDI OUT connector of your sequencer/computer (MIDI interface) or the MIDI THRU of the NS5R.

* *For details on connecting your computer and MIDI interface, and on MIDI port settings, refer to the owner's manual for your MIDI interface.*

# Connecting an IBM PC (compatible)

Use a special connection cable (AG-001B (sold separately)) to connect the serial port (COM port) of your IBM PC (compatible) to the TO HOST connector of the NS5R.



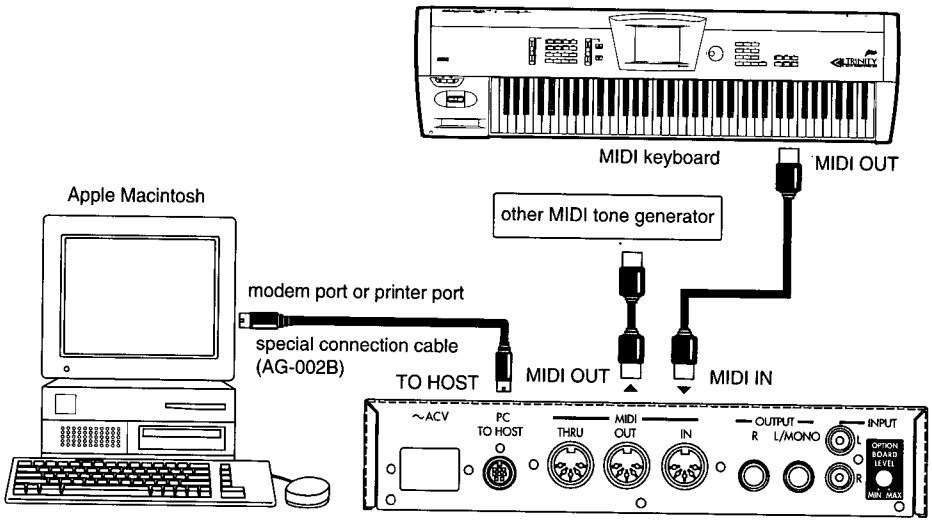

* *Please be aware that depending on the type of your computer or application (sequencer), this method of connection may not be usable. This method of connection cannot be used for non-Windows applications unless they specifically support the NS5R.*
* *If your computer has a 25 pin type serial port, use a 9 pin - 25 pin conversion adapter (AG-004 (sold separately)).*

When connecting the NS5R to an IBM PC (compatible), set the Global mode [041] BPS Select setting to "38.4" (refer to p.68).

If you are using Windows, install the Korg MIDI Driver. For the installation procedure, refer to p.8—11.

# Connecting an Apple Macintosh

Use a special connection cable (AG-002B (sold separately)) to connect the modem port or printer port of your Apple Macintosh to the TO HOST connector of the NS5R.




* *Depending on the type of your computer or on your application (sequencer software), a direct connection may not be usable.*

* *If your application (sequencer software) has a clock setting, set it to 1 MHz.*

When connecting the NS5R to an Apple Macintosh, set the Global mode [041] BPS Select setting to "31.25" (refer to p.68).

If you install the Korg MIDI Driver, you will be able to use the NS5R tone generator and MIDI OUT as independent MIDI outputs. For details on installing the Korg MIDI Driver, refer to p.11.

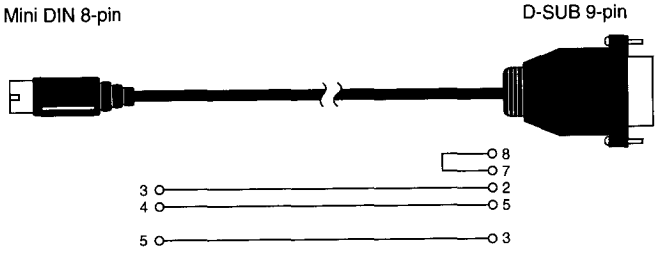
# Settings when connecting a computer

## [041] BPS Select settings (p.68)

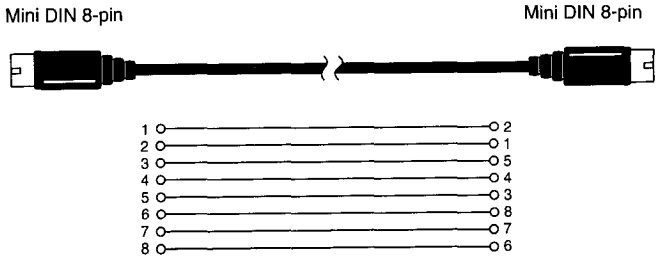
1) Press the [EDIT/ENTER] button to access the Edit menu.
2) In the edit menu, use the [PART/PAGE] buttons to select "Global."
3) Press the [EDIT/ENTER] button to enter Global mode.
4) Use the [PART/PAGE] buttons to access the <GLOBAL> page.
5) Use the [PARAM] buttons to select "BPS."
6) Use the VALUE controller to set the value to either 31.25 or 38.4.
   - 31.25 when connecting an Apple Macintosh
   - 38.4 when connecting an IBM PC (compatible)

# Wiring diagram for special cables

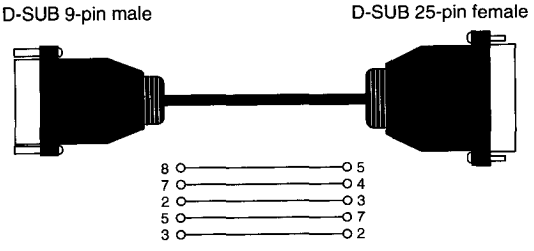
**(1) AG-00 1B (for IBM PC or Compatible)**




**(2) AG-002B (for Macintosh)**




**(3) AG-004 (Adapter for IBM or Compatible)**



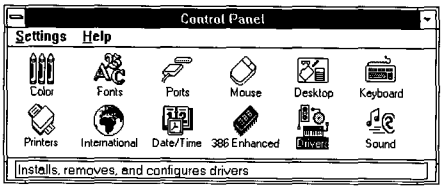
# Korg MIDI Driver installation and setup

The separately sold kits for connecting the NS5R directly to a computer (AG-001B, AG-002B) include a Korg MIDI Driver. If you are using an IBM PC (compatible) computer and your application (sequencer) is Windows-compatible, using the Korg MIDI Driver will allow the NS5R connected to the serial port (COM, RS-232C, Serial 2) to be handled as a MIDI device. If you are using an Apple Macintosh and your application (sequencer) is compatible with the Apple MIDI Manager, using the Korg MIDI Driver will allow the Macintosh to exchange data with the NS5R connected to its serial port (modem or printer).

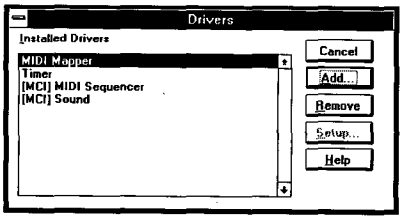
# Installing the Korg MIDI Driver into Windows 3.1

*Data from MIDI IN may not be received correctly if your computer is not fast enough.*

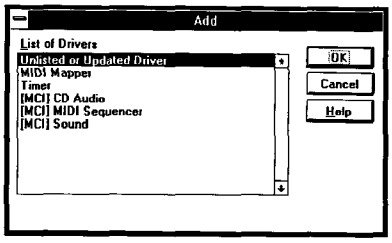
① **In the Control Panel, double-click the Drivers icon.**



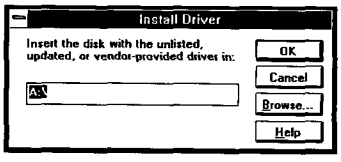

② **Click the [Add] button.**




③ **From the list of drivers, select [New or updated driver], and click the [OK] button.**

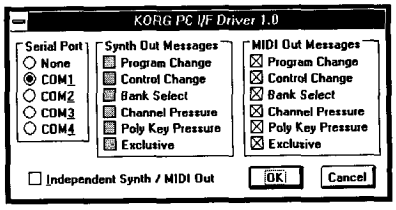



④ **Insert the disk included with AG-001B into the disk drive of your computer. If the disk was inserted into drive A, type "A:\" (or if drive B, type "B:\") and click the [OK] button.**

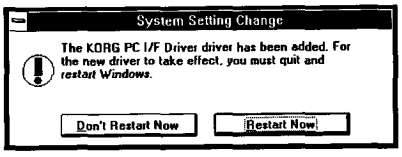



(The directory "A:\PC98"is for a type of computer sold only in Japan, and cannot be used with your computer.)

⑤ **Select KORG PC/IF Driver and click the [OK] button. The setup window will appear. Follow the instructions of "Setting up the Korg MIDI Driver (Windows)" to perform the setup.**

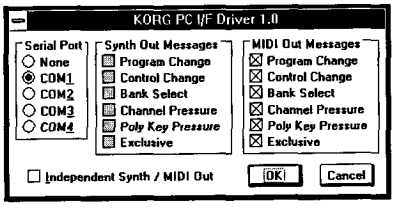



⑥ **After setup is complete, remove the disk and select [Restart] to make the newly installed driver available.**




## *Setting up the Korg MIDI Driver (Windows)*

① **In the Control Panel, double-click the Drivers icon, select [KORG PC/IF Driver], and click the settings button to open the setup window.**




② **For the Serial Port setting, select the serial port to which the NS5R is connected ([COM1]–[COM4]).**

If you wish to use the serial port for another purpose after installing the Korg MIDI Driver, either Delete the driver or select [None] to cancel the driver.

③ **Check [Independent Synth/MIDI Out]. When this is checked, the two ports within the NS5R (port A and port B) can be used independently. If this is not checked, the internal tone generator port B cannot be used.**

The function of the data which is output to Default MIDI will differ depending on the NS5R's Global [049] Program Port setting.

When Program Port is set to Native, the data will be output to the port specified by the Part Edit parameter [016] MIDI Channel To Port.

With a setting of Emulate, the data will be output to both port A and port C. The data which is output to MIDI Out will be output to port C, and the internal tone generator of the NS5R will not sound. The data which is output to Synth-A and Synth-B will be sent to port A and port B respectively of the internal tone generator.

If [Independent Synth/MIDI Out] is not checked, only Default MIDI can be used.

④ **[MIDI Out Messages] allows you to select the types of message that will be transmitted to the NS5R.**

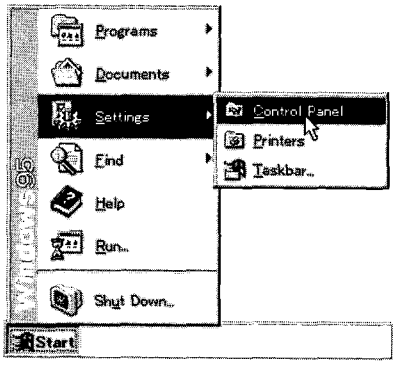
⑤ **When you finish making settings, click the [OK] button. If you wish to cancel your settings, click [Cancel].**

# Installing the Korg MIDI Driver into Windows 95

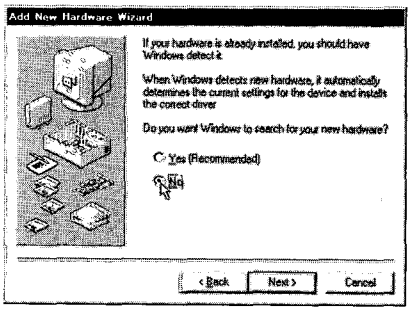


*Data from MIDI IN may not be received correctly if your computer is not fast enough.*

**① Click the [Start] button in the task bar, and click [Control panel] in [Settings].**

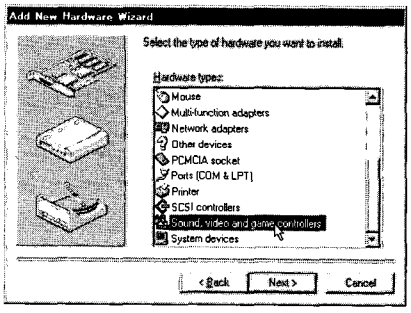



**② Double-click the [Hardware] icon in the control panel, and the hardware wizard will start up. Click the [Next>] button.**




**③ In response to the question "Automatically detect new hardware?" be sure to select [No], and click the [Next>] button.**

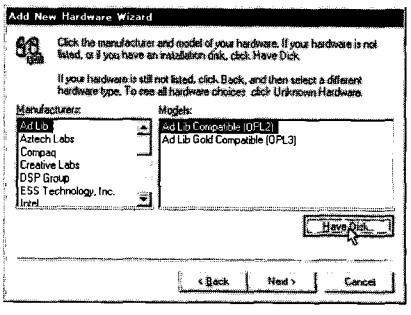
**④ Select [Sound, video and game controllers], and click the [Next>] button.**




**⑤ Click [Have Disk].**

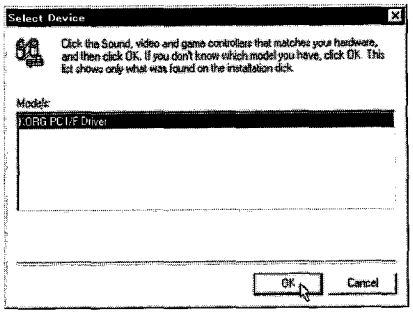
A dialog box will appear, allowing you to specify the drive and directory.

**⑥ Insert the disk included with AG-001B into the disk drive of your computer. If the disk was inserted into drive A, type "A:\" (or if drive B, type "B:\") and click the [OK] button.**



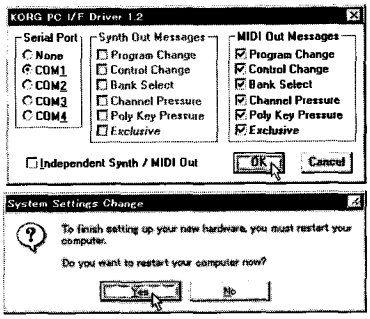

(The directory "A:\PC98"is for a type of computer sold only in Japan, and cannot be used with your computer.)

⑦ **Click the [OK] button and click [OK].**




⑧ **Perform the setup as directed in [Setting up the Korg MIDI Driver (Windows)" (Page 8 in this manual), and click the [OK] button.**

⑨ **Be sure to restart your computer so that the driver will take effect.**




# *Modifying the Korg MIDI Driver setup for Windows 95*

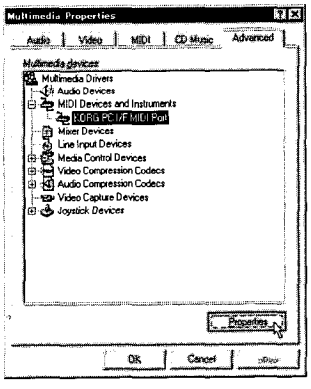
① **In the control panel, double-click the [Multimedia] icon, and the multimedia properties dialog box will appear.**

② **Click the [Advanced] tab located at the upper right.**

③ **Click the [+] for [MIDI Devices] (the display will change to [–]), and click [KORG PC I/F MIDI Port].**

④ **Click the [Properties] button.**

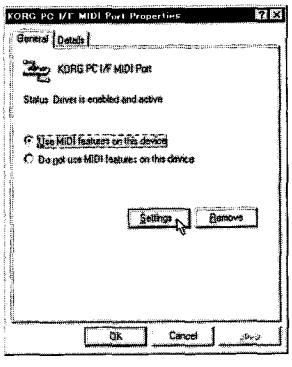
The KORG PC I/F MIDI Port properties will be displayed.




⑤ **Click the [Settings] button.**

Perform the setup as directed in "Setting up the Korg MIDI Driver (Windows)" (Page 8 in this manual), and click the [OK] button.

If you have modified the settings, you must re-start Windows.

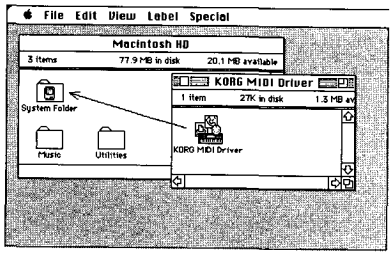


# Installing the Korg MIDI Driver into a Macintosh

*In order to use the Korg MIDI Driver, the Apple MIDI Manager and PatchBay must already be installed. Use the versions of Apple MIDI Manager and PatchBay that are included with your MIDI application. They are not included with the AG-002B.*

When the Korg MIDI Driver is used, the "Modem MIDI Out/Port setting" dialog box (P.12) will allow you to specify the MIDI channels and types of messages which will be transmitted to the NS5R. If you do not need this functionality, you can simply use the Apple MIDI Driver without the Korg MIDI Driver. When using the Apple MIDI Driver, or when using a MIDI application (sequencer) which does not use the Apple MIDI Manager, refer to page 12.

**① Copy the KORG MIDI Driver from the disk included with the AG-002B into the system folder of your startup disk.**




**② If there is a copy of Apple MIDI Driver in your system folder, either delete it, or move it to another folder. Be careful not to delete or move the Apple MIDI Manager.**

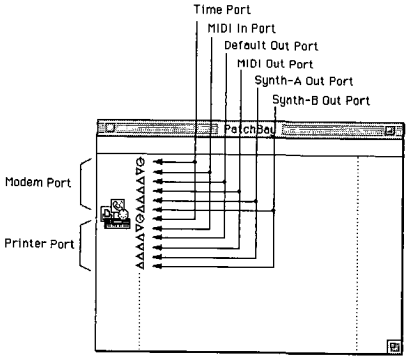
* *The Korg MIDI Driver includes the functionality of the Apple MIDI Driver.*

**③ From the Special menu, select "Restart."**

# Setting up the Korg MIDI Driver (Macintosh)

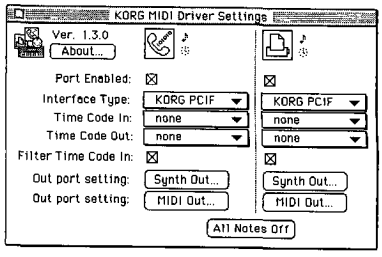
**① Start up PatchBay.**

If installation has been performed correctly, the KORG MIDI Driver icon will appear in the PatchBay window when PatchBay is started up. (The modem and printer ports will be displayed differently depending on the setup condition of each port.)




**② In PatchBay, double-click the KORG MIDI Driver icon.**

The setup dialog box will appear.



### ③ Check Port Enable for the port to which the NS5R is connected, and set Interface Type either to [KORG PCIF] or to [1 MHz].

When Interface Type is set to "KORG PCIF," Default Out, MIDI Out, Synth-A Out, and Synth-B Out can be used.

The operation of Default Out will differ depending on the NS5R's Global [049] Program Port setting.

When Default Out is selected, data will be output to both port A and port C of the NS5R if the NS5R is set to Emulate mode, or to the port specified by the Part Edit parameter [016] MIDI Channel To Port if the NS5R is set to Native mode.

Regardless of whether the NS5R is set to Native mode or Emulate mode, MIDI Out will output to port C, Synth-A Out will output to port A, and Synth-B Out will output to port B.

(Please also read page 54 and 72 in conjunction with this explanation.)

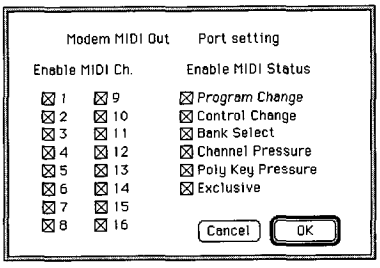
(Since the NS5R does not contain a KORG PC IF, do not select [KORG PCIF].)

### ④ Press the [Out Port Setting] button.

The following dialog box will appear. Here you can select the MIDI channels/messages which will be output to each port. Only those channels/messages which are checked will be output.

### ⑤ After you have made settings, press the [OK] button.

### ⑥ Start up your MIDI application (sequencer), and drag the mouse from the Out Port "◁" of the MIDI application to connect it to the MIDI Out of the MIDI Driver.



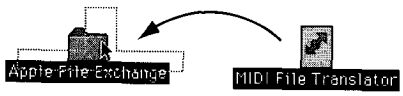

* *For details on using PatchBay, refer to the explanations found in the "  " menu item "About PatchBay..." etc.*

To use the Apple MIDI Driver, you must first delete or move the Korg MIDI Driver if it exists in your system folder. Then start up PatchBay, double-click the Apple MIDI Driver icon that appears, check Enabled for the Port to which the NS5R is connected, set Interface Type to [1 MHz], and close the dialog box. In PatchBay, drag the mouse from the OutPort "◁" of the MIDI application (sequencer) to connect it to MIDI Out.

When using a MIDI application (sequencer) which does not use Apple MIDI Manager, select the port to which the NS5R is connected, and if the application has a clock setting, set it to [1 MHz].

# *About the MIDI File Translator included with the AG-002B*

Most commercially available Standard MIDI File (SMF) song data is saved in MS-DOS format. The MIDI File Translator included with the AG-002B is a translator software module for Apple File Exchange which converts MS-DOS Standard MIDI Files (SMF) into a format that Macintosh MIDI applications can recognize as SMF.




① **Put the MIDI File Translator into the same folder as Apple File Exchange.**

② **Double-click Apple File Exchange to start it up.**

③ **Insert the MS-DOS disk that you wish to convert into the disk drive.**

The MS-DOS format disk must be inserted into the disk drive after Apple File Exchange is started up.

④ **Select the song file that you wish to convert.**

⑤ **Press the "<<Convert<<" (or ">>Convert>>") button located in the center.**

Conversion will begin. When the bar graph reaches 100%, conversion is complete. The converted file will appear in the left-hand box.

⑥ **Exit Apple File Exchange.**

# *Using PC Exchange to convert an SMF*

If Apple File Exchange was not included with your Macintosh system, you can use PC Exchange to make MS-DOS format SMF song files recognizable by the Macintosh.

As an example, here's how to use the MIDI Player included with KORG Audio Gallery [sold separately] to open an MS-DOS SMF song file.

### ① In the control panel, open PC Exchange.

The PC Exchange control panel will appear.

### ② Press the [Add...] button.

The [Specify application associated with DOS extension] window will appear.

### ③ Input "MID" into the DOS extension field.

In order to distinguish different types of file, MS-DOS adds an extension consisting of a period and three characters to the end of the filename. It is customary for SMF data to have an extension of "MID."

### ④ From the list that appears in the lower part of the dialog box, select your SMF-compatible MIDI application (sequencer).

In this example, we will select [MIDI Player v1.0.1]. The selected icon will appear in the Application field.

### ⑤ Form the [Document type] popup menu, choose [Midi], and click the [OK] button.

The item which was added to the PC Exchange window will appear, and has been registered.

Now when an MS-DOS SMF disk is inserted into the disk drive, it can be used immediately.

* *For details refer to the explanation of "Macintosh PC Exchange."*

# Listening to the demo songs

The NS5R contains two demonstration songs which take advantage of its features. These demo songs can be played back by the NS5R without requiring any other equipment.

## 1 Power on/off

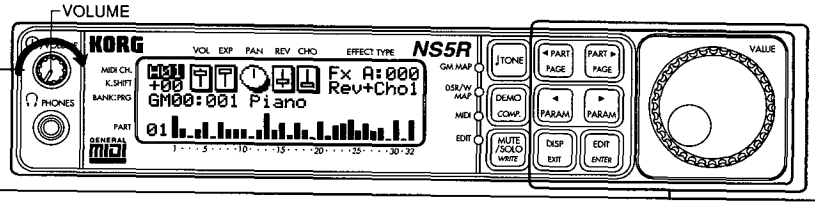
Press the VOLUME/POWER switch to turn the power on. Each time the switch is pressed, the power will alternate on/off.

## 2 Adjust the volume

Rotate the VOLUME to adjust an appropriate volume level.

* *This simultaneously adjusts the headphone volume as well.*

*Your powered speaker or stereo amp system must be turned off before the NS5R's power is turned on or off.*




## 3 Demo songs

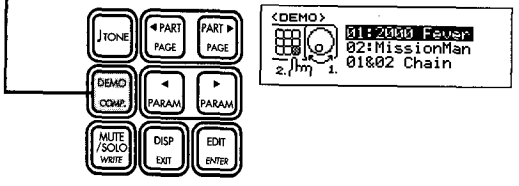
Demo song no.1: "2000 Fever" performed by Akihiro Horikoshi
Demo song no.2: "MissionMan" performed by John Lehmkulh


### ■ Multi mode

When the power is turned on, the NS5R will be in Multi mode.

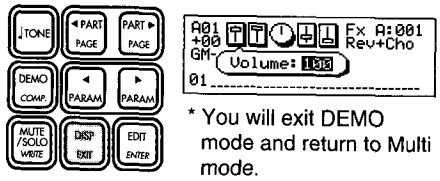
### ■ Enter DEMO mode

Press the [DEMO/COMP.] button.



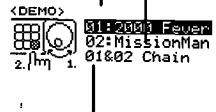

### ■ Exit DEMO mode

From the demo song select screen, press the [DISP/EXIT] button.




* You will exit DEMO mode and return to Multi mode.

### ■ Operations in DEMO mode




During playback, you can press the [DISP/EXIT] button to stop playback.

Repeatedly playback demo songs 1/2. (continually)

EDIT/ENTER — To listen to the playback

Use the VALUE controller, [PART/PAGE] buttons, or [PARAM] buttons to select the song that you wish to hear.

Press the [EDIT/ENTER] button and the selected demo song will begin playback.

* If you select 01 & 02 Chain, demo songs 1/2 will continue to repeat consecutively.

DISP/EXIT — To stop playback

Press the [DISP/EXIT] button during playback, and playback will stop. You will return to the demo song select page.

Listen to the demo playback, and enjoy the versatile sounds and rich expressiveness of the NS5R.

# Playing in Multi mode

In Multi mode the NS5R will function as a multi-timbral (GM) tone generator, with 16 channels for A and B (total of 32 channels). This mode is normally used for when you use a computer/sequencer to play an ensemble on the NS5R.

## 1 Multi mode

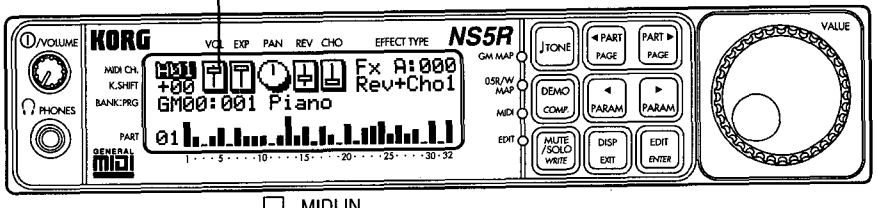
When the power is turned on, the NS5R will be in multi mode.

The LCD screen will show the sound bank, sound number and sound name for each part.


Sound (program/combination) name
Sound (program/combination) number
Sound bank

### ■ What is Multi mode?

In Multi mode, the NS5R will function as a 32 channel multi-timbral tone generator. Different sounds (programs) can be played by each of the 32 parts. Since Multi mode will have the initial GM settings when the power is turned on, it will immediately be ready to playback a GM score (musical data for a GM tone generator). To once again restore the GM initial settings, you can either transmit a GM System On message, or execute the Utility mode [053] Preset/Initialize command.



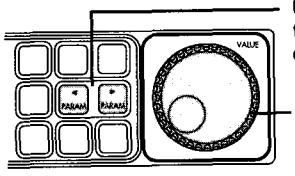

MIDI IN

MIDI OUT

computer/sequencer

## 2 Selecting sounds (1)

The sound for each part can be selected using the VALUE controller.




Use the [PARAM] buttons to select the bank or sound that you wish to change (it will be highlighted)

Rotate the VALUE controller to change the bank or sound number

The NS5R has a total of 1049 Program sounds in the GM-a/b banks, r:bank, y:bank, and Prg (program) A, B, and C banks of its internal ROM. It also has a total of 384 Combination sounds in the Cmb (combination) banks A, B, and C of its internal ROM.
Also, the internal RAM area contains 128 user programs in the PrgU bank, and 128 combination sounds in the CmbU bank.
Select different banks and sound numbers, and play the sounds of the NS5R!

## 3 Selecting sounds (2)

To select sounds from a computer/sequencer, transmit a program change message (if you wish to change the bank, transmit a bank select message as well).

Program changes 0—127 will select programs/combinations 001—128.

* *Sound banks are selected by bank select messages (refer to p.24, 71).*

# If you have problems

If the NS5R does not produce sound, or if the sounds or response are not what you expect, check the following points.

## No sound

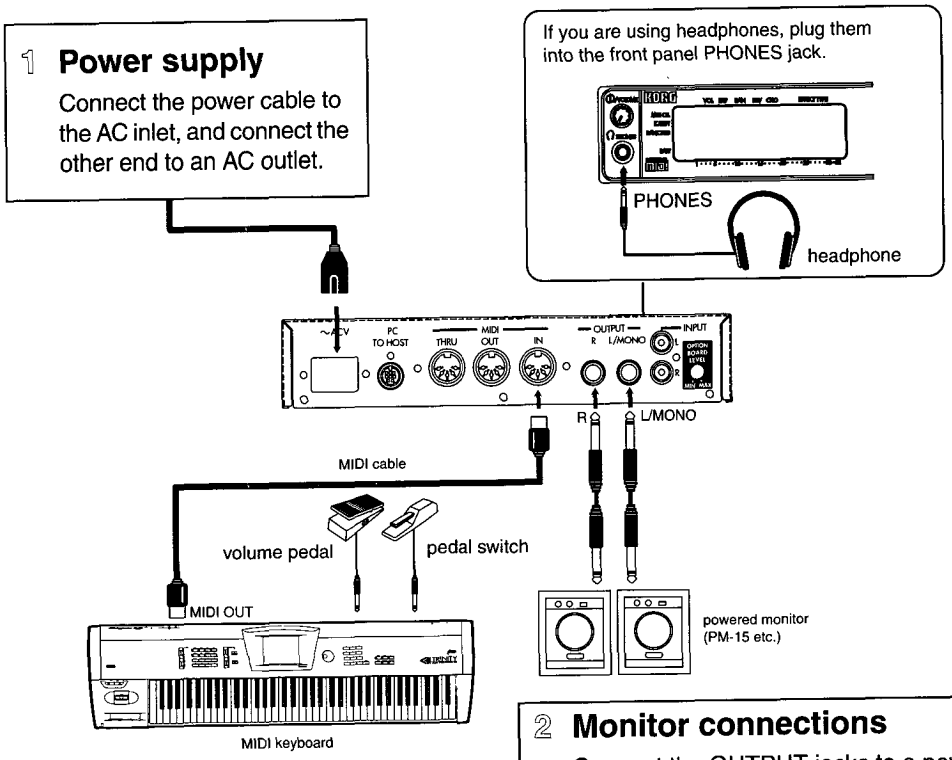
- First check whether you can hear the demo playback. If the demo songs cannot be heard, check that the volume is raised appropriately on your powered monitor / stereo amp system, and that audio cables are connected correctly.
- If you can hear the demo songs, check that you are in Multi mode.
- Check MIDI cable connections / special cable connections. Also check that the correct settings have been made on your computer/sequencer. When the NS5R receives MIDI messages, its MIDI indicator will light. If the MIDI indicator does not light, it is possible that the settings on the computer/sequencer are incorrect.
- If you are using a special cable to make connections, check that the Global mode "BPS" setting is correct. Select 38.4 kBPS if you are using an IBM PC (compatible), or 31.25 kBPS if you are using an Apple Macintosh.
- If you are using a sequencer program on your computer, you will need to make settings for the MIDI port on which MIDI messages will be transmitted and received. Make sure that you have specified the MIDI port of the MIDI interface to which the NS5R is connected, or the port of the Korg MIDI Driver. Korg MIDI Driver is able to the tone generator of the NS5R itself and the MIDI messages transmitted from its MIDI OUT as separate MIDI ports. If you wish to play the NS5R, specify the NS5R's tone generator (Korg PC I/F Synth Port). (p.7—12)
- Some Windows sequencer programs transmit MIDI messages through the MIDI mapper. If you are using such a program, make settings in the MIDI Mapper (located in the Control Panel) to change the port name for all MIDI channels to Korg PC I/F Synth Port.

## Sounds or performance is incorrect

- If the wrong sounds are used when playing back a GM score, it is possible that bank select messages are used within the score. If this is the case, make settings on your computer/sequencer so that bank select messages are not transmitted (p.20, 154). Either transmit a GM System On message from the computer/sequencer, or execute the [053] Preset/Initialize operation to restore the initial GM settings, and then playback the data once again.
- If volume or pan are incorrect, or if they are specified by the music data but are not reflected in the NS5R's playing, it is possible that these messages are being cut by the transmit filter of the sequencer or sequencer program, or by Korg MIDI Driver's filter. Check these settings.
- In Multi mode, the NS5R functions as a 32-part multi-timbral tone generator. Although it is possible to select the sound and specify the volume and pan etc. for each track by making settings on the NS5R, it is best to include such settings in the musical data that you create on your computer/sequencer. (If this is done, the playback conditions will be the same each time.) If you playback musical data which does not contain these settings, the settings that were last played back will still be in effect. For details on creating musical data and on playing each sequencer track, refer to the owner's manual for your sequencer or sequencer program.

# If you are using a keyboard to play the NS5R

## Connections




**Powered monitor / Stereo amp**

In order to faithfully produce the sounds of the NS5R we recommend that you make connections to a powered monitor system (a speaker with built-in amplifier, such as the PM-15 [optional]). If you are using a stereo audio system or a stereo cassette radio that has an external input, make connections to the LINE IN, AUX IN, or "external input" jacks.

*When using a stereo audio amp to play the NS5R, be careful not to raise the volume excessively, since high volumes can damage your speaker system.*

# MIDI keyboard settings

If you wish to play the NS5R from a MIDI keyboard, you will need to make MIDI transmission settings on your MIDI keyboard. For the procedure on making these settings, refer to the owner's manual for your MIDI keyboard.

* *The NS5R is a MIDI tone generator module that produces sound in response to the MIDI messages it receives from an external MIDI device (MIDI keyboard, computer, sequencer etc.). If you will be using a computer or sequencer etc. to play the NS5R, refer to "If you are using a computer/sequencer to play the NS5R" (p.1).*

## *MIDI transmit channel*

Set the MIDI transmit channel of your MIDI keyboard to the MIDI receive channel of the NS5R part that you wish to play. If a different MIDI transmit channel is selected, or if it is not possible to change the MIDI transmit channel of your keyboard (i.e., if the transmit channel is fixed), you will need to change the MIDI receive channel of the NS5R ([000] Receive MIDI channel, [044] Exclusive Channel).

## *MIDI transmit filter*

Some MIDI keyboards allow you to select the MIDI messages which are transmitted.

The NS5R is able to receive the following MIDI messages.

- Note-on/off (note messages) ..... These messages are the most basic type transmitted by a keyboard.
- Program change..... These messages select programs.
- Control change ..... These messages convey controller movements and performance gestures.
- Pitch bend..... These messages convey movements of the bender (joystick, wheel, level) to control the pitch.
- Aftertouch (channel pressure)..... These messages convey the pressure applied to the keyboard to control various effects.

* *Not all MIDI keyboards will necessarily be able to transmit all of the above types of MIDI messages. When the NS5R is played from a MIDI keyboard, it will respond only to those MIDI messages which can be transmitted from the MIDI keyboard. For example, if you are using a MIDI keyboard (such as a digital piano etc.) which is unable to transmit pitch bend messages, the pitch bend effect cannot be obtained.*

# Listening to the demo songs

The NS5R contains two demonstration songs which take advantage of its features. These demo songs can be played back by the NS5R without requiring any other equipment.

## 1 Power on/off

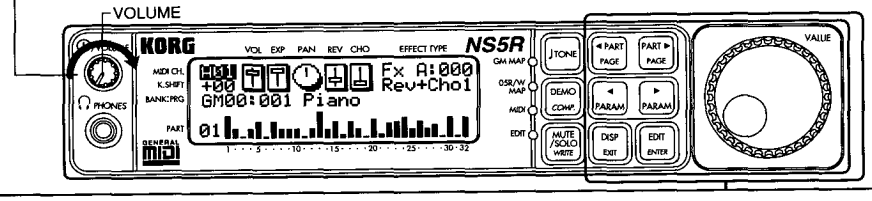
Press the VOLUME/POWER switch to turn the power on. Each time the switch is pressed, the power will alternate on/off.

*Your powered speaker or stereo amp system must be turned off before the NS5R's power is turned on or off.*

## 2 Adjust the volume

Rotate the VOLUME to adjust an appropriate volume level.

* *This simultaneously adjusts the headphone volume as well.*




## 3 Playback the demo songs

Demo song no.1: "2000 Fever" performed by Akihiro Horikoshi

Demo song no.2: "MissionMan" performed by John Lehmkulh

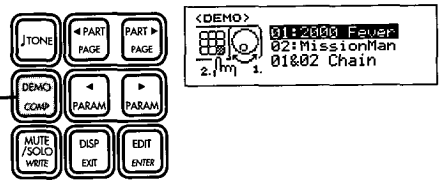


■ Multi mode

When the power is turned on, the NS5R will be in Multi mode.

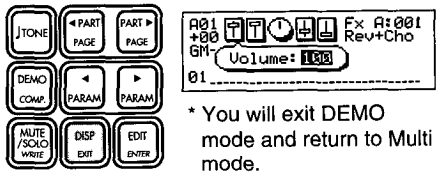
■ Enter DEMO mode

Press the [DEMO/COMP.] button.




■ Exit DEMO mode

From the demo song select screen, press the [DISP/EXIT] button.




* You will exit DEMO mode and return to Multi mode.

■ Operations in DEMO mode


Demo song 1: 2000 Fever

Demo song 2: MissionMan

During playback, you can press the [DISP/EXIT] button to stop playback.

Repeatedly playback demo songs 1/2. (continually)

EDIT/ENTER — To listen to the playback

Use the VALUE controller, [PART/PAGE] buttons, or [PARAM] buttons to select the song that you wish to hear.

Press the [EDIT/ENTER] button and the selected demo song will begin playback.

* If you select 01 & 02 Chain, demo songs 1/2 will continue to repeat consecutively.

DISP/EXIT — To stop playback

Press the [DISP/EXIT] button during playback, and playback will stop. You will return to the demo song select page.

Listen to the demo playback, and enjoy the versatile sounds and rich expressiveness of the NS5R.

# Playing the NS5R from a MIDI keyboard

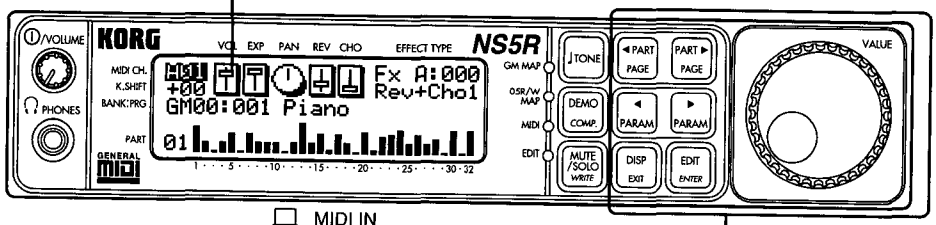
Now go ahead and play the NS5R from your MIDI keyboard. The NS5R has two levels of sound data: programs/combinations and multi. Here we explain how to play program/combination sounds.

## 1 Multi mode

When the power is turned on, the NS5R will be in multi mode.

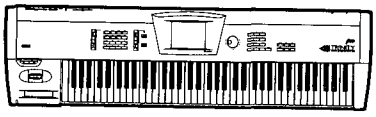

The LCD screen will show the sound bank, sound number and sound name for each part.

Sound (program/combination) name
Sound (program/combination) number
Sound bank




MIDI IN

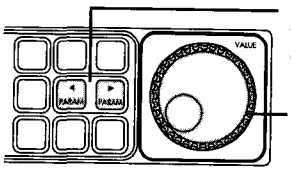
MIDI OUT



MIDI keyboard

## 2 Selecting sounds (1)

The sound for each part can be selected using the VALUE controller.




Use the [PARAM] buttons to select the bank or sound that you wish to change (it will be highlighted)

Rotate the VALUE controller to change the bank or sound number

The NS5R has a total of 1049 Program sounds in the GM-a/b banks, r:bank, y:bank, and Prg (program) A, B, and C banks of its internal ROM. It also has a total of 384 Combination sounds in the Cmb (combination) banks A, B, and C of its internal ROM.

Also, the internal RAM area contains 128 user programs in the PrgU bank, and 128 combination sounds in the CmbU bank.

Select different banks and sound numbers, and play the sounds of the NS5R!

## 3 Selecting sounds (2)

To select sounds from a computer/sequencer, transmit a program change message (if you wish to change the bank, transmit a bank select message as well).

Program changes 0—127 will select programs/combinations 001—128.

* *Sound banks are selected by bank select messages (refer to p.24, 71).*

# If you have problems

If playing a MIDI keyboard does not make the NS5R produce sound, or if you are unable to select programs, check the following points.

## If there is no sound

- First check whether you can hear the demo songs. If the demo songs cannot be heard, check that the volume is raised appropriately on your powered monitor / stereo amp system, and that audio cables are connected correctly.
- If you can hear the demo songs, check that you are in Multi mode. Programs cannot be played while you are in DEMO mode.
- Also check MIDI cable connections and the MIDI transmit channel of your MIDI keyboard. The MIDI transmit channel of your MIDI keyboard must be set to the MIDI receive channel of the NS5R part that you wish to play. If it is not possible to change the MIDI transmit channel of the MIDI keyboard that you are using (i.e., if the transmit channel is fixed), specify the MIDI receive channel of the NS5R by setting Multi mode [000] Receive MIDI channel setting and the Global mode [044] Exclusive Channel.

## If programs cannot be selected

- If you are unable to select programs from your MIDI keyboard, check the transmission settings on your MIDI keyboard. Some models of MIDI keyboard can be set to disable transmission of program change messages. Also, some types may be unable to transmit bank select messages, or may handle bank select messages differently than the NS5R. Carefully check the transmission functionality of your MIDI keyboard.

### About drum kits

Drum kits map different sounds (drum sounds) to each note of the keyboard, instead of playing a pitched sound. This means that a single drum kit can produce a wide variety of drum/percussion sounds. The NS5R has 37 drum kits in ROM and 2 drum kits in RAM. In order to play these, select one of them as a program. (Set the sound bank in Multi mode to yDr1, yD2, rDrm, or kDrm, and then use the VALUE controller; refer to pages 45 and 46). Also, Drum Kit Edit mode allows you to modify the sound and settings for each note of a drum kit (refer to pages 31 and 127).

# 1. About modes



Digital instruments such as the NS5R organize their functions into groups known as "modes." The functions of the NS5R can be broadly categorized into the following three groups.

1. Functions that let you select and play sounds
2. Functions affecting connections with external devices and data management
3. Functions that let you modify and create sounds

In order to help you use these functions efficiently, the functions of the NS5R are divided into the following eight modes: Multi mode, Part Edit mode, Global mode, Utility mode, Combination Edit mode, Program Edit mode, Drum Kit edit mode, and Edit Effect mode.

## Multi mode

Multi mode is the center for all of the NS5R's functionality. Here you can select from 1177 program sounds, 512 combination sounds, and 31 drum programs, assign these sounds to the 32 parts, play them as a GM tone generator or from a MIDI keyboard, and also make simple modifications to these sounds.

### *Playing in Multi mode*

To play sounds in Multi mode, you must set the MIDI transmit channel of the transmitting device (MIDI keyboard/computer etc.) to the MIDI channel of the NS5R part that you wish to play.

On the NS5R, parts 1—16 are normally assigned channels 1—16 of MIDI port A, and parts 17—32 are assigned channels 1—16 of MIDI port B. (These are the factory settings.)

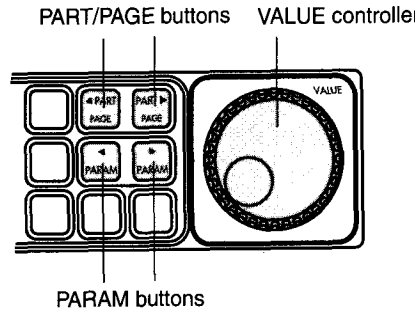
* *Whether port A or port B is used will be determined by the Part Edit mode [016] MIDI Channel To Port setting.*

* *The factory settings can be recalled by the Utility mode function [053] Preset/Initialize.*

### *Basic operation for Multi mode*

When the NS5R is powered-on, it will be in Multi mode.

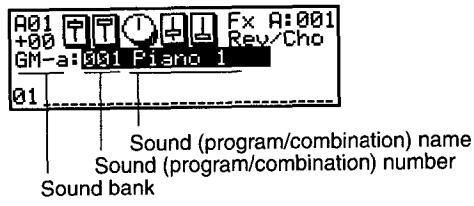
In Multi mode you can use the [PART/PAGE] buttons to switch display pages, the [PARAM] buttons to move the cursor (the highlighted area) to select parameters, and the VALUE controller to modify the value.

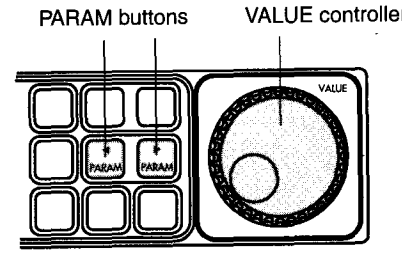



In Multi mode, you can select sounds either from the NS5R's front panel or via MIDI messages from an external device.

## *Selecting sounds from the NS5R's front panel*

- Sound bank: Selects the bank.
- Sound number and name: Selects the program/combination sound.
  Use the [PARAM] buttons to move the cursor to the desired item (highlighted), and rotate the VALUE controller to select a sound.




## *Selecting sounds via MIDI*

To select sounds from a MIDI keyboard (external MIDI device), transmit program change messages. When the NS5R receives a program change, it will switch sounds (programs/combinations) within the currently selected bank.

To switch the program bank, transmit control change #0/32 bank select messages. Even when the NS5R receives a bank select message, the program will not change. When a program change message is transmitted following the bank select message, a program will be selected within newly specified bank.

* *In addition to selecting sounds, Multi mode also allows you to make simple adjustments such as volume, pitch, stereo location, and effect depth for each part. For details refer to Advanced Use, "1. Multi mode."*

Up to four sets of Multi mode settings can be stored in the NS5R's memory. Utility mode [055] Multi Setup lets you save or recall these settings.

### Initial settings in Multi mode

When the power is turned on, or when a GM Mode On [F0 7E 7F 09 01 F7] message is received, the Multi mode settings will be as follows.

(Settings will differ depending on whether [046] Bank Map Type is set to "Default" or to "05R/W.").

| | **Default** | **05R/W** |
|---|---|---|
| Rx.MIDI Ch. | Parts 01 ... 16=01 ... A16,<br>Parts 17 ... 32=B01 ... B16, | Parts 01 ... 16=01 ... A16,<br>Parts 17 ... 32=B01 ... B16 |
| Program | GM-a:001 Piano 1<br>(Other than Parts 10 and 26)<br>rDrm:001 STANDARD<br>(Parts 10 and 26) | GM-b:001 Piano 1<br>(Other than Parts 10 and 26)<br>kDrm:001 GM Kit<br>(Parts 10 and 26) |
| Effect | A:001 Rev/Cho | A:001 Rev/Cho |
| Volume | 100 | 100 |
| Expression | 127 | 127 |
| Panpot | CNT | CNT |
| Key Shift | +00 | +00 |
| Rev.Send | 40 | 40 |
| Cho.Send | 0 | 0 |
| Part Mode | NORM (Other than Parts 10 and 26)<br>MDrm1 (Part 10)<br>MDrm3 (Part 26) | NORM (Other than Parts 10 and 26)<br>MDrm1 (Part 10)<br>MDrm3 (Part 26) |
| MONO/POLY | POLY | POLY |
| FineTune | +00 | +00 |
| Note Window | C-1 ... G 9 | C-1 ... G 9 |
| Velocity Window | 001 ... 127 | 001 ... 127 |
| ModWheel P.ModInt | 10 | 10 |
| PitchBend Range | +02 | +02 |
| Portamento Switch | OFF | OFF |
| Portamento Time | 0 | 0 |

## *Settings for each Part via MIDI*

### Program

The program/combination for each part can be specified by Bank Select and Program Change messages.

### Volume

The volume level of each track can be specified by Control Change #7 (Volume) messages and by Control Change #11 (Expression) messages.

### Panpot

The panning of each track can be modified by Control Change #10 (Panpot) messages.

### Send C/D

The Send C/D of each track can be modified by Control Change #91/93 (Effect Depth) messages.

### Transpose, Detune, Pitch Bend Range

The transpose, detune, and bend range of each track can be modified using RPN messages. In order to modify these settings, transmit Control Change #100 or #101 RPN messages to specify the parameter that you wish to adjust, and then use Control Change #6 or #38 (Data Entry) messages to specify the value.

# Part Edit mode

In this mode you can set parameters (other than Multi mode parameters) for each of the 32 parts of the NS5R. Unlike the "real" sound editing that you perform in Program Edit mode or Combination Edit mode, the modifications to the sound that you perform in this mode are merely adjustments which are applied to the settings of the program or combination sound. This means that the changes you make in this mode do not actually modify the sound data itself.

## *Basic operation in Part Edit mode*

From Multi mode, press the [EDIT/ENTER] button, and the following edit menu will appear.


Use the [PART/PAGE] buttons and the [PARAM] buttons to move the cursor to PartEdit, and press the [EDIT/ENTER] button once.

The parameters of Part Edit mode are divided into the following four groups: Common, EG (envelope generator), filter/window, and others.


Move the cursor and press the [EDIT/ENTER] button once again, and a page will appear in which you can edit the parameters. The following screen is an example of when EG is selected.


In Part Edit mode, use the [PART/PAGE] buttons to switch parts (or in Common, to switch pages), use the [PARAM] buttons to move the cursor (the highlighted area) to select a parameter, and use the VALUE controller to modify the value.

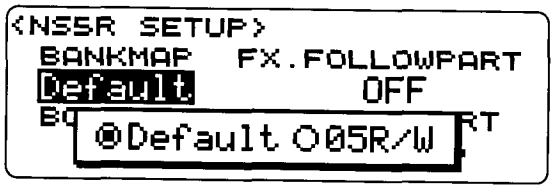
For details on the function of each parameter, refer to Advanced Operation, "2. Part Edit mode."

# Global mode

In this mode you can make settings which affect the entire NS5R. Here are settings for the NS5R's display functions, selection of the MIDI messages which are transmitted and received, and settings for protecting the contents of memory.

## *Basic operation in Global mode.*

From Multi mode, press the [EDIT/ENTER] button and an edit menu will appear. In the menu, move the cursor to Global and press the [EDIT/ENTER] button once.




In Global mode, use the [PART/PAGE] buttons to switch pages, use the [PARAM] buttons to move the cursor (the highlighted area), and use the VALUE controller to modify the value.

For details on the function of each parameter, refer to Advanced Operation, "3. Global mode."

# Utility mode

In this mode you can save various NS5R parameters to an external device or computer, or save/restore Multi mode settings.

## *Basic operation in Utility mode*

From Multi mode, press the [EDIT/ENTER] button and an edit menu will appear. In the menu, move the cursor to Utility and press the [EDIT/ENTER] button once.


Move the cursor to the desired item and press the [EDIT/ENTER] button once, and the page for the selected setting will appear.

In Utility mode, use the [PART/PAGE] buttons to switch pages, use the [PARAM] buttons to move the cursor (the highlighted area), and use the VALUE controller to modify the value.

For details on the function of each parameter, refer to Advanced Operation, "4. Utility mode."

# Combination Edit mode

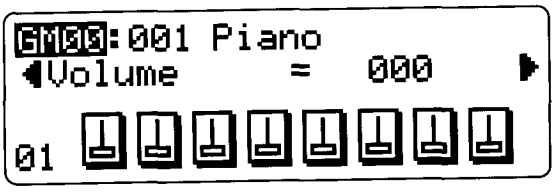
The NS5R allows you to bring together up to eight program sounds, and use them just as if they were a single program sound. Such a group of programs is referred to as a Combination.

For each part of a Combination sound, you can specify the volume, pan (stereo location), effect send level, the keyboard range and velocity range that will sound, and the effect that MIDI messages will have. This allows you to create extremely complex performances.

In Combination Edit mode you can make settings for combination sounds.

## *Basic operation in Combination Edit mode*

To enter this mode from Multi mode, make sure that a Combination sound is displayed, and press and hold the [EDIT/ENTER] button (approximately 2 seconds).

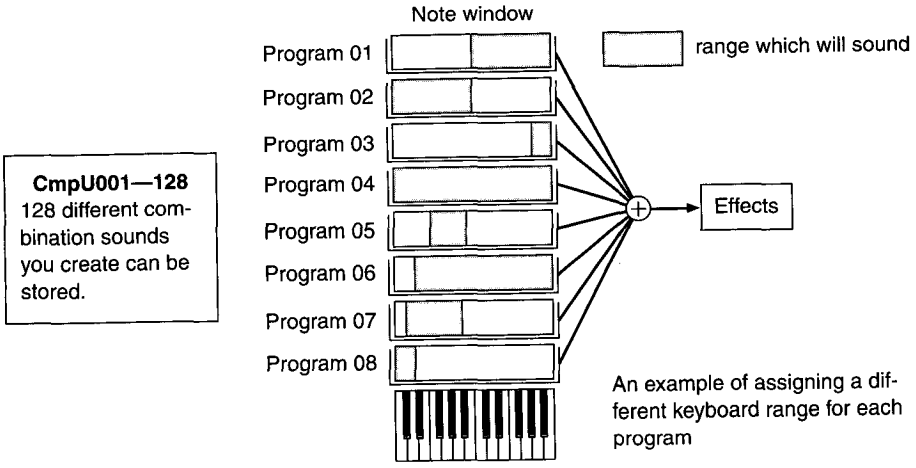



In Combination Edit mode, use the [PART/PAGE] buttons to switch between programs 01 through 08, use the [PARAM] buttons to select a parameter, and use the VALUE controller to modify the value.

For details on the function of each parameter, refer to Advanced Operation "5.Combination Edit mode."

## *Playing a combination*

Since combinations allow you to play up to eight programs, they are especially convenient for live performance.



# Combination types

Depending on the settings of a combination, programs can be combined in many different ways. For example, you might play different programs in the left and right hand, or make settings so that strongly and softly played notes sounded different programs. This can be a powerful capability for live performance. Here are some examples of the major ways in which combinations can be created.

## Layer

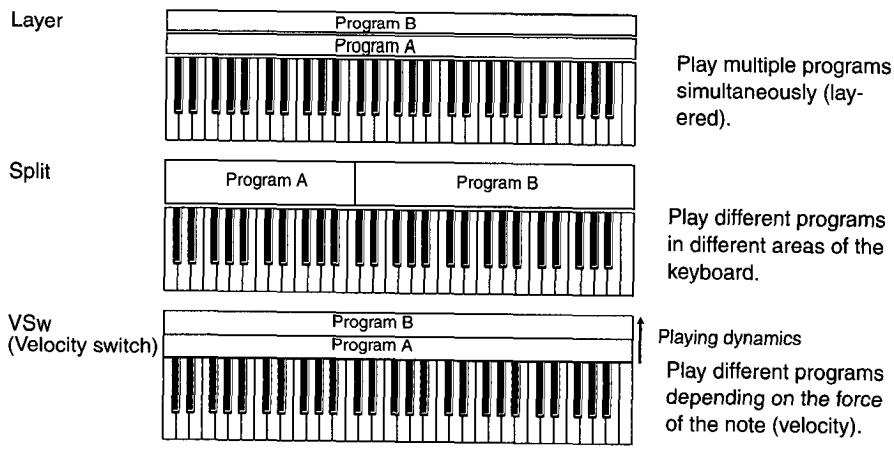
Play two or more programs at once. For example you might layer a piano sound with a strings sound.

## Split

Play different programs in different areas of the keyboard. For example you might play a piano sound in the high range (right hand) and a bass sound in the low range (left hand).

## Velocity switch

Play different programs depending on the force with which a note was played (note-on velocity). For example softly played notes might play a strings sound, and strongly played notes might play a brass sound.



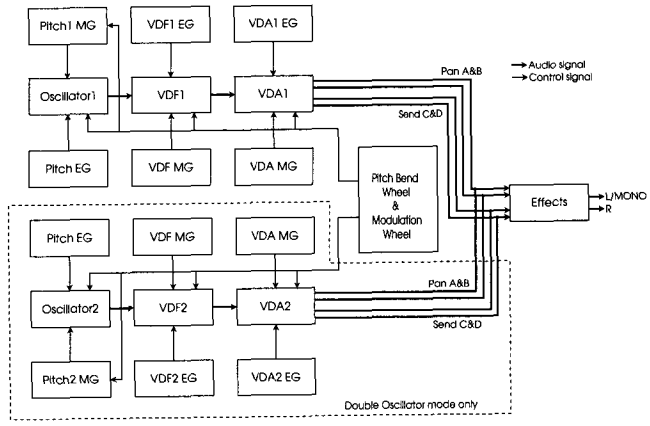

The example combinations shown here contain only two programs. Since the NS5R allows up to 8 different programs to be used, more programs can be used to create highly complex combinations.

* *For each timbre of a combination, an independent MIDI filter is provided for note-on, control change, pitch bend, aftertouch, damper, and portamento MIDI messages.*

Combinations that you create/modify in Combination Edit mode can be written (saved) into Combination bank U (CmbU001—127).

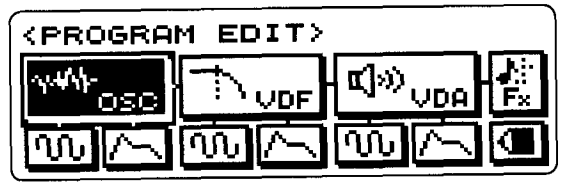
# Program Edit mode

Program Edit mode is where you modify program sounds. Programs are organized as follows. In Program Edit mode you can modify these settings to change the sound.

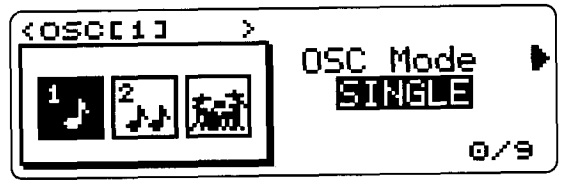



## *Basic operation in Program Edit mode*

To enter this mode from Multi mode, make sure that a Program sound is selected, and then hold down the [EDIT/ENTER] button. In approximately 2 seconds the Program Edit home page will appear.




Move the cursor to the desired item and press the [EDIT/ENTER] button, and the editing page for the selected parameter will appear.




In Program Edit mode, use the [PART/PAGE] buttons to move between sections such as OSC, EG, and LFO, use the [PARAM] buttons to select parameters, and use the VALUE controller to modify the value.

For details on the function of each parameter, refer to Advanced Operation "6. Program Edit mode."

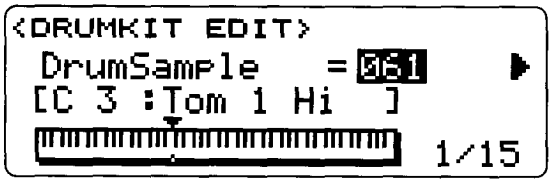
Combinations that you create/modify in Program Edit mode can be written (saved) into Program bank U (PrgU001—128).

# Drum Kit Edit mode

A Drum Kit is a collection of percussion instrument sounds (drum samples) which are assigned to each note number. A sound program which uses a drum kit allows you to play a different drum sound from each note, meaning that you can play drum sounds from your keyboard just as if you were playing a drum set.

## *Basic operation for Drum Kit Edit mode*

To enter this mode, make sure that a drum sound is selected for the oscillator, and from any editing page in Program Edit mode (except for the effect and rename pages) press and hold the [EDIT/ENTER] button (for approximately 2 seconds). A drum sound will be selected for the oscillator if in Multi mode you select a program which uses a drum sound, or if in Program Edit mode you set [074] Oscillator Mode to DRUMS.




In Drum Kit Edit mode, use the [PART/PAGE] buttons to specify a note to which a drum sample is assigned, use the [PARAM] buttons to select a parameter, and use VALUE dial to modify the value of the parameter.

* *If a MIDI keyboard is connected to the NS5R, you can also select a note for editing simply by pressing that note on the keyboard.*

For details on the function of each parameter, refer to Advanced Operation "7. Drum Kit Edit mode."

A drum kit that you create/modify in Drum Kit Edit mode can be written (saved) into the drum kit user area (USERKIT) 01 or 02.

# Effect Edit mode

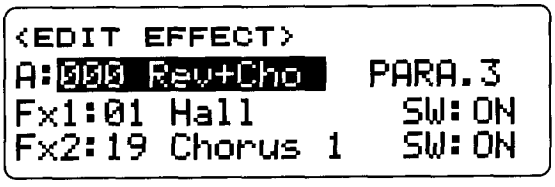
The NS5R contains two digital effect processors. For each effect (EFFECT 1, 2), you can select one of 47 different Effect Types such as reverb, delay, flanger, distortion, and exciter.

In Effect Edit mode you can change the effect type, and modify the settings.

* *In a combination, the effect settings for each program 01 through 08 are ignored, and the effect settings specified for the combination will be used. Similarly in a Multi, the effect settings for the program of each part will be ignored, and the effect settings specified for that Multi will be used.*

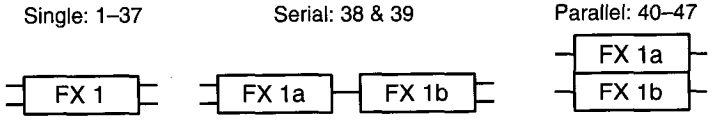
## *Basic operation for Effect Edit mode*

To enter this mode, make sure that either [009] Effect Bank or [010] Effect Program is selected in Multi mode, and press and hold the [EDIT/ENTER] button (approximately 2 seconds).




In Effect Edit mode, use the [PART/PAGE] buttons to select pages, the [PARAM] buttons to select parameters, and the VALUE controller to modify the value of the parameter.

The 47 effect types are numbered: 1—37 are single effects, 38—39 are serial-connected effects, and 40—47 are parallel-connected effects. By using a parallel-connected effect, you can simultaneously use up to four independent effects.



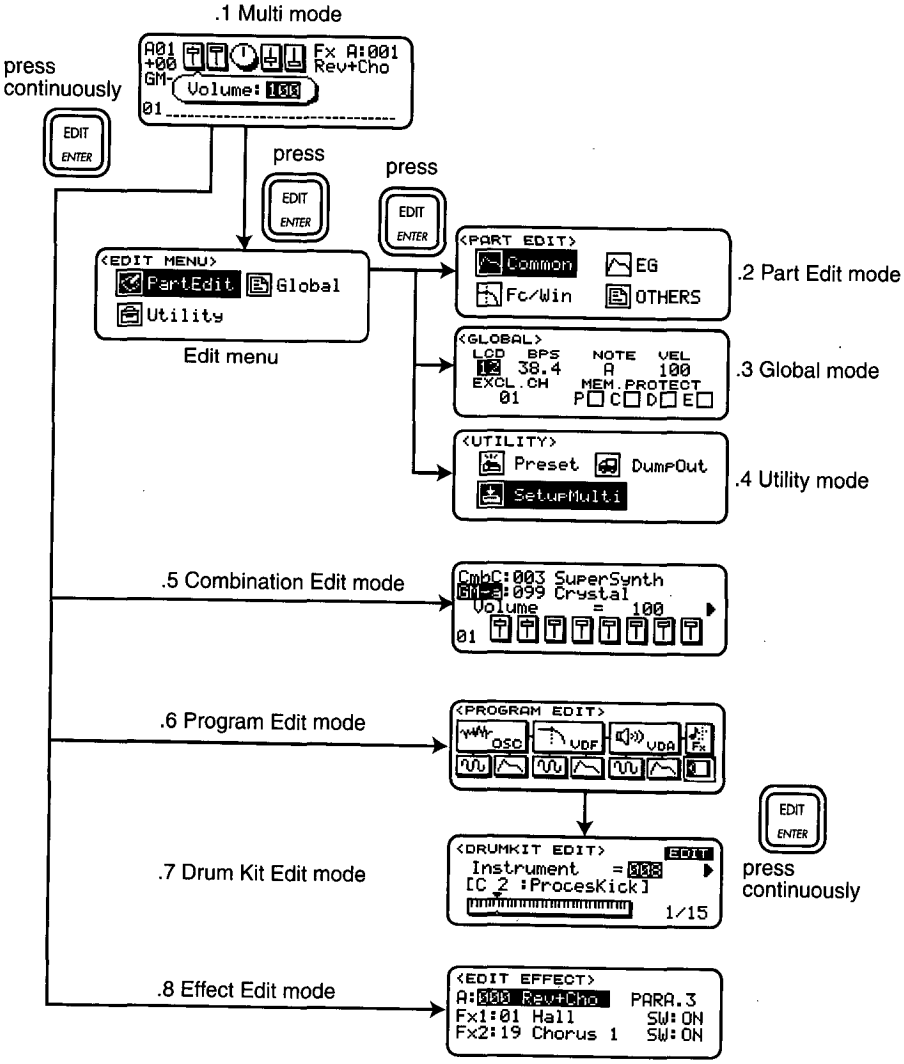

For details on the function of each effect, refer to Advanced Operation "8. Effect Edit mode."

Effects that you create/modify in Effect Edit mode can be written into effect bank H (H:001—128).

# 2. How the NS5R is organized

## Modes and Pages

Digital musical instruments such as the NS5R organize their numerous functions into groups referred to as "modes." As you have already read, the NS5R has eight modes. The eight modes are related as shown in the following diagram.




Each mode consists of several "pages." The three modes Part Edit mode, Program Edit mode, and Utility mode have a page containing a menu (referred to as the home page), and from this home page you can select the desired page.

In the page screens of the NS5R, some cursor locations allow you to move to a different mode. For example if you wish to edit effect settings, place the cursor on the effect selection and continue pressing the Edit button.

# Parts/Channels/Voices

## How Parts and Voices are related

The section in a synthesizer that produces the sound is generally referred to as the oscillator (OSC). On the NS5R, a unit of sound production able to produce one independent sound is referred to as a "voice." The Program sounds of the NS5R are either Single Voice or Double Voice, and these Program sounds can be combined into a Combination to produce a sound that uses up to 16 voices.

Each Part is analogous to a musician in a band. The NS5R has 32 Parts, and therefore is able to emulate a 32-member ensemble. For example, Part 1 might be assigned a piano, Part 2 a bass, Part 3 a trumpet, and so on.

| Part | Sound (number of voices) |
|---|---|
| 1 | Piano (1) |
| 2 | Bass (1) |
| 3 | Synth (2) |
| 4 | Guitar (1) |
| 5 | Strings (2) |
| **Total** | **7 voices** |

In this example, five different sounds use seven voices.

In this case you need to be aware that the total number of voices used by all Parts cannot exceed 64. When more than 64 voices are requested of the NS5R, currently-sounding voices will be turned off, beginning with the oldest voice. This means that you must be careful when using Combination sounds which use a large number of voices.

# How Parts and MIDI channels are related

A MIDI receive channel can be assigned to each of the 32 Parts of the NS5R. The MIDI channels available on the NS5R are A1—A16 and B1—B16. The MIDI channels of the transmitting device (computer or sequencer) must be set to match the MIDI channels of the receiving device (the NS5R). When the power is turned on, Parts 1—16 are set to A1—A16, and Parts 17—32 are set to B1—B16.

| Part no. (sound) | MIDI receive ch. |
|---|---|
| Part 01 (Piano) | A01 |
| Part 02 (Bass) | A02 |
| Part 03 (Strings) | A01 |
| Part 04 (Brass) | A04 |

In this case since Parts 1 and 3 are set to the same MIDI receive channel, a single Note message will simultaneously sound both Piano and Strings sounds.

# Program numbers and Bank numbers

The Programs, Combinations, and Drum Kits of the NS5R provide a total of 1177 different sounds (including 256 User sounds). Since the GM numbers 1–128 are insufficient to select the desired sound from this enormous range of possibilities, sounds are selected by a combination of Extension Voice Bank and Program Number.

When selecting a sound from the front panel, move the cursor to the appropriate location and specify the Bank number and Program number directly. (For the available Banks and Programs, refer to the Voice name list included at the end of this manual.)

When selecting a sound from a sequencer or computer via MIDI, you will use three types of MIDI message: Bank Select MSB, Bank Select LSB, and Program Change. For example if you wish to set Part 1 to "GS02" bank (MSB:LSB=02:00) Program number 10, you would transmit the following MIDI messages.

B0, 00, 02, (B0,) 20, 00, C0, 09

*MIDI Program Change numbers 0–127 correspond to Program numbers 1–128 of the NS5R. Also, when controlling program changes from an external device via MIDI, you must be sure to transmit Bank Select numbers together with the Program number. Programs of the NS5R will not change when Bank Select numbers are received by themselves.*

# 3. Editing

## What is editing?

Since the NS5R already contains a rich assortment of program sounds and combination sounds, a wide range of musical possibilities are already available to you. However you are free to modify these sounds or even to create completely new sounds. The process of modifying an existing sound or of creating a completely new sound is referred to as "editing."

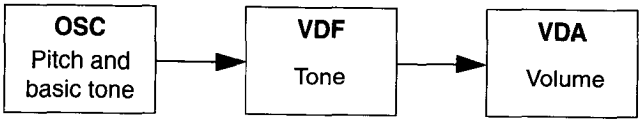
The NS5R is not just a preset tone generator that lets you use only the built-in sounds. It is a full-fledged synthesizer featuring Korg's powerful ai-squared synthesis system, and gives you the freedom to modify sounds or to create completely new ones. In order to bring out the full potential of the NS5R, we encourage you to try your hand at editing.

Editing operations are performed in the corresponding edit mode. For details refer to the Advanced Operation chapter for the relevant mode.

### *The elements of sound*

The NS5R is able to produce an incredible variety of sounds, from instrumental sounds such as piano and guitar, to the sounds of drums and percussion, and even synth sounds and sound effects. In order to modify these sounds or to create new sounds, you must tell the NS5R "how to change the sound." The various aspects of the sound which can be changed are referred to as "parameters." In the NS5R's Program Edit mode and Combination Edit mode, you can edit sounds by modifying the setting or value of these parameters.

In order to edit smoothly and efficiently, it is important that you understand the elements of sound. Sound consists of three elements; pitch, tone, and volume. On the NS5R, the OSC (oscillator), VDF (filter) and VDA (amplifier) which make up a program are what control these elements or aspects of the sound



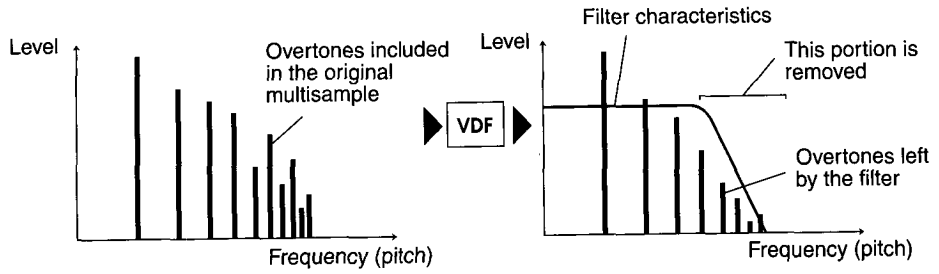

#### Pitch: OSC (oscillator)

OSC is the section which selects the basic waveform (multisample), and specifies the pitch-related settings. The NS5R contains a huge number of multisamples, and the process of creating a sound begins by selecting of one of these multisamples. Not only instrumental sounds such as piano, but also waveforms unique to synthesizers are also provided.

#### Tone: VDF (filter)

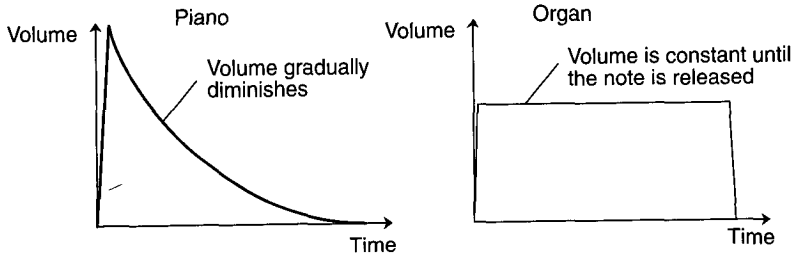
VDF is the section which adjust the brightness of the sound. The multisample selected in the OSC section contains a wide range of overtones and frequency components. These are what make a sound identifiable as "piano-like" or "guitar-like." By using a type of filter called a low pass filter, the VDF can remove some of the high frequency components to adjust the brightness of the sound. The greater the amount removed by the filter, the darker (softer) the sound will become.

The amount removed by the filter (= brightness) can be made to change over time. For example the sound might be bright in the beginning, and gradually be made darker.




### Volume: VDA (amplifier)

VDA is the section that adjusts the volume. The volume referred to here is not the overall volume of the performance, but rather the change in volume that occurs within a single note. For example, a note played on a piano begins loudly, and then gradually decays in volume. On the other hand, a note played on an organ maintains the same volume as long as the key is pressed, and a note played on a violin can change in volume during the note as desired by the performer. This type of volume change is what the VDA creates.




## *EG and LFO*

EG (envelope generator) and LFO (low frequency oscillator) are what enable the OSC, VDF and VDA sections to control the pitch, tone, and volume in ways that change over time.

### EG

This is a section that allows various aspects of the sound to be controlled over time. The NS5R provides a Pitch EG, VDF EG, and a VDA EG, respectively allowing pitch, tone, and volume to be controlled over time. For example the volume adjustments performed over time by the VDA discussed in the preceding section are actually specified by the VDA EG.

### LFO

This is a section that allows various aspects of the sound to be controlled cyclically. The NS5R provides a Pitch LFO, VDF LFO, and VDA LFO, respectively allowing pitch, tone, and volume to be adjusted cyclically. The Pitch LFO creates cyclic change in pitch = vibrato (pitch). The VDF LFO creates cyclic change in tone = wah (VDF cutoff). The VDA LFO creates cyclic change in volume = tremolo (VDA).

# 4. Troubleshooting

This section lists various problems you may experience when playing the NS5R from a computer/sequencer or keyboard, and gives the measures that should be taken in each case. If you wish to know about the discussed functions or parameters in more detail, refer to the page references that are given.

## *Nothing appears in the LCD when the power is turned on*

Make sure that the power is connected correctly.

## *No sound*

Make sure that the audio cables or headphones are connected correctly (p.2, 18).

Make sure that the power switch of your powered monitor system or stereo system is turned on, and that the volume is raised.

Make sure that the NS5R's VOLUME is raised (p.v).

Make sure that the power is turned on for any connected MIDI keyboard or computer/sequencer, and that MIDI cables or special cables are connected correctly (p.3—p.5).

When using a special cable for connections: Make sure that the Global mode BPS setting is correct (p.6).

When using a special cable for connections: Make sure that the MIDI driver installation settings match the MIDI port settings (p.7, 11).

Make sure that you are not playing in a keyboard range or velocity range which is silent because of note window or velocity window settings (p.60, 61, 83, 85).

If a program/combination sound is selected: Make sure that the MIDI transmit channel(s) of your computer/sequencer match the MIDI channel of each part (p.44).

## *The sound does not stop*

If the MIDI cable is disconnected or the connection is switched while a note is sounding, the sound will continue (since the note-off message will not be received). If this happens, temporarily switch to a different mode to stop the sound. If a device capable of transmitting Active Sensing messages is connected to the NS5R, notes will stop automatically if the MIDI connection is broken.

## Cannot control via MIDI

Make sure that MIDI cable or special cable connections are correct, and that the transmitting device is set correctly (p.3).

If a combination sound is selected: If control is impossible only for a specific effect, such as pitch bend or aftertouch, it is possible that MIDI filter settings are causing that message to be cut. Check the Combination Edit mode settings. ([066. Receive pitch bend] p86, [067. Receive aftertouch] p86)

## Cannot select Programs or Combinations

Programs and Combinations are selected by Program Change messages. Check whether the transmitting device is transmitting these messages.

If a program/combination sound is selected: To select banks, transmit bank select messages (p.35).

## The sound or operation is different than when editing

Sounds and effects that you edit in Program Edit mode, Combination Edit mode, Drum Kit Edit mode or Effect Edit mode are not saved unless you perform the Write operation. If you select another program or combination without writing, the sound data that you have been editing will be lost.

When you edit a drum kit, the drum sounds will sound with the settings of the program that is selected in Multi mode. If you use that drum kit with a different program than when you edited it, be aware that the sounds and operation will be different (p.127). Normally, you should first select the program that uses the drum kit that you wish to edit, and then edit the drum kit.

A combination does not contain the program data itself for each part, but contains only the number of the program for each part. If you edit the programs used by a combination, or exchange the locations of the programs, the sound of the combination will be affected.

## Cannot write programs or combinations

Check the Global mode Memory Protect setting (p.70). If Memory Protect is ON, data cannot be written.

## The wrong drum sounds are played

If transmitting the correct note message for the desired sound causes a different drum sound to play, it is possible that the Transpose setting is set to a value other than 0. Make sure that the Performance Edit mode parameter Master Key Shift is set to +00 (p.52).

When using a computer/sequencer to play the NS5R, make sure that the transpose setting of the transmitting device is set to 0. Sequencers or sequencer programs will not normally transpose MIDI channel 10, but if editing commands have been executed to transpose the data or if you are using a Part other than Part 10 of Multi mode to play the drums, check the settings.

## *Cannot transmit exclusive messages from the NS5R*

If you are unable to transmit exclusive messages from the NS5R (e.g., in order to transmit/save sound data or edit sound data), check the Global mode EXCL.CH setting (p.70).

# Parameter Guide

# 1. Multi mode



In Multi mode you can set parameters for the sound, volume, and panning etc. of each Part of the NS5R. Immediately after the NS5R's power is turned on, it will be in this mode.

Multi mode is also the center for a variety of NS5R operations and functions, and is the starting point from which you can move to various editing modes, or to Global and Utility modes.

The following items can be set in Multi mode.

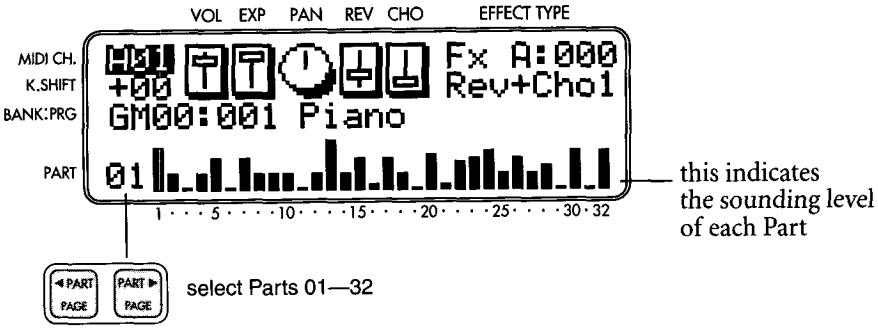
| Button | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 000 Receive MIDI channel | Set the MIDI channel that each Part will receive | →P.44 |
| | 001 Transpose | Set the transposition for each Part | →P.45 |
| | 002 Bank select | Select the sound bank for each Part | →P.46 |
| | 003 Program number | Select the sound program for each Part | →P.46 |
| | 004 Volume | Adjust the volume for each Part | →P.46 |
| | 005 Expression | Adjust the depth of Expression for each Part | →P.47 |
| | 006 Panpot | Adjust the stereo position for each Part | →P.47 |
| | 007 Reverb send level | Adjust the effect depth | →P.48 |
| | 008 Chorus send level | Adjust the effect depth | →P.48 |
| | 009 Effect bank | Select the effect program bank that will apply to the setup | →P.49 |
| | 010 Effect program | Select the effect program that will apply to the setup | →P.49 |
| | [EDIT] (Effect edit mode) | | →P.134 |
|  | Press (Edit menu) | Move to Part Edit mode | →P.50 |
| | | Move to Global mode | →P.67 |
| | | Move to Utility mode | →P.75 |
| | Press and hold | Move to Combination Edit mode | →P.79 |
| | | Move to Program Edit mode | →P.89 |
| | | Move to Drum Kit Edit mode | →P.134 |

By pressing the [EDIT/ENTER] button from Multi mode, you can move to a variety of modes that allow you to edit parts, programs or combinations. The mode to which you will move will depend on the location of the cursor at that time. Refer to the explanations for each parameter which begin on the following page.

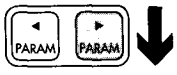
* *Settings in Multi mode will be lost when the power is turned off. When the power is turned on, these settings will be initialized for GM.*

* *If you wish to save the Multi mode settings, you can use Utility mode [055] Setup Multi (refer to p.78) to store up to four types of settings. Also, the NS5R, X5 and X5DR Multi mode settings are compatible, but the NS5R and 05R/W Multi settings are compatible only in their Effect settings.*

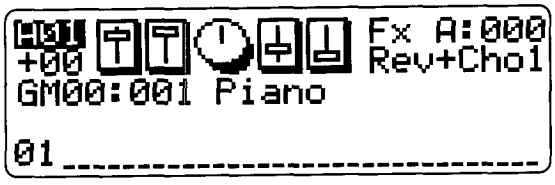
In Multi mode, the LCD will display an indicator which shows the playing status for each of the 32 Parts. When the NS5R is producing sound in response to musical data being received from an external device, the indicator for the corresponding Part will move like a level meter.



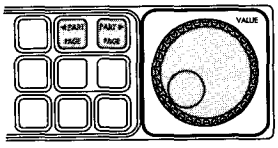

## 000. Receive MIDI Channel




### *Set the MIDI channel that each Part will receive*




**A01—A16, B01—B16, OFF**

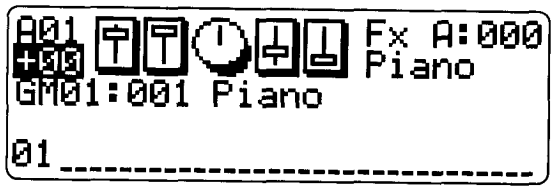


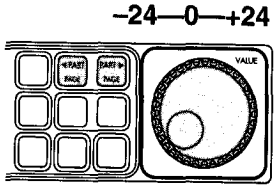

If you are using a connected MIDI keyboard to play the NS5R, set the MIDI channel being transmitted by the keyboard to match the MIDI channel of the NS5R Part to which the Program you wish to play is assigned. If you are using a sequencer, set the MIDI channel of each NS5R Part to match the MIDI channel used by each sequencer part.

## 001. Key Shift

↑ 000. Receive MIDI Channel
↓ 002. Bank Number

### Set the transposition for each Part




Adjust the pitch of each Part in semitone steps over a range of –24 to +24 (12 steps are one octave).

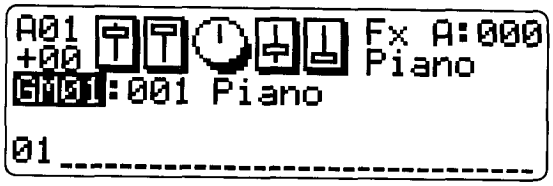
* *When the power is turned on or when a GM On message is received, this will automatically be set to 00.*

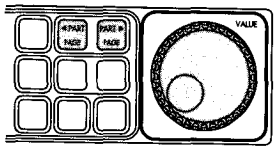
## 002. Bank Number

↑ 001. Key Shift
↓ 003. Program Number

### Select the sound bank for each Part

**GM-a, r:01—r:28, r:CM, y:01—y:65, ySFX, GM-b, PrgU, PrgA—PrgC, CmbU, CmbA—CmbC, yDr1, yDr2, rDrm, kDrm, ******



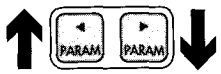




Select the sound program bank for each Part.
Lists of the sound programs contained in each bank can be found in the Program List section at the end of this manual.

* *The program indicated by "****" is a silent program.*

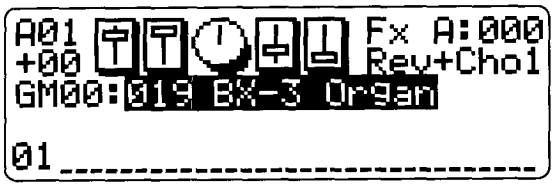
**GW** If this parameter is set to CmbU, CmbA...CmbC, or yDrm1, pressing and holding the [EDIT/ENTER] button will take you to Combination Edit mode.

## 003. Program Number

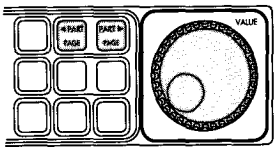



↑ 002. Bank Number
↓ 004. Volume

### Select the sound program for each Part



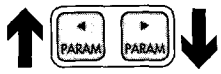

001—128




Select the sound program number for each Part.
Lists of the sound programs can be found in the Program List section at the end of this manual.

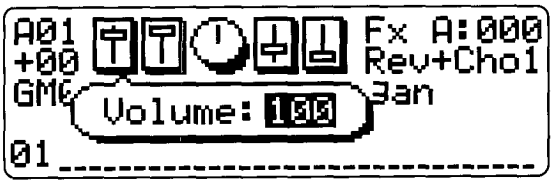
* *Parts for which the Bank Number specifies a Combination Bank will use the Combination sound of the number you specify here.*

## 004. Volume

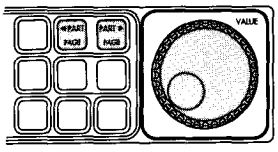



↑ 003. Program Number
↓ 005. Expression

### Adjust the volume for each Part




000—127

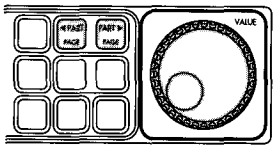



Adjust the volume (MIDI Control Change #07) for each Part.
The volume can also be adjusted by [005] Expression, but to set the overall volume balance of the ensemble you will normally use this Volume parameter.
On the NS5R, parameters which determine the volume of each Part exist separately in each of the three modes Program, Combination, and Multi. The maximum possible value for the Multi mode [004] Volume setting will be the value of the Program Edit mode [078] Oscillator Level. In the case of a Combination sound, the volume will be limited by the [054] Program Volume setting as well.

## 005. Expression

↑ 004. Volume
↓ 006. Panpot

### Adjust the loud/soft dynamics for each Part

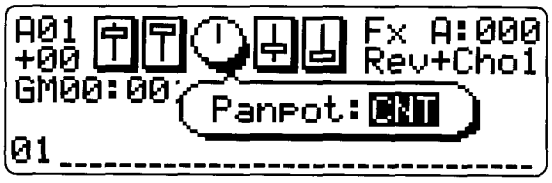



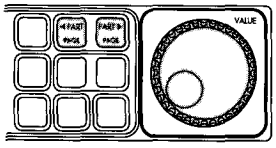

Adjust the depth of Expression (MIDI Control Change #11) for each Part.
Like Volume, Expression is a parameter which controls the volume, but the loud/soft dynamics of an individual instrument are normally created using Expression.

## 006. Panpot

↑ 005. Expression
↓ 007. Reverb Send Level

### Adjust the stereo position for each Part



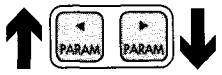




When the sound is output in stereo, this setting determines whether each Part will be heard from the center (with equal volume from the two outputs L and R) or from one side (with less volume from either the L or the R output) (MIDI Control Change #10).
With a setting of CNT, the sound of the Part will be heard from the center. As the value is increased, the sound will move from center toward the left or right. A setting of L63 is far left, and R63 is far right.
With a setting of RND, the sound of the Part will be heard from a random location each time a MIDI Note-on message is received. This means that, for example as you play a MIDI keyboard connected to the NS5R, each note will be heard from a different location, producing an impression of the sound bouncing here and there.
On the NS5R, parameters which determine the panpot setting exist separately in each of the three modes Program, Combination, and Multi. The actual pan location at which the sound is heard is determined by the sum of the settings in these three modes.
For example if for a certain part in Multi mode, [006] Panpot is set to R63 (far right) and the [144] Oscillator Panpot is set to L63 (far left) in the program selected for that part, the sound will actually be heard in the location determined as follows:

R63 (far right) + L63 (far left) = (same level for both) = (heard from the center)

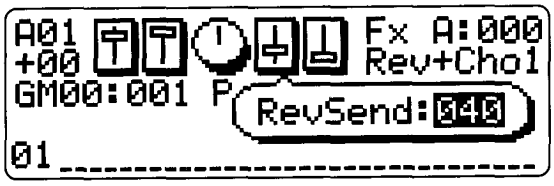
Thus, the sound will be heard from the center.
If the sound selected for that part is a combination sound (rather than simply a program sound), the [055] Program Panpot setting will be added to this equation.
However if even one of these values is set to RND, the sound of that part will be heard from a random location for each note.

## 007. Reverb Send Level

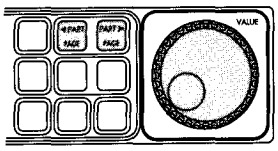



↑ 006. Panpot
↓ 008. Chorus Send Level

### Adjust the Reverb effect depth

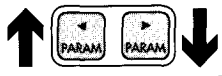



000—127



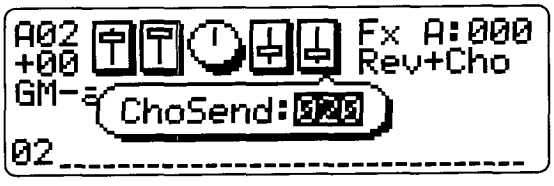

For each part, adjust the level of the sound that is sent to the reverb effect. As this value is increased, reverb will be applied more strongly to the sound of that part.
An effect other than reverb can be selected as the effect that is applied here. Also, you can specify the way in which it will be connected to the chorus effect discussed below, and this will affect the function of this parameter. These settings can be saved for each Multi setup. Settings such as this are made in Effect Edit mode. For details refer to the explanation of Effect Edit mode parameters which begins on page 134.
On the NS5R, parameters which determine send levels to the effect processors exist separately in each of the three modes Program, Combination, and Multi. The maximum value of the Multi mode parameters [007] Reverb Send Level and [008] Chorus Send Level will be the values of the Program Edit mode parameters [145] C Send Level and [146] D Send Level. In the case of a combination sound, the send levels will also be limited by the settings of the [058] C Send Level and [059] D Send Level parameters.

## 008. Chorus Send Level

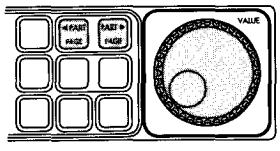



↑ 007. Reverb Send Level
↓ 009. Effect Bank

### Adjust the Chorus effect depth

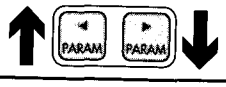



000—127



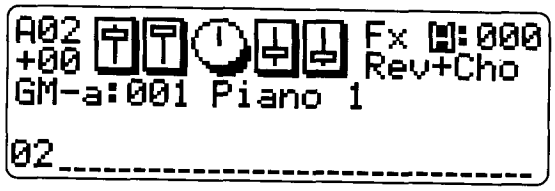

For each part, adjust the level of the sound that is sent to the chorus effect. As this value is increased, chorus will be applied more strongly to the sound of that part.
An effect other than chorus can be selected as the effect that is applied here. Also, you can specify the way in which it will be connected to the reverb effect discussed above, and this will affect the function of this parameter. These settings can be saved for each Multi setup. Settings such as this are made in Effect Edit mode. For details refer to the explanation of Effect Edit mode parameters which begins on page 134.

## 009. Effect Bank

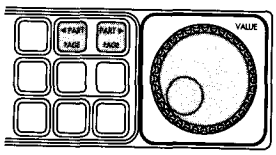



↑ 008. Chorus Send Level
↓ 010. Effect Program

*Select the effect program bank that will apply to the setup*




**A, B, C, D, E, F, G, H**



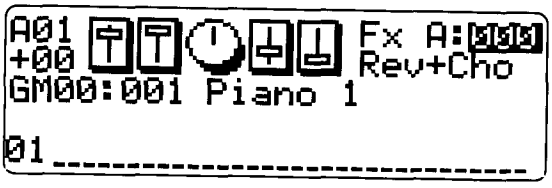

This specifies the effect program bank that will be used for the displayed Multi setup.

**GW** When this parameter is selected, you can press and hold the [EDIT/ENTER] button to move to Effect Edit mode.

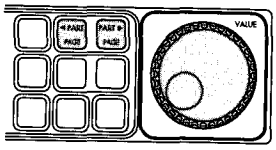
## 010. Effect Program


↑ 009. Effect Bank

*Select the effect program that will apply to the setup*




**001—128**




This specifies the effect program that will be used for the displayed Multi setup.

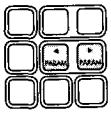
**GW** When this parameter is selected, you can press and hold the [EDIT/ENTER] button to move to Effect Edit mode.

# 2. Part Edit mode

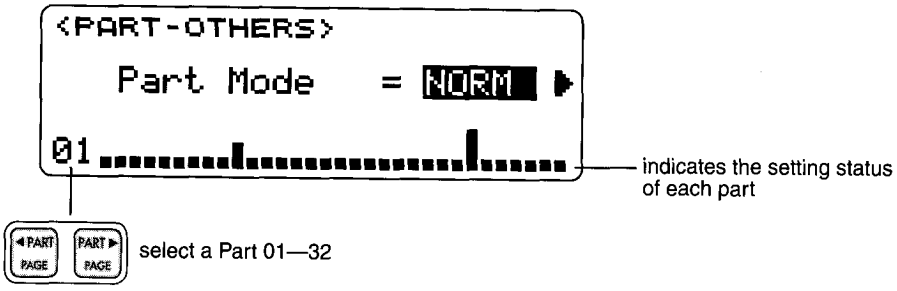
In this mode you can make settings for each part which are not covered in Multi mode. To enter this mode from Multi mode, select PartEdit from the edit menu, and press the [EDIT/ENTER] button once.

Unlike the sound editing that you perform in Program Edit mode and Combination Edit mode, the settings you make in Part Edit mode will modify the sound by adding Part Edit values to the sound parameters of the Program or Combination sound. This means that the original sound itself is actually not affected.

Part Edit parameters are organized into four groups: Common, EG (Envelope Generator), Filter/Window, and Others.

| Key | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 011 (Sub menu) | *Common edit*<br>EG edit<br>Filter/Window edit<br>Others edit | →P.51<br>→P.55<br>→P.60<br>→P.62 |
|  | 012 Master Tune | Make fine adjustments to the pitch of the entire setup | →P.52 |
| | 013 Master Key Shift | Transpose the pitch of the entire setup | →P.52 |
| | 014 Master Volume | Set the *volume* of the entire setup | →P.53 |
| | 015 Master Balance | Set the stereo balance of the entire setup | →P.53 |
| | 016 MIDI Channel To Port | Set the output port for each MIDI channel | →P.54 |
| | 017 Program Change To Port | Use program changes to select output ports | →P.54 |
|  | 018 EG Attack Time | Adjust the attack time for the tone/volume of each Part | →P.55 |
| | 019 EG Decay Time | Adjust the *decay* time for the tone/volume of each Part | →P.56 |
| | 020 EG Release Time | Adjust the release time for the tone/volume of each Part | →P.56 |
| | 021 Pitch EG Start Level | Adjust the pitch at which each Part begins to sound | →P.57 |
| | 022 Pitch EG Attack Time | Adjust the attack time for the pitch of each Part | →P.57 |
| | 023 Pitch EG Release Time | Adjust the release time for the pitch of each Part | →P.58 |
| | 024 Pitch EG Release Level | Adjust the pitch to which each Part returns | →P.58 |
|  | 025 Cutoff Frequency | Adjust the brightness of each Part | →P.59 |
| | 026 Color | Adjust the *tonal character* of each Part | →P.59 |
| | 027 Note Window Bottom | Set the lower note limit for each Part | →P.60 |
| | 028 Note Window Top | Set the upper note limit for each Part | →P.60 |
| | 029 Velocity Window Top | Set the upper velocity limit for each Part | →P.61 |
| | 030 Velocity Window Bottom | Set the lower velocity limit for each Part | →P.61 |
|  | 031 Part Mode | Set the play mode of each Part | →P.62 |
| | 032 Mono/Poly | Set the number of voices for each Part | →P.62 |
| | 033 Fine Tune | Make fine adjustments to the pitch of each Part | →P.63 |
| | 034 Velocity Sensitivity Depth | Set the sensitivity of each Part to keyboard dynamics | →P.63 |
| | 035 Velocity Sensitivity Offset | Specify a value by which velocity data will be offset for each Part | →P.64 |
| | 036 Modulation Wheel / Pitch MG Intensity | Set the depth of modulation for each Part | →P.64 |
| | 037 Pitch Bend Range | Adjust the pitch bend depth for each Part | →P.65 |
| | 038 Portamento Switch | Turn portamento on/off for each Part | →P.65 |
| | 039 Portamento Time | Adjust the portamento time for each Part | →P.66 |

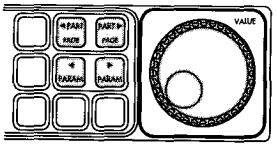
In Part Edit mode as in Multi mode, an indicator showing the edit status of each of the 32 Parts will be shown in the LCD, for all parameters except Common parameters. Use the [PART/PAGE] buttons to select the Part you wish to edit, and then edit its parameters. When you modify the value of a certain parameter, a bar graph-like indicator for the corresponding part will indicate that the setting has been modified.




## 011. Sub menu

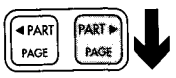

### Select the Part Edit parameter group


**Common, EG, Fc/Win, OTHERS**



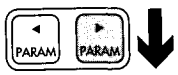
The Part Edit parameters are divided into four groups: common (settings common to all parts), EG (envelope generator), filter/window, and others. In this menu screen, select the group of parameters that you wish to edit.

## PART-MASTER1




↓ 014. Master Volume
015. Master Balance

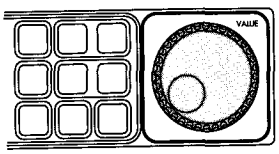
## 012. Master Tune




↓ 013. Master Key Shift

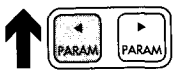
### *Make fine adjustments to the pitch of the entire setup*


**–100.0—+100.0**




This adjusts the basic pitch (tuning) of the entire NS5R in 0.1 cent steps (1 cent is 1/100th of a semitone), over a range of 100 cents upward or downward.

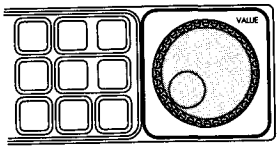
## 013. Master Key Shift




↑ 012. Master Tune

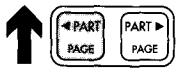
### *Transpose the pitch of the entire setup*


**–24—0—+24**



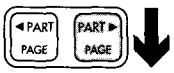

This adjusts the pitch of the entire NS5R in semitone steps. This is a convenient way to transpose the playback.

## PART-MASTER 2




↑ 012. Master Tune
013. Master Key Shift

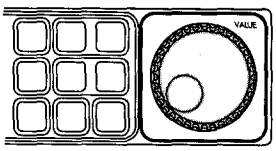
## 014. Master Volume




↓ 015. Master Balance

### Set the volume of the entire setup


**000—127**



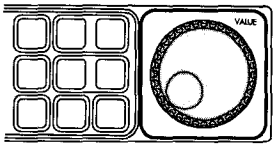

This adjusts the volume of the entire NS5R. This lets you adjust the overall volume while preserving the volume balance between Parts.

## 015. Master Balance


↑ 014. Master Volume

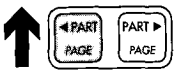
### Set the stereo balance of the entire setup


**L63—CNT—R63**




This adjusts the left/right stereo volume balance of the entire NS5R.
With a setting of CNT the volume of the L and R outputs will be equal. The sound will be heard from far left with a setting of L63, and from far right with a setting of R63.

MIDI TO PORT

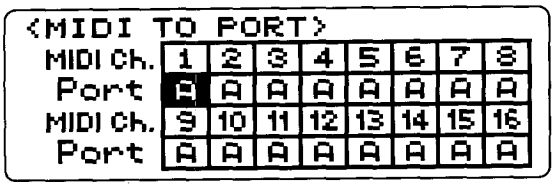



↑ 014. Master Volume
015. Master Balance

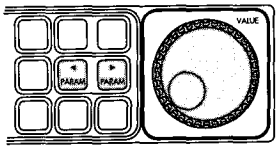
# 016. MIDI Channel To Port

↓ 017. Program Change To Port

## Set the output port for each MIDI channel




**(ch. select) / A, B, C**

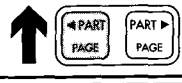



For each channel of MIDI messages that is received by the NS5R from an external MIDI device (MIDI keyboard, sequencer, or computer etc.) connected to the NS5R's MIDI IN, these settings determine whether the NS5R itself will sound as the tone generator, or whether an external MIDI tone generator will sound instead.

For example you might assign MIDI channel 01 to the NS5R, channel 02 to the external MIDI tone generator, ... etc., so that the MIDI channels could be divided between two or more MIDI tone generators including the NS5R.

MIDI messages of channels which are set to A or B will be sounded on the NS5R's own tone generator, and MIDI messages of channels which are set to C will be sounded on an external MIDI tone generator.

PROG TO PORT

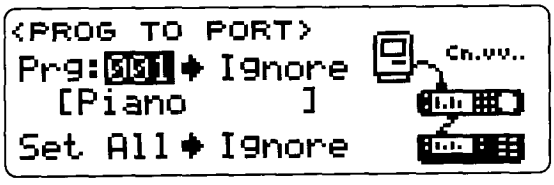


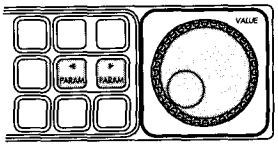

↑ 016. MIDI Channel To Port

# 017. Program Change To Port

## Use program changes to select output ports

**(program) 001—128 / SET ALL (port:) A (Int), B (Int), C (Ext), Ignore**

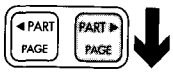



The MIDI program change messages received by the NS5R can specify whether the NS5R itself will sound as the tone generator, or whether an external MIDI tone generator connected to the NS5R's MIDI OUT will be sounded.

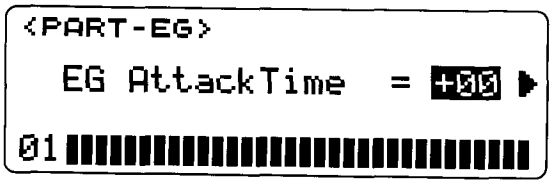
For example you can specify that Piano (#001) will be sounded by the NS5R and Strings (#049) will be sounded by an external tone generator, in this way using program change messages to switch between several MIDI tone generators including the NS5R.
When a program change message with a program number specified as A (Int) or B (Int) is received, the internal tone generator of the NS5R will sound. When a program change message with a program number specified as C (Ext) is received, the internal tone generator of the NS5R will not sound, and the external tone generator connected to MIDI OUT will sound instead.
Program numbers set to Ignore will not cause program change messages to switch between internal/external tone generators.
By specifying Set All instead of a program number, you can set the same setting (A, B, C, or Ignore) for all program numbers from 001 to 128. This is convenient when you do not need to make individual settings for each of the 128 program numbers.
If you select Drum mode, you will be able to choose drum programs, and to select a different drum program for each part.

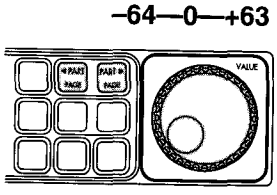
## 018. EG Attack Time




↓ 019. EG Decay Time

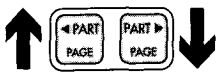
### *Adjust the attack time for the tone/volume of each Part*



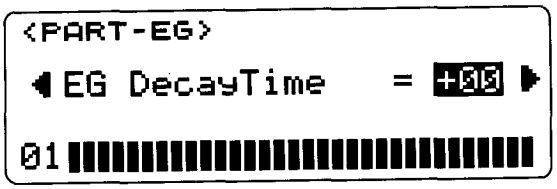

For each Part, this parameter makes a temporary adjustment to the envelope Attack Time (the time over which the tone or volume rises) that is specified within the Program.
When this value is 0, the Attack Time will be as specified by the Program. As this value is increased in the positive (+) direction, the Attack Time will become longer than the original value. As this value is increased in the negative (–) direction, the Attack Time will become shorter than the original value.

## 019. EG Decay Time

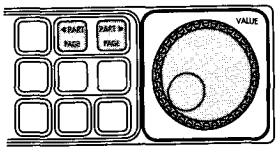



↑ 018. EG Attack Time
↓ 020. EG Release Time

### Adjust the decay time for the tone/volume of each Part

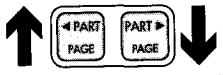



–64—0—+63



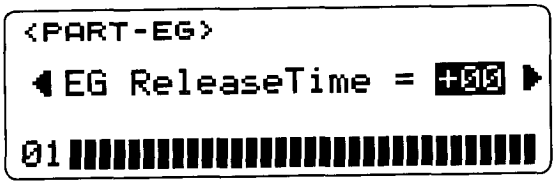
For each Part, this parameter makes a temporary adjustment to the envelope Decay Time (the time over which the tone or volume falls) that is specified within the Program.
When this value is 0, the Decay Time will be as specified by the Program. As this value is increased in the positive (+) direction, the Decay Time will become longer than the original value. As this value is increased in the negative (–) direction, the Decay Time will become shorter than the original value.

## 020. EG Release Time

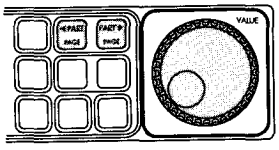



↑ 019. EG Decay Time
↓ 021. Pitch EG Start Level

### Adjust the release time for the tone/volume of each Part

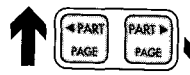



–64—0—+63



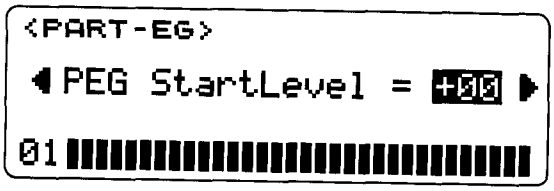
For each Part, this parameter makes a temporary adjustment to the envelope Release Time (the time until the tone or volume change is completed) that is specified within the Program.
When this value is 0, the Release Time will be as specified by the Program. As this value is increased in the positive (+) direction, the Release Time will become longer than the original value. As this value is increased in the negative (–) direction, the Release Time will become shorter than the original value.

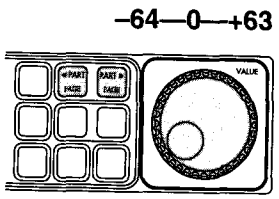
## 021. Pitch EG Start Level




↑ 020. EG Release Time
↓ 022. Pitch EG Attack Time

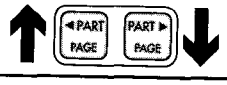
### *Adjust the pitch at which each Part begins to sound*



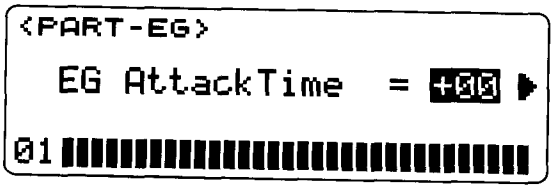

For each Part, this parameter makes a temporary adjustment to the pitch envelope Start Level (the pitch level at the instant the note begins) that is specified within the Program. When this value is 0, the Start Level will be as specified by the Program. As this value is increased in the positive (+) direction, the Start Level will become higher than the original value. As this value is increased in the negative (–) direction, the Start Level will become lower than the original value.

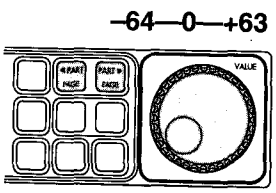
## 022. Pitch EG Attack Time




↑ 021. Pitch EG Start Level
↓ 023. Pitch EG Release Time

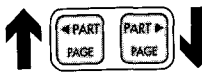
### *Adjust the attack time for the pitch of each Part*



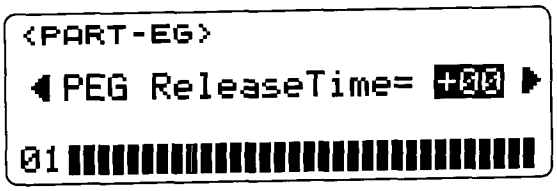

For each Part, this parameter makes a temporary adjustment to the pitch envelope Attack Time (the time over which the pitch changes at the beginning of the note) that is specified within the Program.
When this value is 0, the Attack Time will be as specified by the Program. As this value is increased in the positive (+) direction, the Attack Time will become longer than the original value. As this value is increased in the negative (–) direction, the Attack Time will become shorter than the original value.

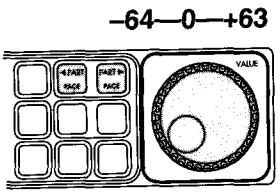
## 023. Pitch EG Release Time




↑ 022. Pitch EG Attack Time
↓ 024. Pitch EG Release Level

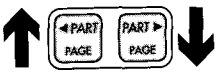
### *Adjust the release time for the pitch of each Part*



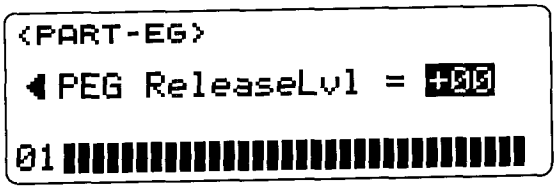

For each Part, this parameter makes a temporary adjustment to the pitch envelope Release Time (the time until the pitch change will end) that is specified within the Program.
When this value is 0, the Release Time will be as specified by the Program. As this value is increased in the positive (+) direction, the Release Time will become longer than the original value. As this value is increased in the negative (–) direction, the Release Time will become shorter than the original value.

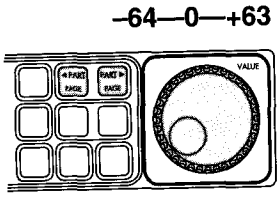
## 024. Pitch EG Release Level




↑ 023. Pitch EG Release Time

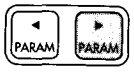
### *Adjust the pitch to which each Part returns*



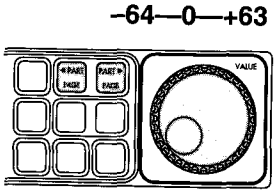

For each Part, this parameter makes a temporary adjustment to the pitch envelope Release Level (the pitch level at which the pitch change ends) that is specified within the Program.
When this value is 0, the Release Level will be as specified by the Program. As this value is increased in the positive (+) direction, the Release Level will become higher than the original value. As this value is increased in the negative (–) direction, the Release Level will become lower than the original value.

## 025. Cutoff Frequency



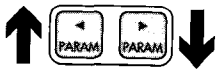

↓ 026. Color

### Adjust the brightness of each Part

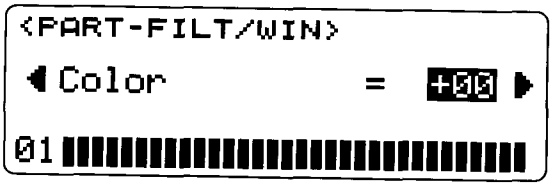

For each Part, this parameter makes a temporary adjustment to the filter Cutoff Frequency (brightness) that is specified within the Program.
When this value is 0, the Cutoff Frequency will be as specified by the Program. As this value is increased in the positive (+) direction, the Cutoff Frequency will become higher than the original value. As this value is increased in the negative (–) direction, the Cutoff Frequency will become lower than the original value.

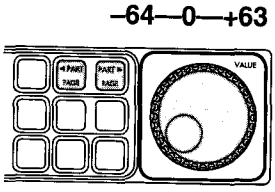
## 026. Color




↑ 025. Cutoff Frequency
↓ 027. Note Window Bottom

### Adjust the tonal character of each Part

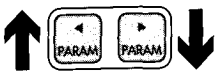



For each Part, this parameter makes a temporary adjustment to the filter Color (tonal character of the sound) that is specified within the Program.
When this value is 0, the Color will be as specified by the Program. As this value is increased in the positive (+) direction, the Color will become stronger than the original value. As this value is increased in the negative (–) direction, the Color will become weaker than the original value.

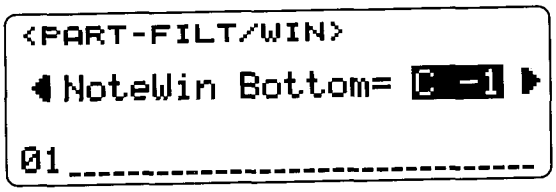
* *Depending on the program sound which is assigned to the part, changes in the Color parameter may not be noticeable.*

## 027. Note Window Bottom

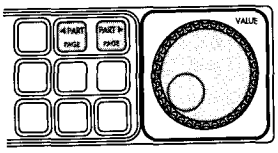



↑ 026. Color
↓ 028. Note Window Top

### *Set the lower note limit for each Part*

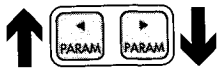



**C-1—G9**



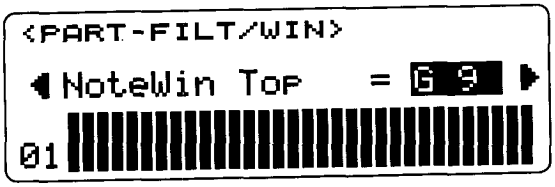

For each Part, this parameter sets the Bottom note of the keyboard area that will be played.

## 028. Note Window Top

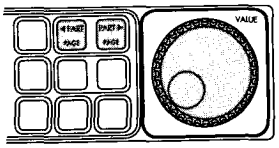



↑ 027. Note Window Bottom
↓ 029. Velocity Window Top

### *Set the upper note limit for each Part*



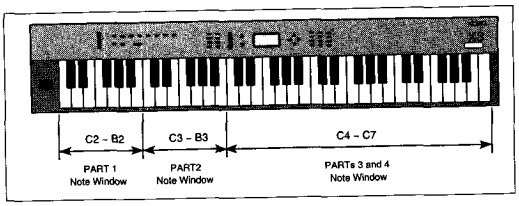

**C-1—G9**




For each Part, this parameter sets the Top note of the keyboard area that will be played.

By setting the Top and Bottom notes of the Note Window, you can cause that Part to play only in the specified area of the keyboard. It will not be sounded by notes of other areas. For example, this allows you to create setups in which the lower half of the keyboard plays a bass Part, and the upper half plays a piano Part.

In the diagram at right, different Note Windows have been set for Parts 1 and 2, and the same Note Window has been set for Parts 3 and 4.

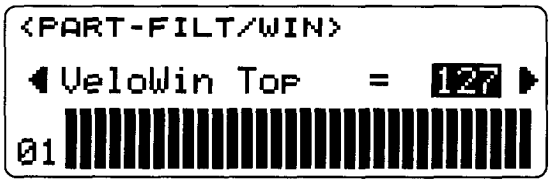



It is not possible to set the Top Note lower than the Bottom Note. If you attempt to set the Top Note lower than the Bottom Note, the Bottom Note will be adjusted to the same value as the Top Note. The opposite also applies.

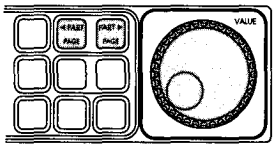
* *When the power is turned on, or when a GM System On message is received, the Top Note of all Parts will be set to G9 and the Bottom Note to C-1.*

## 029. Velocity Window Top

### Set the upper velocity limit for each Part



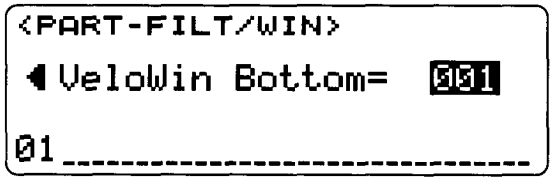

001—127



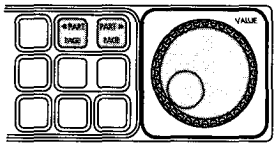
For each Part, this parameter sets the maximum velocity value for which the Part will sound. (Velocity data is part of a MIDI Note-on message indicating the force with which the note was played.)

## 030. Velocity Window Bottom

### Set the lower velocity limit for each Part




001—127



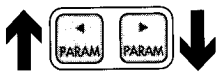
For each Part, this parameter sets the minimum velocity value for which the Part will sound.

The Velocity Window settings specify the range of velocity values which will sound each Part. By setting the Top and Bottom of the Velocity Window you can cause a Part to play only in response to notes which are played with a certain force.

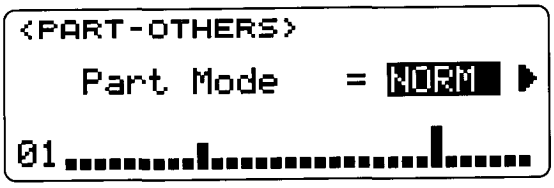
For example, if you set a low Velocity Window for a "soft strings" Part and a high Velocity Window for a "hard strings" Part, softly played notes will be sounded by the "soft strings" Part, and strongly played notes will be sounded by the "hard strings" Part (Velocity Switch).

Alternatively, you can make settings so that playing dynamics cause additional Parts to be sounded simultaneously in a natural-sounding way (Velocity Layer).

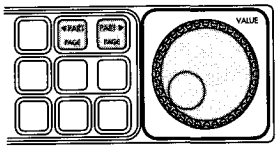
## 031. Part Mode




### Set the play mode of each Part



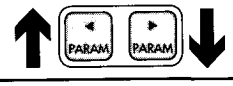

**NORM, Drum, MDrum1—4**




For each part, specify whether it will function in normal (NORMAL) mode for conventional keyboard playing, or in drum mode where drum sounds will be assigned. If you select Modify Drum (MDrum) mode, MIDI NRPN or system exclusive messages can be used to control the pitch etc. of each drum. In this case, parts for which the identically-numbered Modify Drum (MDrm1–MDrm4) is selected can be controlled simultaneously by the same MIDI messages. In other words, if you control one part, the other parts will also be controlled in the same way.
Modify Drum can also be controlled not only via MIDI messages, but also from the NS5R itself. If you return to the edit menu (p. 26) with Modify Drum mode selected, a drum icon will be added to the menu.

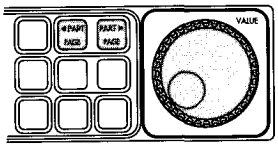

Select this icon and press the [EDIT] button to access the Modify Drum editing screen, and you will be able to make temporary modifications to the drum pitch and volume, effect send levels, and MIDI switches etc.

## 032. Mono/Poly



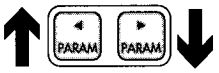

### Set the number of voices for each Part


**MONO, POLY**

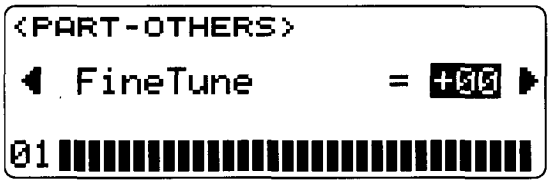


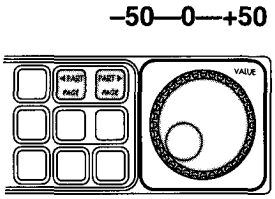

For each Part, specify whether the Program will be played polyphonically (allowing chords to be played) or monophonically (single notes). When POLY is selected, you will be able to play chords of up to the maximum number of simultaneous notes. When MONO is selected, only single notes can be played.

## 033. Fine Tune



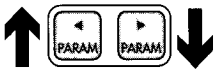

### *Make fine adjustments to the pitch of each Part*



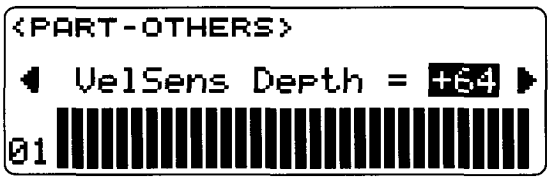



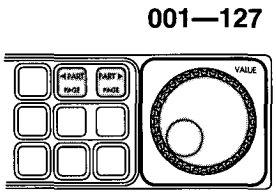

For each Part, this parameter provides a fine adjustment to the pitch, in 1 Hz (Hertz) steps.

## 034. Velocity Sensitivity Depth



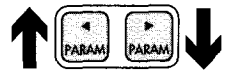

### *Set the sensitivity of each Part to keyboard dynamics*



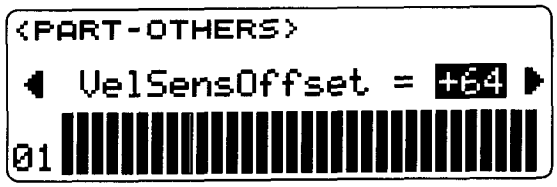




For each Part, this parameter determines how volume will change in response to velocity (MIDI data indicating the force with which a note was played).
Low settings of this value will cause variations in keyboard dynamics to have little effect on the volume. Higher settings of this value will cause volume to change greatly in response to even minor variations in keyboard dynamics.

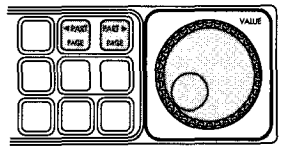
## 035. Velocity Sensitivity Offset




*Specify a value by which velocity data will be offset for each Part*

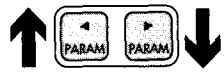



**001—127**

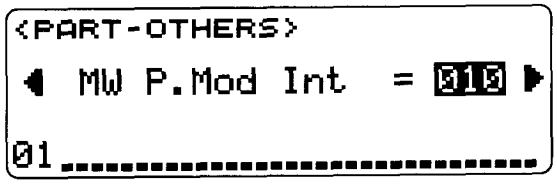



For each Part, this parameter allows you to add a fixed amount to the velocity values that affect the volume. i.e., the amount that you specify here will be added to (or subtracted from) the velocity data. When you are using several MIDI instruments that vary in their response to velocity data, or when playing back MIDI musical data that was created for several different MIDI instruments, this parameter provides a helpful way to compensate for the unevenness that can occur.

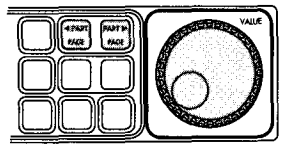
## 036. Modulation Wheel / Pitch MG Intensity




*Set the depth of modulation for each Part*

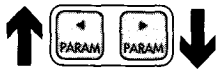



**001—127**




For each Part, this sets the depth of the pitch modulation (vibrato) effect that will occur in response to movements of a modulation wheel on a MIDI keyboard connected to the NS5R, or to MIDI Modulation messages transmitted from a sequencer/computer.
As this value is increased, identical movements of the modulation wheel will produce a deeper pitch modulation effect.

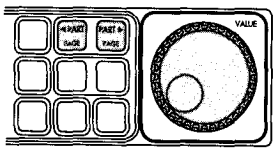
## 037. Pitch Bend Range




↑ 036. Modulation Wheel / Pitch MG Intensity
↓ 038. Portamento Switch

### Adjust the pitch bend depth for each Part

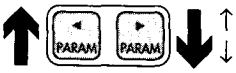

**001—127**




For each Part, this sets the depth of the pitch bend effect that will occur in response to movements of a pitch bend wheel on a MIDI keyboard connected to the NS5R, or to MIDI Pitch Bend messages transmitted from a sequencer/computer.
As this value is increased, identical movements of the pitch bend wheel will produce a deeper pitch bend effect.

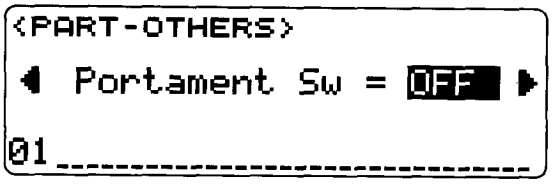
* *Depending on the type of multisample used by the selected sound, the pitch may not necessarily rise as far as the value that you specify here.*

## 038. Portamento Switch

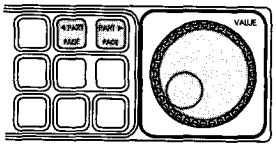



↑ 037. Pitch Bend Range
↓ 039. Portamento Time

### Turn portamento on/off for each Part



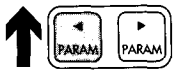

**OFF, ON**



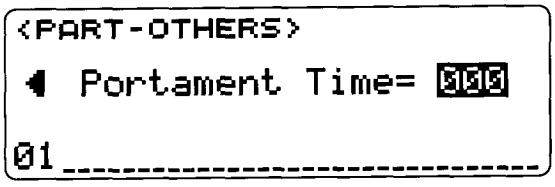

For each Part, this specifies whether the Portamento effect (a smooth change in pitch between two notes) will be enabled or disabled.

* *Portamento Switch settings cannot be made if Drums or MDrm 1—4 are selected in [031] Part Mode. In this case, the parameter will be displayed as "***."*

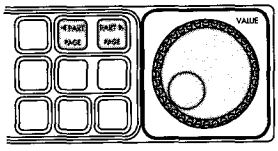
# 039. Portamento Time




## *Adjust the portamento time for each Part*




**001—127**



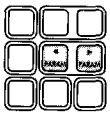
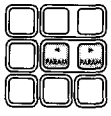

For each Part, this adjusts the time of the Portamento effect (i.e., the time over which the pitch will change from one note to the next).
As this value is increased, the Portamento effect will become slower and more pronounced.

* *This parameter setting is valid only for Parts for which the [038] Portamento Switch is ON.*

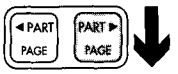
# 3. Global mode

In Global mode you can make basic settings that affect the operation and functionality of the entire NS5R. Settings for the LCD display, interfacing with external devices, and memory protect etc. are made in this mode. To enter this mode from Multi mode, choose Global from the edit menu, and press the [EDIT/ENTER] button once.

The following items can be set in this mode.

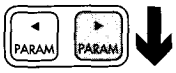
| Key | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 040 LCD contrast | Adjust the contrast of the LCD screen | →P.68 |
| | 041 BPS select | Select the transmission speed of the PC interface | →P.68 |
| | 042 Preview note | Specify the pitch of the [TONE] button | →P.69 |
| | 043 Preview velocity | Specify the velocity of the [TONE] button | →P.69 |
| | 044 Exclusive channel | Specify the transmit/receive channel for exclusive messages | →P.70 |
| | 045 Memory protect | Protect/permit writing of data to the user bank | →P.70 |
|  | 046 Bank map type | Select the arrangement of sounds | →P.71 |
| | 047 Effect follow part | Select the part for which the effect will change with the program | →P.71 |
| | 048 Boot option | Specify whether a Multi will be loaded at power-on | →P.72 |
| | 049 Program port | Specify how MIDI Port Select messages will select ports | →P.72 |
|  | 050 Rx switch | Control exclusive message reception | →P.74 |
| | 051 Rx color | Specify how exclusive messages will switch the LCD color | →P.74 |

# GLOBAL



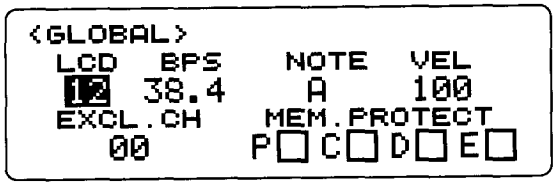

↓ NS5R SETUP

## 040. LCD contrast

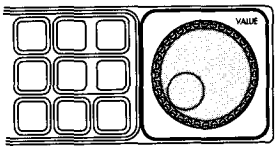



↓ 041. BPS select

### Adjust the contrast of the LCD screen

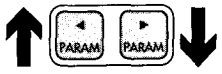



**00—31**



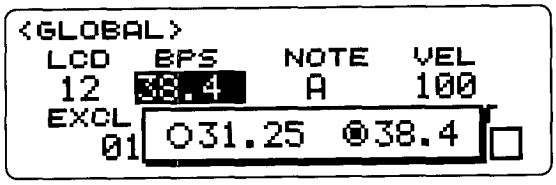

Adjust the contrast of the characters or graphics which appear in the NS5R's LCD. Higher settings are darker, and lower settings are lighter.

## 041. BPS select

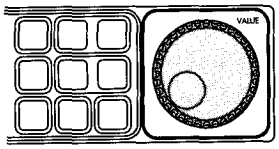



↑ 040. LCD contrast
↓ 042. Preview note

### Select the transmission speed of the PC interface




**31.25, 38.4**



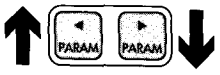

Specify the rate at which data will be transmitted between the NS5R and the computer which is connected to the NS5R's PC interface (the TO HOST connector).

When the NS5R is connected to an Apple Macintosh, select 31.25 (kBPS).

When the IBM PC is connected to an IBM PC (or compatible), select 38.4 (kBPS).

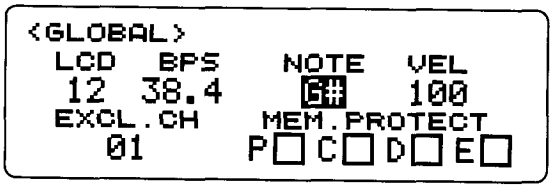
Please also refer to "Computer/sequencer connections" in the "Preparations" section.

## 042. Preview note

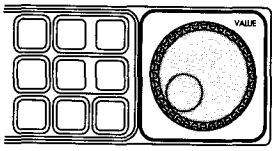



↑ 041. BPS select
↓ 043. Preview velocity

### Specify the pitch of the [TONE] button

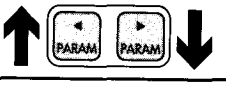



**C, C#, D, D#, E, F, F#, G, G#, A, A#, B**



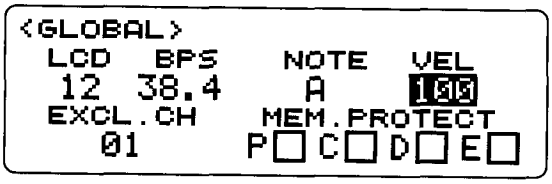

Specify the pitch of the auditioning note that will sound when the [TONE] button is pressed.

## 043. Preview velocity

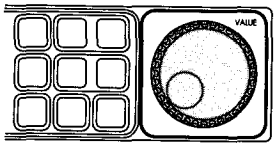



↑ 042. Preview note
↓ 044. Exclusive channel

### Specify the velocity of the [TONE] button

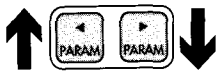



**001—127**



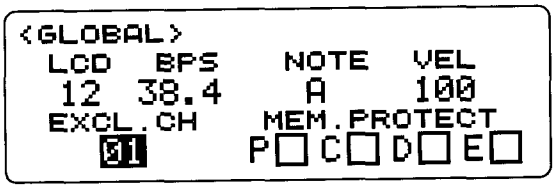

Specify the velocity of the auditioning note that will sound when the [TONE] button is pressed.

## 044. Exclusive channel

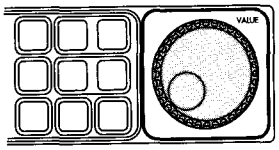



↑ 043. Preview velocity
↓ 045. Memory protect

### Specify the transmit/receive channel for exclusive messages

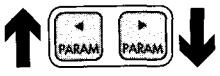



**01—16**




Specify the MIDI channel of the NS5R which will be used when MIDI system exclusive messages are transmitted/received between the NS5R and an external MIDI device connected to the NS5R.

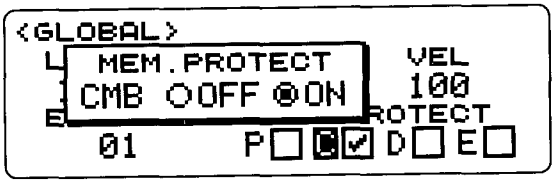
## 045. Memory protect

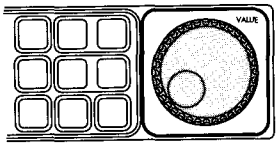



↑ 044. Exclusive channel

### Protect/permit writing of data to the user bank

**PRG, CMB, DRM, EFF, OFF, ON**



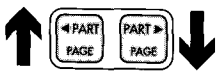




For the Program (PRG), Combination (CMB), Drum Kit (DRM) and Effect (EFF) memories, you can turn memory protect off or on, to specify whether write or save operations which modify the original data will be permitted or prohibited.

When this is ON, it will not be possible to enter the corresponding Edit mode such as Program Edit or Combination Edit even if you press and hold the [EDIT/ENTER] button. This allows you to avoid loss of the original sound or effect settings that would result from accidentally executing a write or save operation.

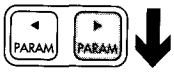
Of course even if this is ON, you will still be able to temporarily modify the sound in Part Edit mode. Such modifications will not affect the actual settings of the Program, Combination, Drum Kit or Effect itself.

# NS5R SETUP



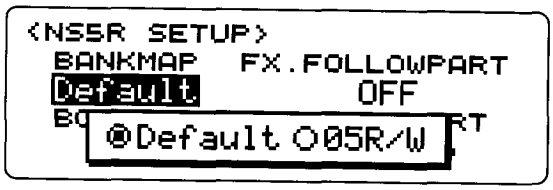

↑ GLOBAL
↓ RX. SWITCH

## 046. Bank map type

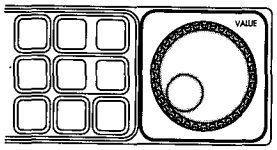



↓ 047. Effect follow part

### Select the arrangement of sounds




**Default, 05R/W**



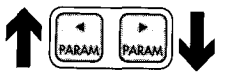

The arrangement of the sound programs in the sound banks of the NS5R can be specified to be the same arrangement as in the Korg 05/RW ai-squared synthesis module. This setting allows musical data that was created for the 05R/W to be used on the NS5R as well.

With a setting of Default, GM-a (GM bank a) will be selected when the power is turned on, or when GM Mode On or bank change [LSB:000, MSB:000] is received.

With a setting of 05R/W, GM-b (GM bank b) will be selected when the power is turned on, or when GM Mode On is received. If at this point, a bank change [000,000] message is received, PrgA (same mapping as 05R/W) will be specified. This allows 05R/W data to be played back on the NS5R.

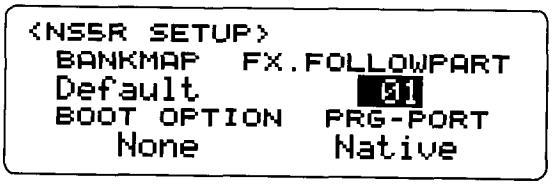
* *GM-b modifies the arrangement of the GM bank to an arrangement which in particular makes it easier to handle 05R/W data. The normal GM bank arrangement is referred to here as GM-a to differentiate it from this.*

## 047. Effect follow part

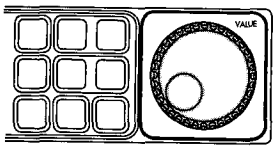



↑ 046. Bank map type
↓ 048. Boot option

### Select the part for which the effect will change with the program




**OFF, 01—32**

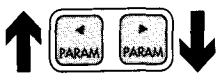



Select the Part for which MIDI Program Change messages will select Effect programs at the same time they select NS5R sound programs.

When a Program Change message is received for the part that you select here, the program number of the Effect will switch at the same time that the sound of that part is switched.

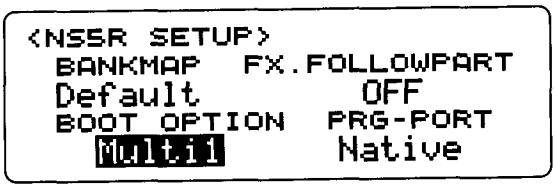
With a setting of OFF, effect programs will not be switched by program change messages.

## 048. Boot option

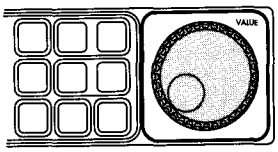



↑ 047. Effect follow part
↓ 049. Program port

### Specify whether a Multi will be loaded at power-on




**None, Multi1**

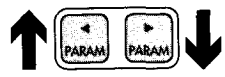



Specify whether previously-saved Multi mode settings will be automatically called up when the NS5R power is turned on, so that they will be ready for immediate use.

If you specify None, powering-on the NS5R will cause it to be initialized in the same way that it is when a GM Mode On message is received. This is the normal setting.

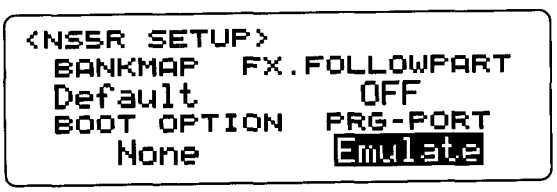
When the power is turned on, Multi Setup 1 will be selected. This is convenient when you wish to be able to immediately start playing with a previously-determined setup.

## 049. Program port

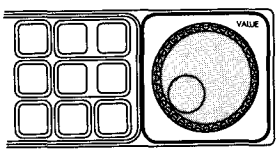



↑ 048. Boot option

### Specify how MIDI Port Select messages will select ports




**Native, Emulate**

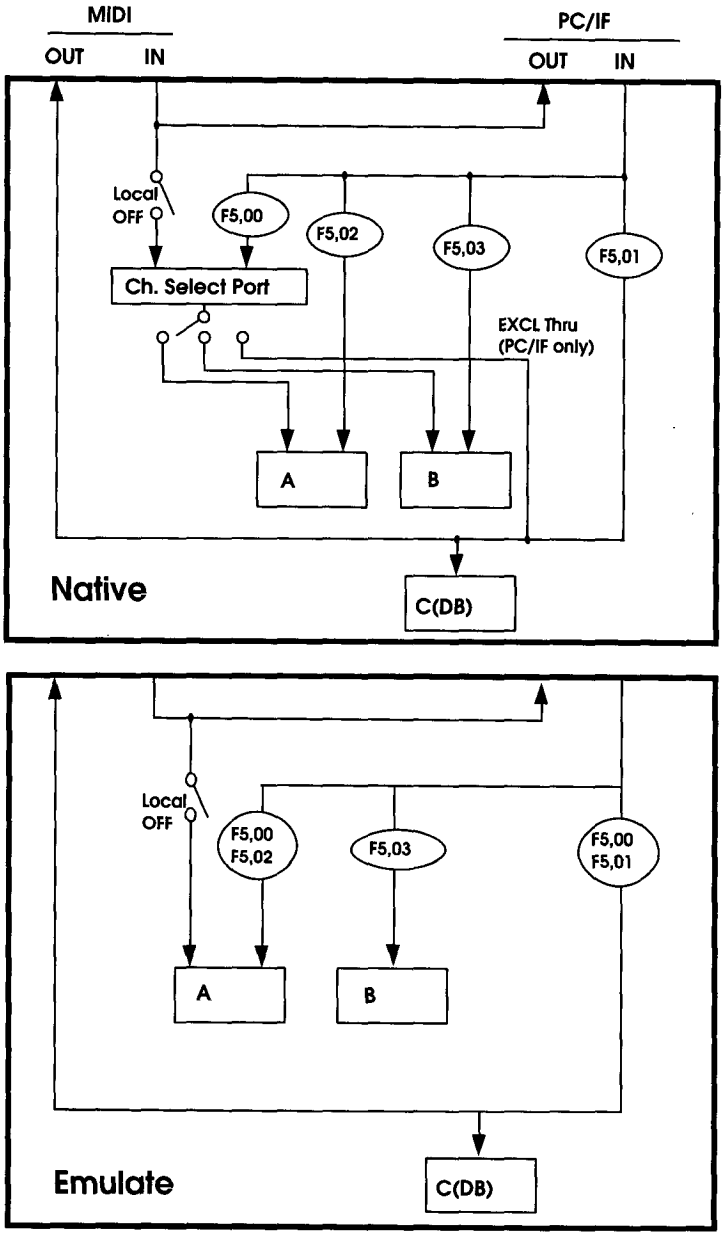



This setting specifies whether or not MIDI Port Select messages can be used to choose between the NS5R's two MIDI ports A and B.

With a setting of Native, after the NS5R receives a MIDI message of (F5, 00), the musical data of each channel will be played on the port specified by the [16] MIDI Channel To Port setting.

With a setting of Emulate, after the NS5R receives a MIDI message of (F5, 00), the musical data will be transmitted to port A and to MIDI OUT. This will operate in the same way as previous tone generator modules which are not able to use ports to expand the number of channels (Korg X5DR, 05R/W etc.). When musical data that was created for these previous models is to be played back on the NS5R, set this parameter to Emulate.

(Refer to the diagram on the following page.)

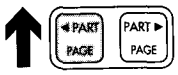



Regardless of whether Native or Emulate is selected, when a MIDI message of (F5, 02) is received, the musical data will be transmitted only to port A, and if (F5, 03) is received the musical data will be transmitted only to port B.

When the MIDI message (F5, 01) is received, the musical data will be transmitted only to MIDI OUT. I.e., the tone generator of the NS5R itself will not sound in this case.

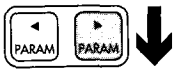
* *When "Native" is selected, the System Common messages (system exclusive messages etc.) within the musical data from an external device received at the MIDI IN connector will not be output from C (DB... expansion tone generator board) or from MIDI OUT. In order for system exclusive messages to be correctly transmitted to a device connected to C or the MIDI OUT connector, the TO HOST connector (PC/IF) must be used, not the MIDI IN connector.*

# RX.SWITCH




↑ NS5R SETUP

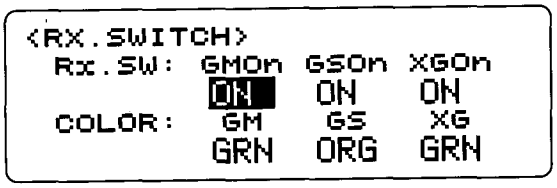
## 050. Rx switch

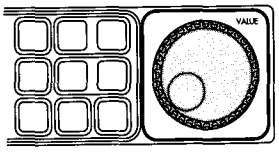



↓ 051. Rx color

### Control exclusive message reception

**GMOn, GSOn, XGOn, ON, OFF**



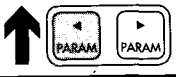

You can specify whether reset messages for the GM, GS, and XG formats will be received or ignored, for each type of message.

When GMOn is ON, the NS5R will receive GM Mode ON messages. When this is OFF, these messages will not be received.

When GSOn is ON, the NS5R will receive GS Reset messages. When this is OFF, these messages will not be received.

When XGOn is ON, the NS5R will receive XG System ON messages. When this is OFF, these messages will not be received.

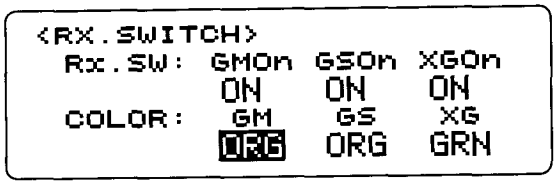
## 051. Rx color

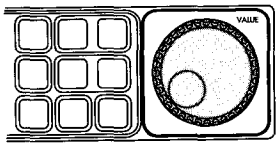



↑ 050. Rx switch

### Specify how exclusive messages will switch the LCD color

**GM, GS, XG, GRN, ORG**




You can specify the backlight color that will be selected by each type of message when a GM, GS, or XG reset message (GM Mode ON, GS Reset, XG System ON) is received.

When an exclusive message for which GRN was specified is received, the LCD backlight will light yellow-green.

When an exclusive message for which ORG was specified is received, the LCD backlight will light orange (amber).

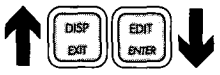
# 4. Utility mode

In Utility mode you can save various NS5R parameters to an external device or computer, or save/load Multi mode settings. To enter this mode from Multi mode, choose Utility from the edit menu, and press the [EDIT/ENTER] button.

The following items can be set in this mode.

| Button | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 052 (sub menu) | Select the type of Utility operation | →P.75 |
| | 053 Preset/Initialize | Initialize internal settings of the NS5R | →P.76 |
| | 054 MIDI data dump | Transmit NS5R parameters to an external device | →P.77 |
| | 055 Multi setup | Save/load Multi mode settings | →P.78 |

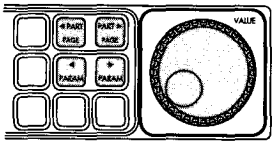
## 052. Sub menu




↑ 0.Edit menu
↓ (finalize)

### *Select the type of Utility operation*


**Preset, DumpOut, SetupMulti**



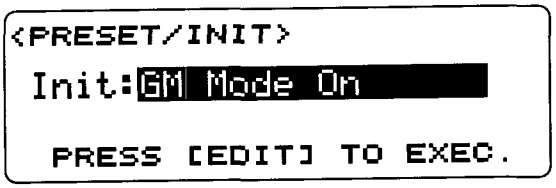

In Utility mode you can execute three operations: Preset (initialize NS5R settings), Dump Out (transmit NS5R parameters to an external device), or Setup Multi (save/load Multi mode settings). In this menu page, select the operation that you wish to execute.

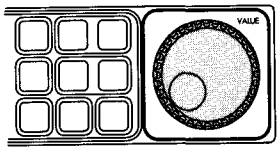
# 053. Preset/Initialize


↑ 052. Sub menu
↓ (finalize)

## *Initialize internal settings of the NS5R*

**GM Mode On, NS5R Reset(R), NS5R Reset(Y), Factory Preset**




This operation initializes all internal data of the NS5R for GM mode, GS mode, or XG mode.

* *To initialize the data, select the desired mode and then press the [EDIT] button. You will be asked "Are You Sure?" (i.e., "Are you sure you want to execute?").*

*Use the [PARAM] buttons to select either YES (execute initialization) or CNCL (cancel execution), and press the [EDIT] button once again to execute initialization and return to the previous display (or return without executing).*

*Approximately one second is required for initialization to be completed. While initialization is being executed, the display will indicate "Executing..."*

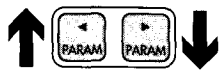
If GM Mode On is selected, a GM Mode On message will be transmitted. The sound parameters and effect programs within the NS5R will be given settings appropriate for playing GM format data, and the NS5R will function as a GM tone generator.

When NS5R Reset (R) is selected, a GS Reset message will be transmitted. The parameters and effect programs of the NS5R will be initialized to the same state as when a GS Reset message is received.

When NS5R Reset (Y) is selected, a XG System On message will be transmitted. The parameters and effect programs of the NS5R will be initialized to the same state as when an XG System On message is received.

If you select Factory Preset, the parameters and effect programs of the NS5R will be initialized to the factory settings.

# 054. MIDI data dump

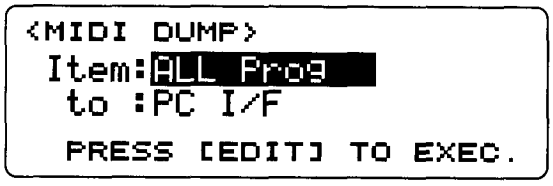


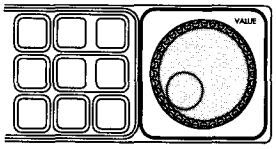

↑ 052. Sub menu
↓ (finalize)



## *Transmit NS5R parameters to an external device*

**ALL Prog, ALL Combi, ALL Multi, ALL Drumkit, ALL Effect**




This operation lets you transmit sound parameters or effect programs from the NS5R to an external device such as a MIDI data filer connected to the NS5R.

* *A data filer is a device which receives exclusive data from other devices, and stores this data as a file on a storage medium such as floppy disk. This allows you to store a larger amount of data than can be accommodated in the memory of the NS5R itself, and is also a convenient way to make a backup copy of the programs inside the NS5R.*

*Data filers are sold as independent devices with a built-in disk drive, but their functionality may also be provided by some synthesizers which have a disk drive, or by personal computer software. For details on using a data filer, refer to the owner's manual for your data filer.*

If ALL Prog is selected, all User's Program data of the NS5R will be transmitted as exclusive data.

If ALL Combi is selected, all User's Combination data of the NS5R will be transmitted.

If ALL Multi is selected, four Multi Setup data of the NS5R will be transmitted.

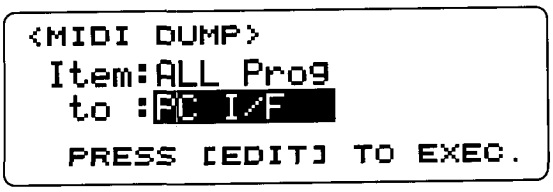
If ALL Drumkit is selected, two Drum Kit Program data of the NS5R will be transmitted.

If ALL Effect is selected, all Effect Program data of the NS5R will be transmitted.

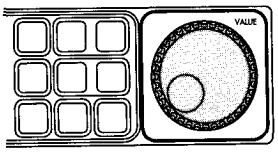
* *To execute a data dump, select the desired type of parameter, and press the [EDIT] button. The display will ask "Are You Sure?" (Are you sure that you want to execute?).*

*Use the [PARAM] buttons to select either YES (execute the data dump) or CNCL (cancel the data dump), and press the [EDIT] button once again to execute the data dump and return to the previous display (or return without executing).*

*Several seconds will be required for the data dump to be completed. While the data dump is being executed, the display will indicate "Executing..."*




**PC I/F, MIDI OUT**

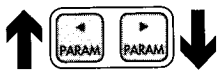



If PC I/F is selected, the exclusive data will be transmitted from the TO HOST connector of the NS5R.

If MIDI OUT is selected, the exclusive data will be transmitted from the MIDI OUT connector of the NS5R.

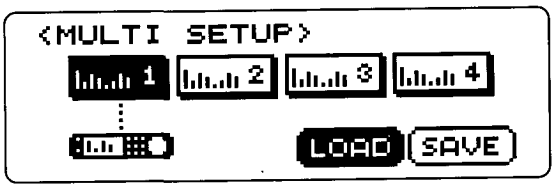
For details on exclusive data, refer to the MIDI implementation at the end of this manual.

# 055. Multi setup

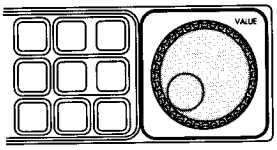



↑ 052. Sub menu
↓ (finalize)

## Saving/loading Multi mode settings




**1, 2, 3, 4, LOAD, SAVE**




You can save four different sets of the settings modified or adjusted in Multi mode, such as sound banks, programs, and parameters, which can be loaded later when desired.

The four sets that can be saved are numbered from 1 to 4. Use the VALUE controller to select the number of the set that you wish to load or save, and use the [PARAM] buttons to select either SAVE (store the current settings) or LOAD (recall the previously saved settings).

* *To load or save the settings, select the desired set, and press the [EDIT] button. The display will ask "Are You Sure?" (Are you sure that you want to execute?).*

*Use the [PARAM] buttons to select either YES (execute load/save) or CNCL (cancel load/save), and press the [EDIT] button once again to execute load or save and return to the previous display (or return without executing).*

*Several seconds will be required for the load/save operation to be completed. While the operation is being executed, the display will indicate "Executing..."*

# 5. Combination Edit mode

The NS5R allows you to bring together up to eight different program sounds, and use these just as if they were a single program sound. Such a collection of programs is called a Combination.

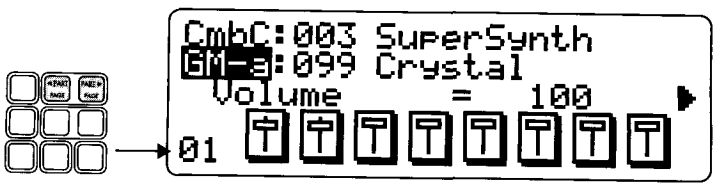
Since a Combination allows settings to be made independently for each program to specify its volume, pan (stereo position), effect send level, the range of keys and velocities which will be sounded by the program, and how the program will be controlled via MIDI messages, you can create extremely complex musical textures.

Combination Edit mode is where you can make settings such as those listed above for the Combination. To enter this mode from Multi mode, press and hold the [EDIT/ENTER] button for approximately 2 seconds when a Combination sound is displayed.

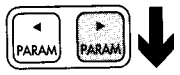
| Key | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 052 Bank select | Select the bank for each program in the combination | →P.80 |
| | 053 Program select | Select the programs for the combination | →P.80 |
| | 054 Program volume | Specify the volume of each program | →P.80 |
| | 055 Program panpot | Specify the stereo position of each program | →P.81 |
| | 056 Program transpose | Adjust the pitch of each program in semitones | →P.81 |
| | 057 Program tune | Make fine adjustments to the pitch of each program | →P.82 |
| | 058 C send level | Specify the effect send level for each program | →P.82 |
| | 059 D send level | Specify the effect send level for each program | →P.83 |
| | 060 Note window bottom | Specify the lower note limit of each part | →P.83 |
| | 061 Note window top | Specify the upper note limit of each part | →P.84 |
| | 062 Velocity window bottom | Specify the lowest velocity that will play each part | →P.84 |
| | 063 Velocity window top | Specify the highest velocity that will play each part | →P.85 |
| | 064 Receive note on | Allow each program to receive note-on messages | →P.85 |
| | 065 Receive control change | Allow each program to receive control change messages | →P.86 |
| | 066 Receive pitch bend | Allow each program to receive pitch bend messages | →P.86 |
| | 067 Receive aftertouch | Allow each program to receive aftertouch messages | →P.86 |
| | 068 Receive damper | Allow each program to receive damper pedal messages | →P.87 |
| | 069 Receive portamento | Allow each program to receive portamento messages | →P.87 |
| | 070 Effect bank | Select the bank of the effect that you wish to use | →P.87 |
| | 071 Effect program | Specify the number of the effect that you wish to use | →P.88 |
| | 072 Combination rename | Assign a name to the combination and save it | →P.88 |

In Combination Edit mode, use the [PART/PAGE] buttons to step through the eight programs 01 through 08 which make up the combination. When you use the [PARAM] buttons to select a parameter and make settings, the settings will apply to the selected program within the combination.

The display will indicate the selected program 01—08 as follows.



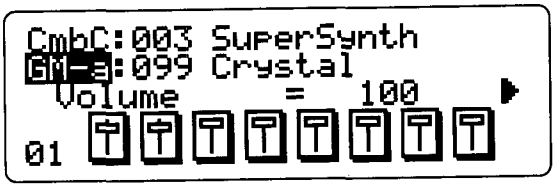
## 052. Bank select

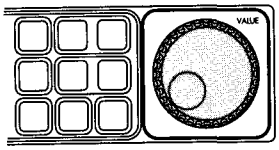



↓ 053. Program select

### Select the bank for each program in the combination

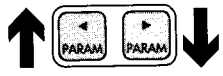
**GM-a, r:01—28, r:CM, y:01—65, ySFX, GM-b, PrgU, PrgA, PrgB, PrgC, yDr2, rDrm, kDrm**




Select the bank of the program in the combination.

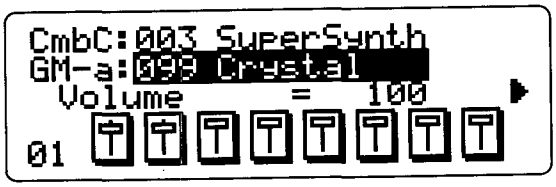
## 053. Program select

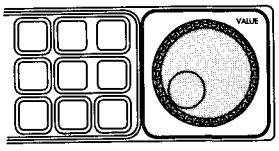



↑ 052. Bank select
↓ 054. Program volume

### Select the programs for the combination

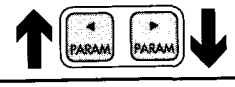
**001—128**




Select the number of the program in the combination.

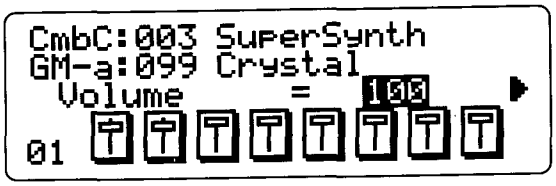
## 054. Program volume

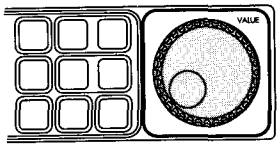



↑ 053. Program select
↓ 055. Program panpot

### Specify the volume of each program

**001—127**

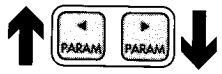



Specify the volume of each program.

On the NS5R, parameters which determine the volume of each Part exist separately in each of the three modes Program, Combination, and Multi. The maximum possible value for the Multi mode [004] Volume setting will be the value of the Program Edit mode [078] Oscillator Level. In the case of a Combination sound, the volume will be limited by the [054] Program Volume setting as well.

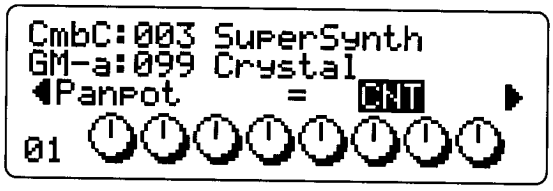
## 055. Program panpot

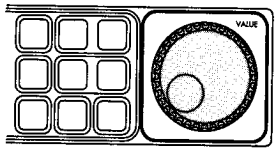



↑ 054. Program volume
↓ 056. Program transpose

### Specify the stereo position of each program

**R63—R01, CNT, L01—L63, RND**




Specify the left/right volume balance of each program when stereo output is used.

With a setting of CNT, the L and R outputs will be the same volume. A setting of L63 places the sound at far left, and R63 at far right.

With a setting of RND, the sound of the program will be heard from a different location each time a MIDI note-on message is received. Each note will be located at a different stereo position, as if the sound were jumping randomly here and there.

On the NS5R, parameters which determine the panpot setting exist separately in each of the three modes Program, Combination, and Multi. The actual pan location at which the sound is heard is determined by the sum of the settings in these three modes.

For example if for a certain part in Multi mode, [006] Panpot is set to R63 (far right) and the [144] Oscillator Panpot is set to L63 (far left) in the program selected for that part, the sound will actually be heard in the location determined as follows:

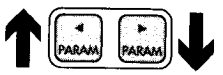
R63 (far right) + L63 (far left) = (same level for both) = (heard from the center)

Thus, the sound will be heard from the center.

If the sound selected for that part is a combination sound (rather than simply a program sound), the [055] Program Panpot setting will be added to this equation.

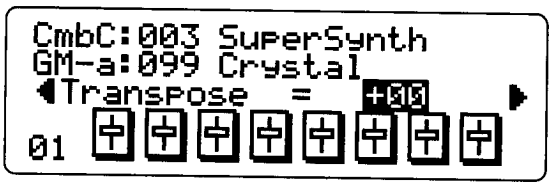
However if even one of these values is set to RND, the sound of that part will be heard from a random location for each note.

## 056. Program transpose

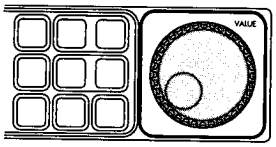



↑ 055. Program panpot
↓ 057. Program tune

### Adjust the pitch of each program in semitones

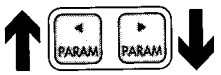



**–24—+00—+24**



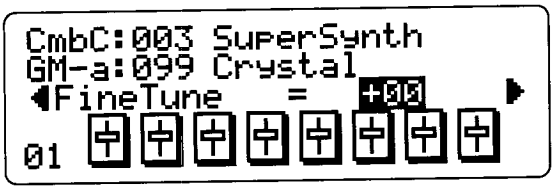

Adjust the pitch of each program in semitone steps.

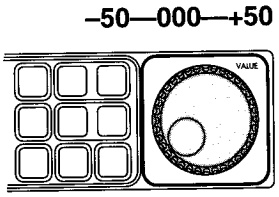
## 057. Program tune




↑ 056. Program transpose
↓ 058. C send level

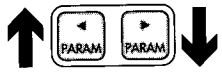
### Make fine adjustments to the pitch of each program



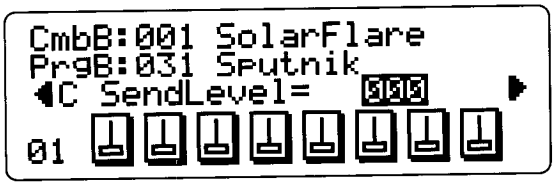

Make fine adjustments to the pitch of each program.

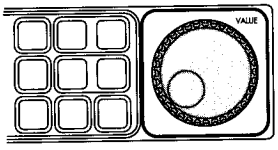
## 058. C send level




↑ 057. Program tune
↓ 059. D send level

### Specify the effect send level for each program



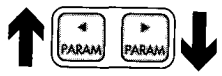




Specify the level of the sound that will be sent from each program to the two internal effect processors of the NS5R. As this setting is increased, the effect will be applied more strongly to the sound of that part.

* *The way in which the sound is sent to the two effect processors, and the way in which the C Send Level parameter will affect the level will depend significantly on the Effect Placement parameter.* → *page 135, "Effect Placement"*

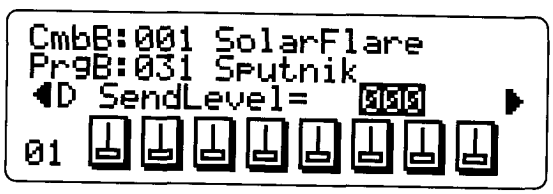
On the NS5R, parameters which determine send levels to the effect processors exist separately in each of the three modes Program, Combination, and Multi. The maximum value of the Multi mode parameters [007] Reverb Send Level and [008] Chorus Send Level will be the values of the Program Edit mode parameters [145] C Send Level and [146] D Send Level. In the case of a combination sound, the send levels will also be limited by the settings of the [058] C Send Level and [059] D Send Level parameters.

## 059. D send level

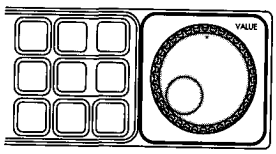



↑ 058. C send level
↓ 060. Note window bottom

### Specify the effect send level for each program




000—127

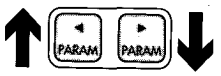



As with C Send Level, this specifies the level of the sound that will be sent from each program to the two internal effect processors. As this setting is increased, the effect will be applied more strongly to the sound of that part.

* *The way in which the sound is sent to the two effect processors, and the way in which the D Send Level parameter will affect the level will depend significantly on the Effect Placement parameter.* → *page 135, "Effect Placement"*

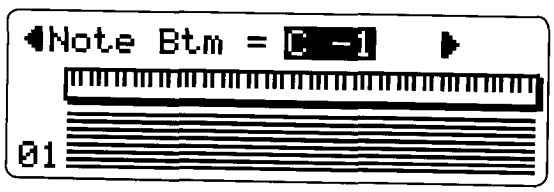
On the NS5R, parameters which determine send levels to the effect processors exist separately in each of the three modes Program, Combination, and Multi. The maximum value of the Multi mode parameters [007] Reverb Send Level and [008] Chorus Send Level will be the values of the Program Edit mode parameters [145] C Send Level and [146] D Send Level. In the case of a combination sound, the send levels will also be limited by the settings of the [058] C Send Level and [059] D Send Level parameters.

## 060. Note window bottom

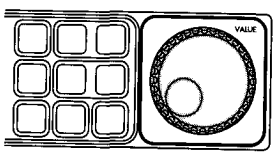



↑ 059. D send level
↓ 061. Note window top

### Specify the lower note limit of each part

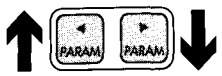



C-1—G9



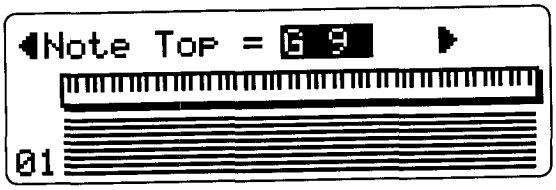

For each program, specify the bottom (lowest) note that will sound.

## 061. Note window top

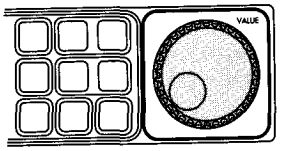



↑ 060. Note window bottom
↓ 062. Velocity window bottom

### Specify the upper note limit of each part




C-1—G9




For each program, specify the top (highest) note that will sound.

By setting the Note Window Top and Bottom parameters, you can restrict a program to sound only in a specific area of the keyboard, so that it will not sound in other areas.

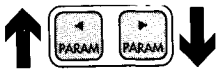
For example, this allows you to create a combination in which the keyboard area lower than the center will play a bass program, and the area above the center will play a piano program.

It is not possible to set the Top note lower than the Bottom note. If you attempt to do so, the Bottom note will automatically be adjusted to the same value as the Top note. The opposite is also true.

*Note Window can be set not only in Combination Edit mode, but also in Part Edit mode. The Note Window settings of Part Edit mode take priority over the settings of Combination Edit mode.* → *p.60 [027] Note Window Bottom, [028] Note Window Top.*

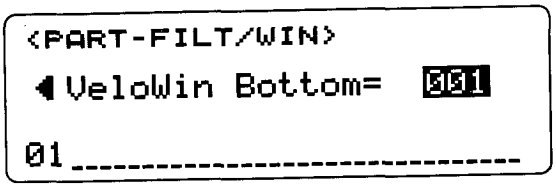
* *When the power is turned on or when a GM System On message is received, the Top note of all programs will be set to G9, and the Bottom note to C-1.*

## 062. Velocity window bottom

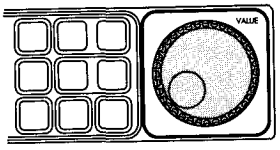



↑ 061. Note window top
↓ 063. Velocity window top

### Specify the lowest velocity that will play each part

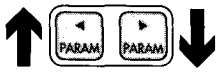



001—127



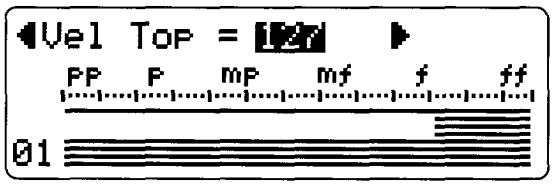

For each program, specify the lowest velocity for which the program will sound. (Velocity is MIDI data which indicates how strongly a note was played on the keyboard or other MIDI instrument.)

## 063. Velocity window top

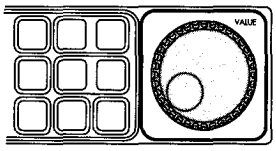



↑ 062. Velocity window bottom
↓ 064. Receive note on

### *Specify the highest velocity that will play each part*




**001—127**




For each program, specify the highest velocity for which the program will sound.

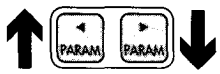
Velocity Window settings specify the range of velocities for which the program will sound. By setting the Velocity Window Top and Bottom, you can restrict a program so that it will sound only in response to the specified range of keyboard dynamics.

For example, you could set a low velocity window for a soft strings program, and a high velocity window for a hard strings program, so that softly-played notes would sound the soft strings, and strongly-played notes would sound the hard strings (Velocity Switch).

Alternatively, you could make settings so that variations in playing dynamics cause the sound of two or more programs to be layered (Velocity Layer).

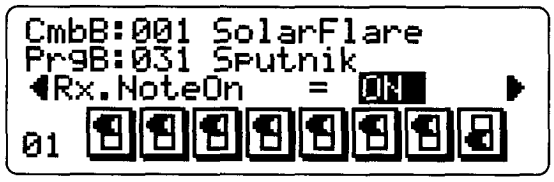
*As for Note Window, Velocity Window settings can be made not only in Combination Edit mode but also in Part Edit mode. The Velocity Window settings of Part Edit mode take priority over those in Combination Edit mode.* → *p.61 [029] Velocity Window Top, [030] Velocity Window Bottom*

## 064. Receive note on

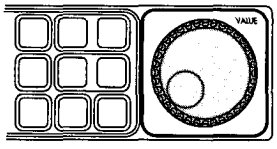



↑ 063. Velocity window top
↓ 065. Receive control change

### *Allow each program to receive note-on messages*

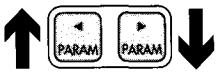



**ON, OFF**



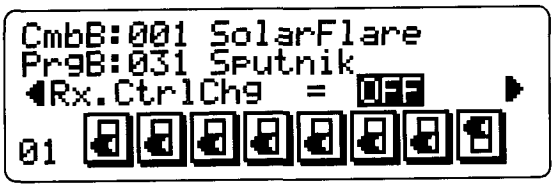

For each program, specify whether or not MIDI Note-on messages will be received. Programs for which this setting is OFF will not sound, regardless of the program or volume settings.

## 065. Receive control change

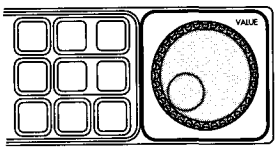



↑ 064. Receive note on
↓ 066. Receive pitch bend

### Allow each program to receive control change messages

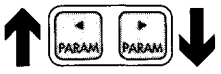



**ON, OFF**



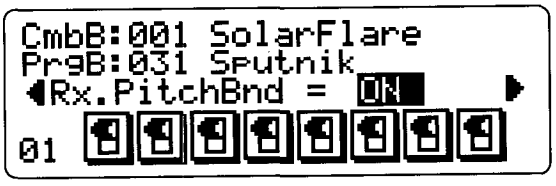

For each program, specify whether or not MIDI Control Change messages will be received. Programs for which this setting is OFF will not receive the Control Change messages used to control a variety of parameters.

## 066. Receive pitch bend

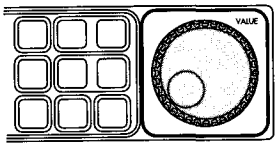



↑ 065. Receive control change
↓ 067. Receive aftertouch

### Allow each program to receive pitch bend messages

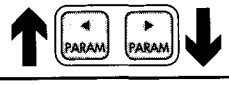



**ON, OFF**



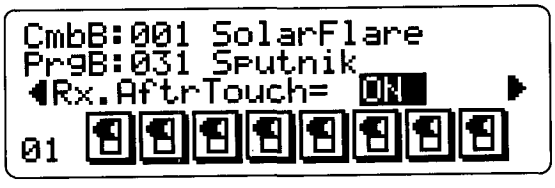

For each program, specify whether or not MIDI Pitch Bend messages will be received. Programs for which this setting is OFF will not receive the Pitch Bend messages that are transmitted by a MIDI keyboard etc. connected to the NS5R when its pitch bend wheel is operated.

## 067. Receive aftertouch

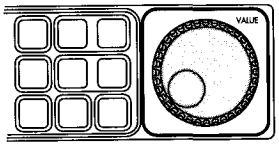



↑ 066. Receive pitch bend
↓ 068. Receive damper

### Allow each program to receive aftertouch messages

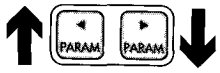



**ON, OFF**



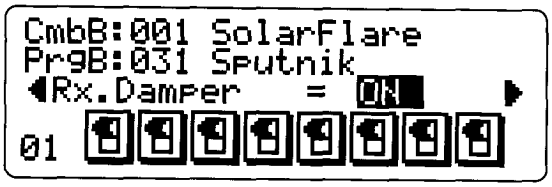

For each program, specify whether or not MIDI Aftertouch messages will be received. Programs for which this setting is OFF will not receive the Aftertouch messages that are transmitted by a MIDI keyboard.

## 068. Receive damper

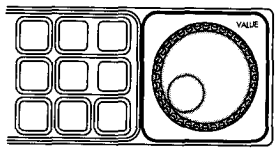



↑ 067. Receive aftertouch
↓ 069. Receive portamento

### *Allow each program to receive damper pedal messages*

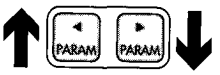



**ON, OFF**



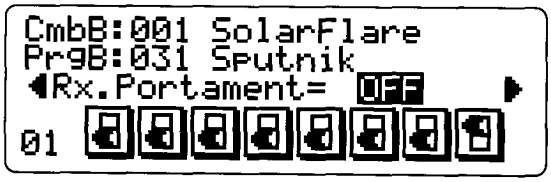

For each program, specify whether or not MIDI Damper messages will be received. Programs for which this setting is OFF will not receive the Damper messages that are transmitted when the damper pedal of a connected MIDI keyboard is operated.

## 069. Receive portamento

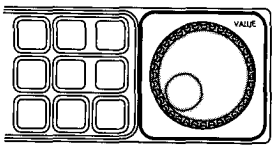



↑ 068. Receive damper
↓ 070. Effect bank

### *Allow each program to receive portamento messages*

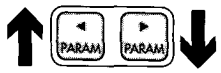



**ON, OFF**



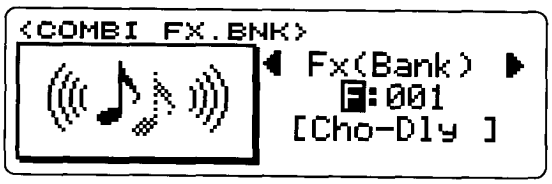

For each program, specify whether or not MIDI Portamento messages will be received. Programs for which this setting is OFF will not receive Portamento messages to control the portamento effect specified by the [38] Portamento Switch parameter.

## 070. Effect bank

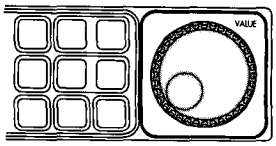



↑ 069. Receive portamento
↓ 071. Effect program

### *Select the bank of the effect that you wish to use*

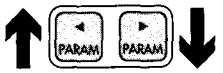



**A, B, C, D, E, F, G, H**



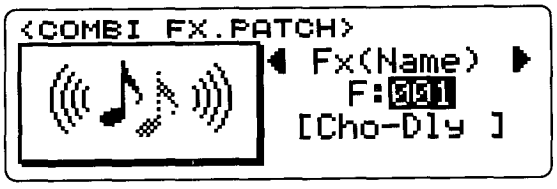

For the displayed combination, specify the bank of the effect program that will be used.

## 071. Effect program

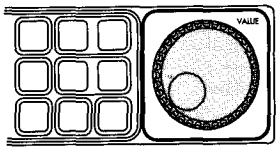



↑ 070. Effect bank
↓ 072. Combination rename

### Specify the number of the effect that you wish to use

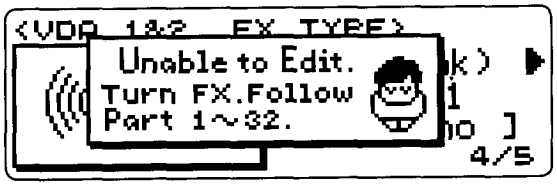



**001—128**



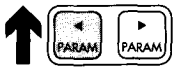

For the displayed combination, specify the effect program that will be used.

* *In order to select an effect program, you must first specify the part by which it will be used. If the Global mode [047] Effect Follow Part setting is OFF, it will not be possible to select an effect program. In this case, the following display will appear.*



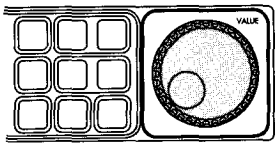

*If you wish to select an effect, specify the part number in [047] Effect Follow Part.*

## 072. Combination rename




↑ 071. Effect program

### Assign a name to the combination and save it

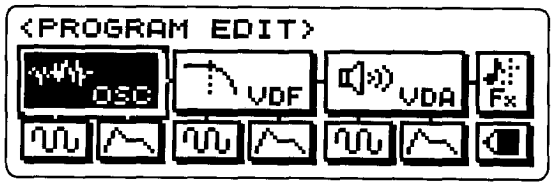

You can modify the name of the currently selected combination (if desired), and save it in any memory number of the User Combination bank.

To modify the combination name, use the [PARAM] buttons to move the cursor to the character in the name that you wish to modify, and use the VALUE controller to select the desired character. By repeating this process for each character you can assign any desired name. The following characters can be used.

| | ! | " | # | $ | % | & | ' | ( | ) | * | + | , | - | . | / | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | : | ; | < | = | > | ? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| @ | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | [ | ¥ | ] | ^ | _ |
| ` | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | { | \| | } | → | ← |

# 6. Program Edit mode

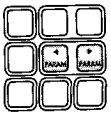
In this mode you can edit program sounds. To enter this mode from Multi mode, make sure that a Program sound is selected, and then hold down the [ENTER/EDIT] button. In approximately 2 seconds, the home page of Program Edit mode will appear.




Sounds edited in Program Edit mode can be given a name (if desired) and saved in the User program area, which is indicated as "PrgU: (number)."

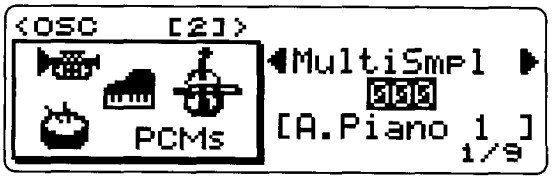
Program Edit mode consists of OSC (oscillator), VDF (filter), VDA (amplifier), and Pan/Effect Send, and a page which allows you to save the results of your editing.

| Key | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 073 (home page) | Oscillator | →P.92 |
| | | Pitch LFO | →P.98 |
| | | Pitch EG | →P.100 |
| | | Filter | →P.104 |
| | | Filter LFO | →P.108 |
| | | Filter EG | →P.110 |
| | | Amplifier | →P.115 |
| | | Amplifier LFO | →P.117 |
| | | Amplifier EG | →P.120 |
| | | Pan/effect send | →P.124 |
| | | Rename | →P.126 |
|  | 074 Oscillator mode | Specify the type of oscillator | →P.93 |
| | 075 Multisample select | Select a multisample | →P.94 |
| | 076 Drum kit select | Select a drum kit | →P.94 |
| | 077 Octave select | Specify the pitch in octave units | →P.94 |
| | 078 Oscillator level | Specify the oscillator volume | →P.95 |
| | 079 Key transpose | Specify the pitch in semitone steps | →P.95 |
| | 080 Fine tune | Make fine adjustments to pitch | →P.95 |
| | 081 Velocity window bottom | Specify the minimum velocity which will play the sound | →P.96 |
| | 082 Velocity window top | Specify the maximum velocity which will play the sound | →P.96 |
| | 083 Delay start | Delay the beginning of the note | →P.97 |
| | 084 Pitch slope | Specify the relation between pitch and the keyboard location | →P.97 |
|  | 085 Pitch LFO waveform | Select the vibrato waveform | →P.98 |
| | 086 Pitch LFO frequency | Specify the frequency of vibrato | →P.98 |
| | 087 Pitch LFO intensity | Specify the depth of vibrato | →P.98 |
| | 088 Pitch LFO delay | Specify the time delay before vibrato begins to apply | →P.99 |
| | 089 Pitch LFO fade in time | Specify the time over which vibrato reaches its full depth | →P.99 |

| | | | |
|---|---|---|---|
|  | 090 Pitch EG start level | Specify the pitch at which the sound will begin | →P.100 |
| | 091 Pitch EG attack time | Specify the time over which the pitch will reach the attack level | →P.100 |
| | 092 Pitch EG attack level | Specify the pitch which will be reached after the attack time | →P.100 |
| | 093 Pitch EG decay time | Specify the time over which the pitch will reach the normal level | →P.101 |
| | 094 Pitch EG release time | Specify the time over which the pitch will release the release level | →P.101 |
| | 095 Pitch EG release level | Specify the pitch which will be reached after the release time | →P.101 |
| | 096 Pitch EG intensity | Specify the depth of the pitch EG effect | →P.102 |
| | 097 Pitch EG intensity velocity sensitivity | Specify how pitch EG depth will be affected by keyboard dynamics | →P.102 |
| | 098 Pitch EG time velocity sensitivity | Specify how pitch EG times will be affected by keyboard dynamics | →P.103 |
|  | 099 Cutoff frequency | Adjust the brightness of the sound | →P.104 |
| | 100 Color intensity | Adjust the tonal character of the sound | →P.104 |
| | 101 Color velocity sensitivity | Specify how the tonal character will be affected by keyboard dynamics | →P.105 |
| | 102 VDF keyboard tracking mode | Specify how the brightness will change in relation to the keyboard location | →P.105 |
| | 103 VDF keyboard tracking key | Specify the note at which the brightness will begin changing | →P.106 |
| | 104 VDF keyboard tracking intensity | Specify how greatly the brightness will be affected by keyboard location | →P.106 |
| | 105 VDF keyboard tracking EG time | Specify how greatly tone EG times will be affected by keyboard location | →P.107 |
| | 106 VDF keyboard tracking EG time switch/polarity | Specify the time and direction of the EG change produced by keyboard location | →P.107 |
|  | 107 VDF LFO waveform | Select the waveform of the wah effect | →P.108 |
| | 108 VDF LFO frequency | Specify the frequency of the wah effect | →P.108 |
| | 109 VDF LFO intensity | Specify the depth of the wah effect | →P.109 |
| | 110 VDF LFO delay | Specify the delay until the wah begins to apply | →P.109 |
| | 111 VDF LFO fade-in time | Specify the time until the full wah effect is reached | →P.109 |
|  | 112 VDF EG attack time | Specify the time over which the tone will reach the attack level | →P.110 |
| | 113 VDF EG attack level | Specify the level which the tone will reach after the attack time | →P.110 |
| | 114 VDF EG decay time | Specify the time over which the tone will reach the break point | →P.110 |
| | 115 VDF EG break point | Specify the level which the tone will reach after the decay time | →P.111 |
| | 116 VDF EG slope time | Specify the time over which the tone will reach the normal level | →P.111 |
| | 117 VDF EG sustain level | Specify the brightness of the tone which will be maintained until the key is released | →P.111 |
| | 118 VDF EG release time | Specify the time over which the tone will change after the key is released | →P.112 |
| | 119 VDF EG release level | Specify the brightness level toward which the tone will change after the key is released | →P.112 |
| | 120 VDF EG intensity | Specify the depth of the VDF EG effect | →P.113 |
| | 121 VDF EG intensity velocity sensitivity | Specify how the VDF EG will be affected by keyboard dynamics | →P.113 |
| | 122 VDF EG time velocity sensitivity | Specify how greatly the VDF EG times will be affected by keyboard dynamics | →P.114 |
| | 123 VDF EG velocity sensitivity switch/ polarity | Specify the direction in which keyboard dynamics will affect the VDF EG times | →P.114 |

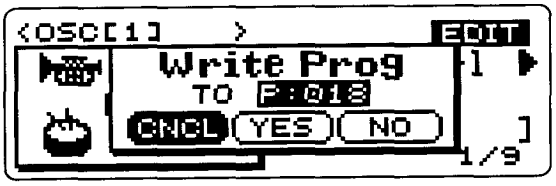
| | | | |
|---|---|---|---|
| | 124 VDA keyboard tracking mode | Specify how volume will be affected by keyboard location | →P.115 |
| | 125 VDA keyboard tracking key | Specify the key around which volume will change | →P.115 |
| | 126 VDA keyboard tracking intensity | Specify how greatly the volume EG will be affected by keyboard location | →P.116 |
| | 127 VDA keyboard tracking EG time | Specify how greatly the volume EG times will be affected by keyboard location | →P.116 |
| | 128 VDA keyboard tracking EG time switch/polarity | Specify the direction in which the volume EG will be affected by keyboard location | →P.117 |
| | 129 VDA LFO waveform | Select the waveform for the tremolo effect | →P.118 |
| | 130 VDA LFO frequency | Specify the frequency of the tremolo effect | →P.118 |
| | 131 VDA LFO intensity | Specify the depth of the tremolo effect | →P.118 |
| | 132 VDA LFO delay | Specify the time delay until the tremolo effect will begin to apply | →P.119 |
| | 133 VDA LFO fade-in time | Specify the time over which the maximum tremolo effect will be reached | →P.119 |
| | 134 VDA EG attack time | Specify the time over which the volume will reach the attack level | →P.120 |
| | 135 VDA EG attack level | Specify the level which the volume will reach after the attack time | →P.120 |
| | 136 VDA EG decay time | Specify the time over which the volume will reach the break point | →P.120 |
| | 137 VDA EG break point | Specify the level which the volume will reach after the decay time | →P.121 |
| | 138 VDA EG slope time | Specify the time over which the volume will reach the normal level | →P.121 |
| | 139 VDA EG sustain level | Specify the volume level which will be maintained until the key is released | →P.121 |
| | 140 VDA EG release time | Specify the time over which the volume will decrease to silence after the key is released | →P.122 |
| | 141 VDA EG amplitude velocity sensitivity | Specify how greatly the VDA EG will be affected by keyboard dynamics | →P.122 |
| | 142 VDA EG time velocity sensitivity | Specify how greatly the VDA EG times will be affected by keyboard dynamics | →P.123 |
| | 143 VDA EG velocity sensitivity switch/ polarity | Specify the direction in which the VDA EG will be affected by keyboard dynamics | →P.123 |
| | 144 Oscillator panpot | Specify the stereo balance of the send level to the effects | →P.124 |
| | 145 C send level | Specify the send level to the effect | →P.125 |
| | 146 D send level | Specify the send level to the effect | →P.125 |
| | 147 Effect bank | Select the bank of the desired effect | →P.125 |
| | 148 Effect number | Select the number of the desired effect | →P.126 |
| | 149 Program rename | Assign a name to the program and save it | →P.126 |

[074] In Program Edit mode if the Oscillator Mode is set to DOUBLE, a display of [1] and [2] in the LCD screen will alternate each time the [EDIT/ENTER] button is pressed when in edit pages [074] through [146]. This indicates for which of the two oscillators the oscillator-related parameter settings are being made. Oscillator, filter or amplifier settings for which either [1] or [2] is displayed are in the same signal flow.




If the Oscillator Mode is not set to DOUBLE, the LCD will show only [1], and it will not be possible to switch this.

In Program Edit mode, modifying a parameter setting will cause a EDIT symbol to appear in the upper right of the display. When this symbol is displayed, pressing the [DISP/EXIT] button to exit Program Edit mode will cause the following popup window to appear. This menu lets you choose whether to save the current edited program in the User bank, or whether you wish to discard the results of your editing.




If you select CNCL and press the [ENTER] button, the popup window will disappear, and you can continue editing.

If you select YES and press the [ENTER] button, the program that you modified will be saved in the displayed program number of the User bank. You can use the VALUE controller to select the program number

* *In this case, when you save your edited program to a different program number which already contains another program, the program settings that were previously in that location will be overwritten and lost.*

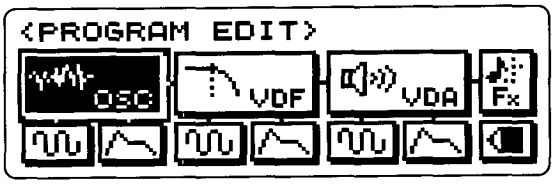
If you select NO and press the [ENTER] button, the modified program will not be saved, and you will exit Program Edit mode.

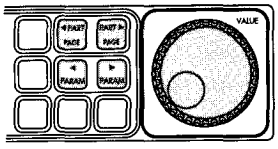
## 073. (home page)

↑
↓ (finalize)

### Select the item that you wish to edit

**OSC, PITCH LFO, PITCH EG, VDF, VDF LFO, VDF EG, VDA, VDA LFO, VDA EG, Fx, PROG RENAME**

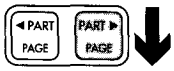



This page is a menu that lets you select the item you wish to edit.

Items can be selected using the [PART/PAGE] buttons, the [PARAM] buttons, or VALUE dial.

OSC

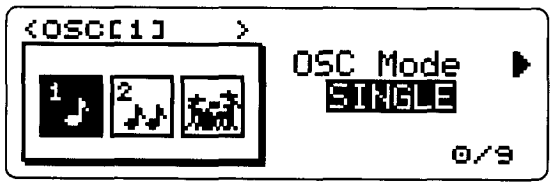



↓ PITCH LFO

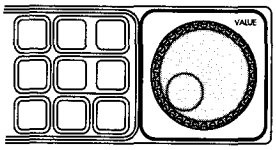
# 074. Oscillator mode


↓ 075. Multisample select
Drum kit select

## Specify the type of oscillator




**SINGLE, DOUBLE, DRUMS**



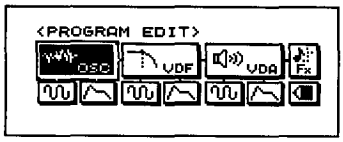

This setting specifies whether the sound will be based on one oscillator alone, two oscillators together, or a drum kit oscillator.

With a setting of SINGLE, a single system of oscillator, filter, and amplifier will be used. In this case, the NS5R will have a maximum polyphony of 64 notes.

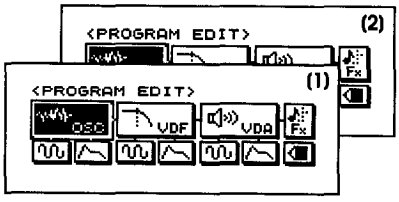
With a setting of DOUBLE, two systems of oscillator, filter, and amplifier will be used. This lets two different sounds (or identical sounds) be layered as a single sound, allowing more complex sounds to be created. However in this case, the NS5R will have a maximum polyphony of 32 notes.

If this setting is DOUBLE, subsequent editing pages will show either [1] or [2] in the LCD, which will alternate when you press the [EDIT/ENTER] button. This indicates the oscillator (1 or 2) for which you are editing the oscillator, filter, or amplifier settings. Oscillator, filter, or amplifier settings for which the same number is displayed belong to the same system.

**(SINGLE)**



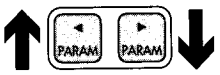

**(DOUBLE)**




With a setting of DRUMS, you will be able to select a drum kit.

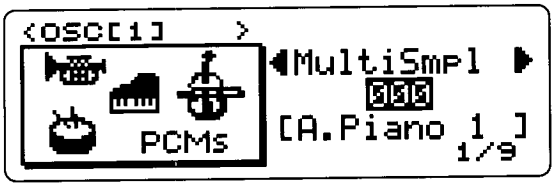
GW When this parameter is set to DRUMS, pressing and holding the [EDIT/ENTER] button (regardless of the parameter page which is displayed) will take you to Drum Kit Edit mode, allowing you to make detailed settings for the drum kit. →P.127

# 075. Multisample select/Drum kit select

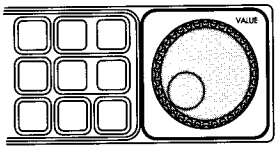



↑ 074. Oscillator mode
↓ 077. Octave select

## Select a multisample



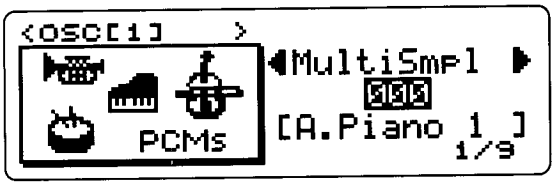

**000—527**



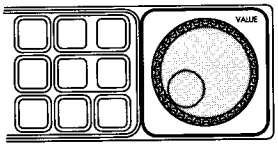

Select the multisample that will be used for the oscillator. This parameter selects the waveform which will be the basis for the sound. A list of the available multisamples is provided in the appendices at the end of this manual.

# 076. Drum kit select

## Select a drum kit

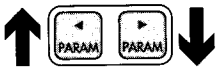



**000—038**



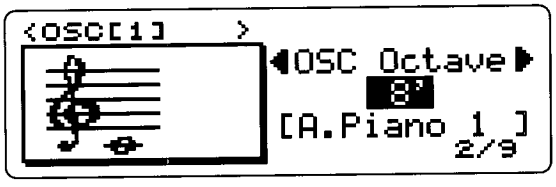

[074] When the Oscillator Mode parameter is set to DRUMS, this drum kit select page will appear instead of the multisample select page. A list of the available drum kits is provided in the appendices at the end of this manual.

# 077. Octave select

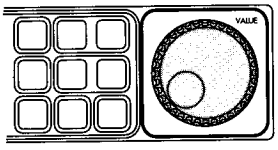



↑ 075. Multisample select
076. Drum kit select
↓ 078. Oscillator level

## Specify the pitch in octave units

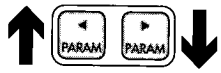



**32', 16', 8', 4'**



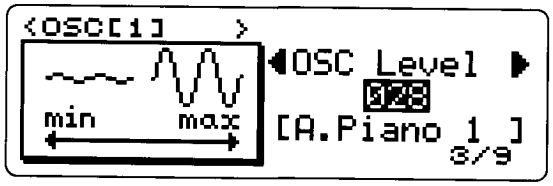

Specify the pitch of the oscillator in 1-octave units. A setting of 8' is the standard pitch.

## 078. Oscillator level

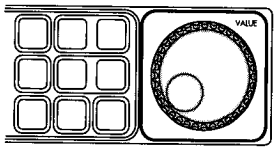



↑ 077. Octave select
↓ 079. Key transpose

### Specify the oscillator volume



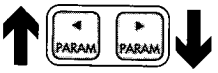

000—127




Specify the basic volume of the oscillator.

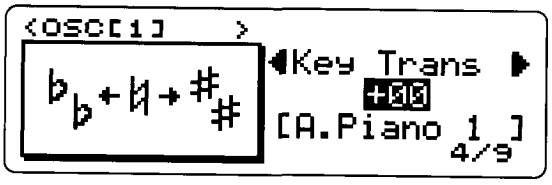
On the NS5R, parameters which determine the volume of each Part exist separately in each of the three modes Program, Combination, and Multi. The maximum possible value for the Multi mode [004] Volume setting will be the value of the Program Edit mode [078] Oscillator Level. In the case of a Combination sound, the volume will be limited by the [054] Program Volume setting as well.

## 079. Key transpose

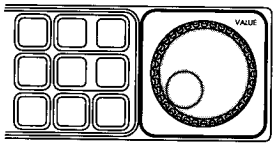



↑ 078. Oscillator level
↓ 080. Fine tune

### Specify the pitch in semitone steps

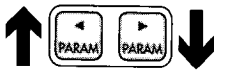



–12—00—+12



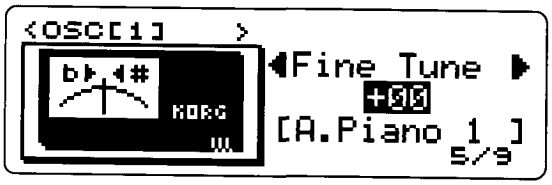

Specify the pitch of the oscillator in semitone steps.

## 080. Fine tune

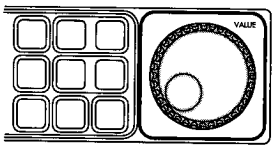



↑ 079. Key transpose
↓ 081. Velocity window bottom

### Make fine adjustments to pitch



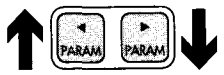

–99—00—+99




Specify a fine adjustment to the pitch of the oscillator.

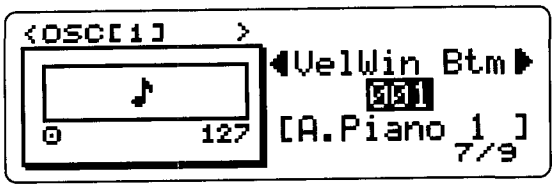
[074] When the Oscillator Mode is set to DOUBLE, this parameter allows you to create a detuning effect between oscillators [1] and [2]. (Detuning is an effect in which the pitches of two sounds are slightly varied relative to the other, creating a richer sound.)

## 081. Velocity window bottom

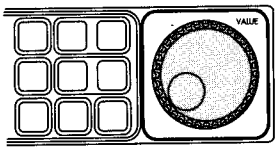



↑ 080. Fine tune
↓ 082. Velocity window top

### Specify the minimum velocity which will play the sound



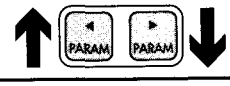

**001—127**




Specify the minimum velocity value for which the oscillator will sound.

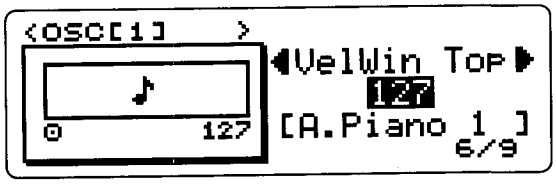
With high settings of this parameter, softly played notes will not sound the oscillator. As the value is decreased, the oscillator will sound in response to increasingly softly played notes.

## 082. Velocity window top

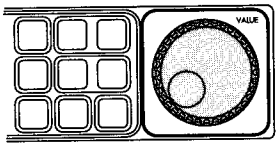



↑ 081. Velocity window bottom
↓ 083. Delay start

### Specify the maximum velocity which will play the sound




**001—127**

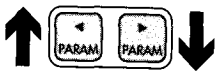



Set the maximum velocity value for which the oscillator will sound. (Velocity is MIDI data which indicates how strongly a note was played.)

With low values of this parameter, strongly played notes will not sound the oscillator. As the value is increased, the oscillator will sound in response to increasingly strongly played notes.

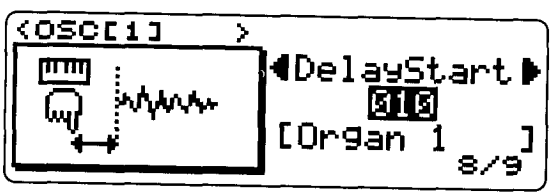
The velocity window allows you to specify the range of velocities which will sound the oscillator. By setting the velocity window top and bottom, you can cause the sound to play only when notes are played with a specific strength.

## 083. Delay start

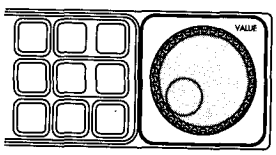



↑ 082. Velocity window top
↓ 084. Pitch slope

### Delay the beginning of the note




000—127

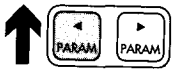



This parameter sets the time from when the NS5R receives a MIDI Note-on message (i.e., when a note is played on the MIDI keyboard) until when the oscillator actually begins to sound.

As this value is increased, there will be an increasing delay from when the note is played until the sound begins.

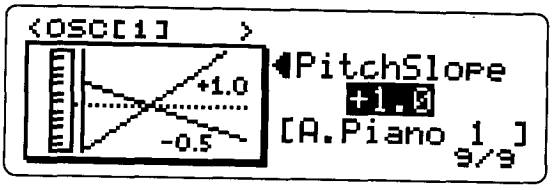
When another MIDI tone generator which is slower to respond to MIDI messages is used together with the NS5R, this parameter provides a convenient way to match the note timing of the two devices.

## 084. Pitch slope

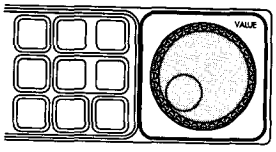



↑ 083. Delay start

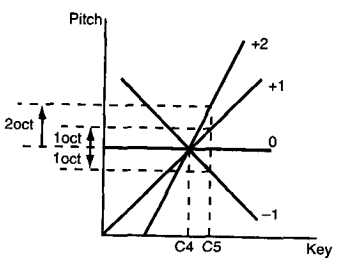
### Specify the relation between pitch and the keyboard location




−1.0—+0.0—+2.0




When this parameter has a value of +1.0, the oscillator's pitch will rise one octave as the note number increases by 12 (i.e., 12 notes on the keyboard). This is the normal pitch change.




If this parameter is set to a value above 1, the pitch will rise more rapidly. With a setting of +2.0, the oscillator's pitch will rise two octaves as the note number increases by 12. With settings of less than 1, the pitch will rise more slowly, and with a setting of 0.00 all note numbers will produce the same pitch of C4.

Values less than 0 will invert the relation between note numbers and pitch, so that higher note numbers will be sounded at lower pitches. In other words, notes will become lower as you play toward the right edge of the keyboard, and higher as you play toward the left edge. With a setting of −1.0, the oscillator's pitch will fall one octave as the note number increase by 12.

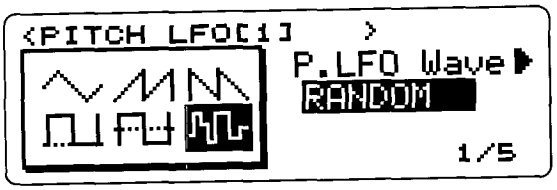
# PITCH LFO

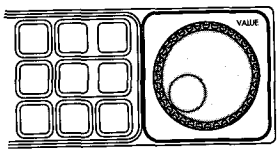
## 085. Pitch LFO waveform

↓ 086. Pitch LFO frequency

### Select the vibrato waveform

**TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RANDOM**



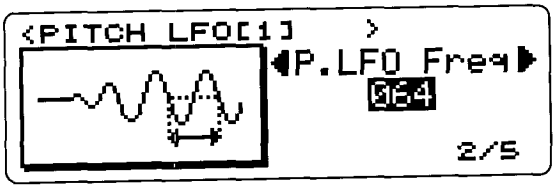
This selects the waveform that will be used for pitch modulation (the vibrato effect that cyclically modifies the pitch).

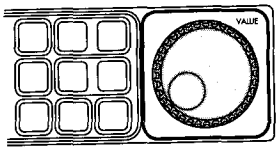
## 086. Pitch LFO frequency

↑ 085. Pitch LFO waveform
↓ 087. Pitch LFO intensity

### Specify the frequency of vibrato

**000—127**



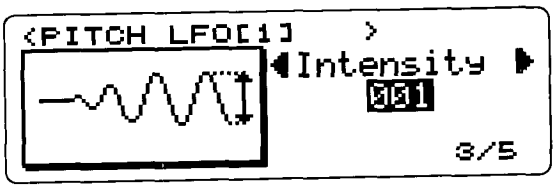
Specify the frequency of the pitch modulation waveform.

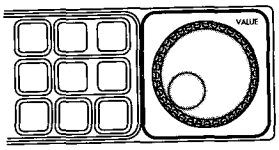
## 087. Pitch LFO intensity

↑ 086. Pitch LFO frequency
↓ 088. Pitch LFO delay

### Specify the depth of vibrato

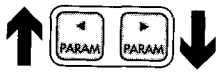
**000—127**



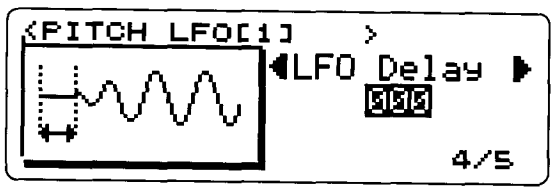
Specify the depth (strength) of the pitch modulation effect.

## 088. Pitch LFO delay

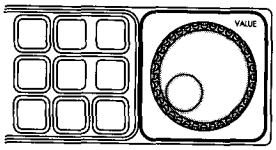



↑ 087. Pitch LFO intensity
↓ 089. Pitch LFO fade in time

### Specify the time delay before vibrato begins to apply

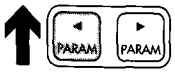



000—127



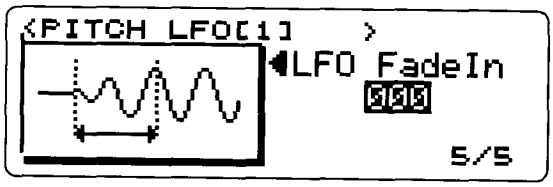

Specify the time from when the Note-on message is received (i.e., from when you play a note) until pitch modulation begins to apply to the sound that is played.

## 089. Pitch LFO fade in time

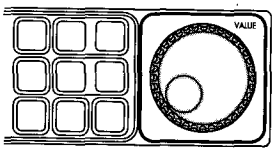



↑ 088. Pitch LFO delay

### Specify the time over which vibrato reaches its full depth




000—127



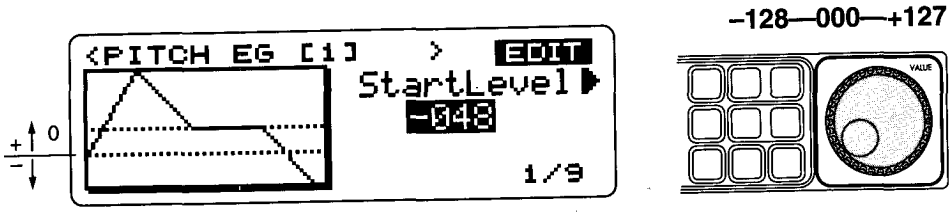

Specify the time from when pitch modulation begins to apply until it reaches the full strength specified by the [087] Pitch LFO Intensity parameter.

# PITCH EG

## 090. Pitch EG start level

↓ 091. Pitch EG attack time

*Specify the pitch at which the sound will begin*




Specify the initial pitch (i.e., the pitch at the moment of Note-on).

## 091. Pitch EG attack time

↑ 090. Pitch EG start level
↓ 091. Pitch EG attack level

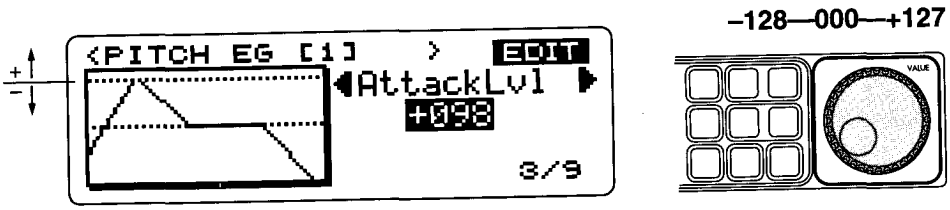
*Specify the time over which the pitch will reach the attack level*


Specify the time over which the pitch will change from Note-on until it reaches the pitch specified by the [092] Attack Level parameter.

## 092. Pitch EG attack level

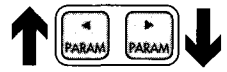
↑ 091. Pitch EG attack time
↓ 093. Pitch EG decay time

*Specify the pitch which will be reached after the attack time*



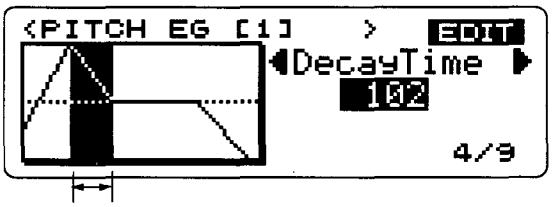

Specify the pitch which will be reached after the time specified by the [091] Attack Time parameter has elapsed.

## 093. Pitch EG decay time

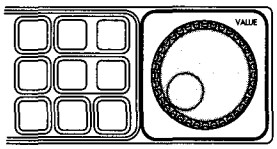



↑ 092. Pitch EG attack level
↓ 094. Pitch EG release time

### Specify the time over which the pitch will reach the normal level

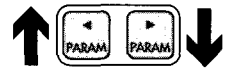



000—127



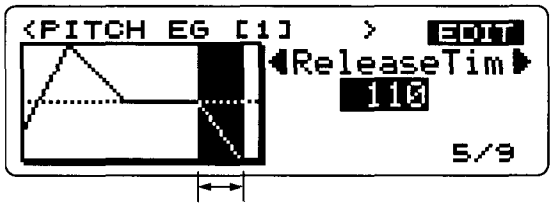

Specify the time over which the pitch will move toward the normal level (the pitch which will continue to sound as long as you continue pressing the key), after the [091] Attack Time has elapsed.

## 094. Pitch EG release time

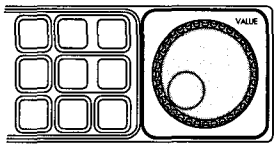



↑ 093. Pitch EG decay time
↓ 095. Pitch EG release level

### Specify the time over which the pitch will release the release level

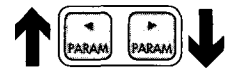



000—127



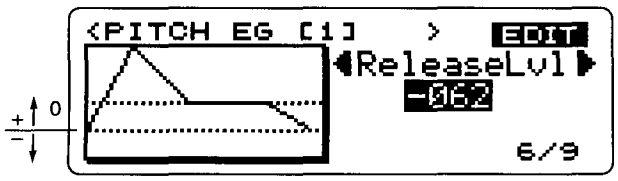

Specify the time over which the pitch will change from Note-off (the moment you release the key) until the pitch specified by the [095] Release Level parameter is reached.

## 095. Pitch EG release level

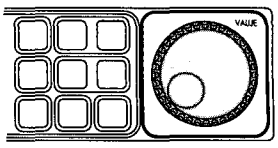



↑ 094. Pitch EG release time
↓ 096. Pitch EG intensity

### Specify the pitch which will be reached after the release time

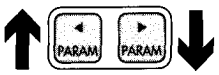



−128—000—+127



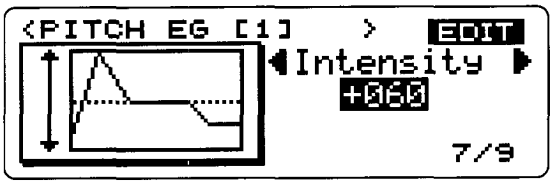

Specify the pitch that will be reached after the [094] Release Time has elapsed.

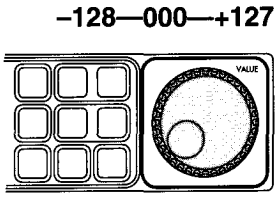
## 096. Pitch EG intensity




↑ 095. Pitch EG release level
↓ 097. Pitch EG intensity velocity sensitivity

### Specify the depth of the pitch EG effect



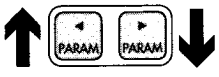




Specify the depth (strength) of the Pitch EG effect.

With a setting of 0, the pitch EG will not cause any change in the pitch. With negative settings, the pitch will change in the opposite direction from the Attack Level and Decay Level specified by the pitch EG parameters.

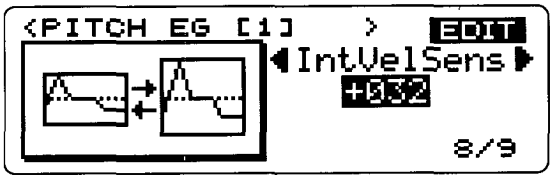
For example if [092] Attack Level is set higher than the standard pitch, a positive (+) setting for this Intensity parameter will cause the pitch to gradually increase after the note begins, until the highest value (Attack Level) is reached. However if this Intensity parameter has a negative (–) setting, the pitch will gradually decrease after the note begins, until the lowest level (the inverse of the Attack Level) is reached.

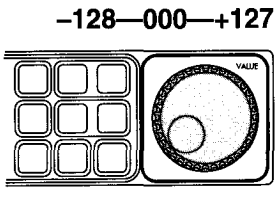
## 097. Pitch EG intensity velocity sensitivity




↑ 096. Pitch EG intensity
↓ 098. Pitch EG time velocity sensitivity

### Specify how pitch EG depth will be affected by keyboard dynamics



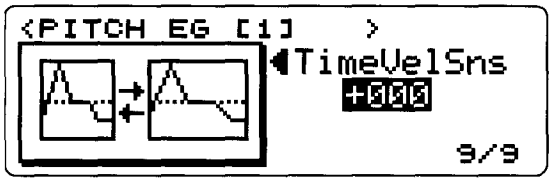

Specify how the pitch EG depth (strength) will be affected by MIDI velocity data.

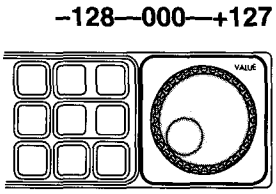
Increasingly positive (+) settings of this parameter will cause the pitch EG to become deeper as you play the keyboard more strongly, and shallower as you play less strongly. Conversely, increasingly negative (–) settings of this parameter will cause the pitch EG to become shallower as you play the keyboard more strongly, and deeper as you play less strongly.

# 098. Pitch EG time velocity sensitivity


↑ 097. Pitch EG intensity velocity sensitivity

## *Specify how pitch EG times will be affected by keyboard dynamics*



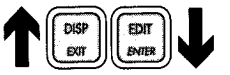




Specify how the Attack Time (091), Decay Time (093) and Release Time (095) of the pitch EG will be affected by MIDI velocity data.

Increasingly positive (+) settings of this parameter will cause each of the pitch EG times to become shorter for strongly played notes, producing more rapid pitch change. For softly played notes, pitch EG times will become longer, producing slower pitch change.

Conversely, increasingly negative (–) settings of this parameter will cause strongly played notes to have slower pitch change, and softly played notes to have faster pitch change.

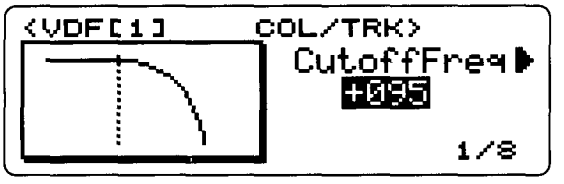
# VDF COL/TRK



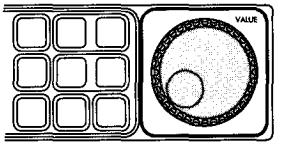

## 099. Cutoff frequency


↓ 100. Color intensity

### Adjust the brightness of the sound

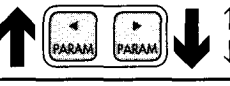



000—127



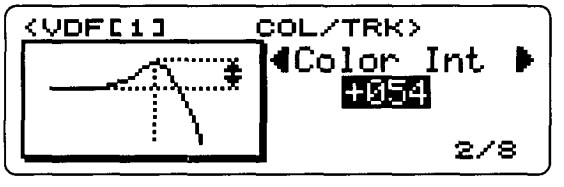

Adjust the VDF cutoff frequency (the brightness of the sound).

## 100. Color intensity

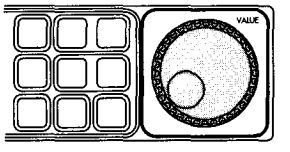



↑ 099. Cutoff frequency
↓ 101. Color velocity sensitivity

### Adjust the tonal character of the sound



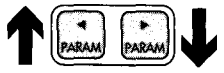

000—127




This parameter adds character to the sound by emphasizing the frequency region around the VDF cutoff frequency.

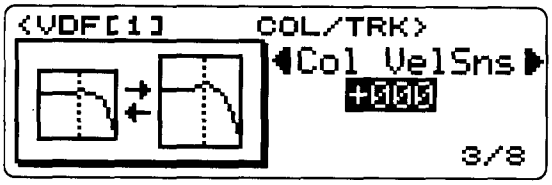
* *The result of this effect will depend on the original sound. For some multisamples, the effect may not be very noticeable.*

## 101. Color velocity sensitivity

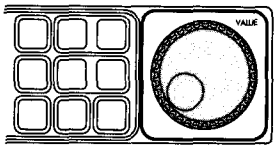



↑ 100. Color intensity
↓ 102. VDF keyboard tracking mode

### Specify how the tonal character will be affected by keyboard dynamics




**–128—000—+127**

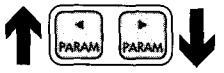



Specify how MIDI velocity data will affect the Color parameter.

Increasingly positive (+) settings of this parameter will cause strongly played notes to have a more pronounced Color effect, and softly played notes to have a weaker effect. Conversely, increasingly negative (–) settings will cause strongly played notes to have a weaker Color effect, and softly played notes to have a stronger effect.

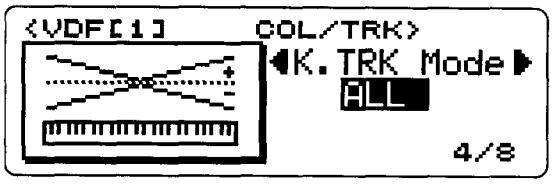
* *The result of this effect will depend on the original sound. For some multisamples, the effect may not be very noticeable.*

## 102. VDF keyboard tracking mode

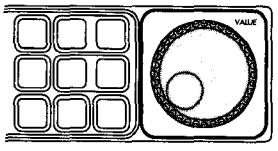



↑ 101. Color velocity sensitivity
↓ 103. VDF keyboard tracking key

### Specify how the brightness will change in relation to the keyboard location




**OFF, LOW, HIGH, ALL**

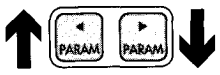



Specify how the change in brightness relative to the keyboard location (VDF keyboard tracking) will be applied.

With a setting of LOW, keyboard tracking will occur in the area below the specified[103] Keyboard Tracking Key. With a setting of HIGH, keyboard tracking will occur in the area above the specified key.

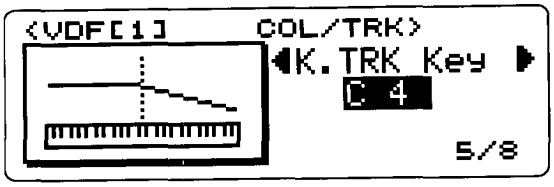
With a setting of ALL, keyboard tracking will occur over the entire keyboard. With a setting of OFF, keyboard tracking will not occur. In this case, the [104]Keyboard Tracking Intensity, [105]Keyboard Tracking EG Time, and [106]Keyboard Tracking EG Time Switch/Polarity settings will have no effect.

# 103. VDF keyboard tracking key

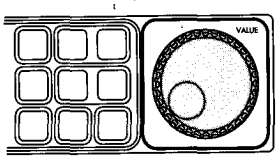



↑ 102. VDF keyboard tracking mode
↓ 104. VDF keyboard tracking intensity

## Specify the note at which the brightness will begin changing



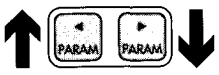

C-1—G9




When [102]Keyboard Tracking Mode is set either to HIGH or LOW, keyboard tracking will begin applying at the note specified by this parameter, either to the area above or below.

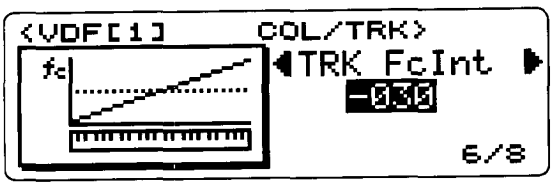
When the Tracking Mode is set to ALL, this parameter sets the center of keyboard tracking. (Keyboard tracking will not apply to this key.)

# 104. VDF keyboard tracking intensity

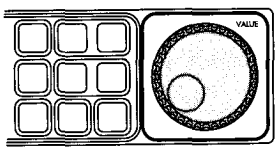



↑ 103. VDF keyboard tracking key
↓ 105. VDF keyboard tracking EG time

## Specify how greatly the brightness will be affected by keyboard location



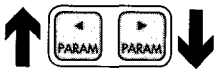

-128—000—+127




This parameter specifies the strength (depth) with which keyboard tracking will affect the area specified by [102]Keyboard Tracking Mode and [103]Keyboard Tracking Key.

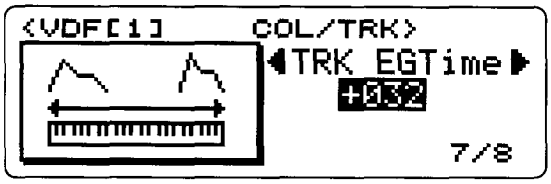
Positive (+) settings will cause the sound to become brighter as increasingly higher notes are played. Negative (–) settings will have the opposite effect.

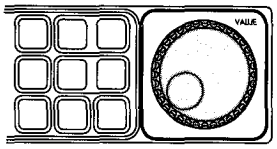
# 105. VDF keyboard tracking EG time




↑ 104. VDF keyboard tracking intensity
↓ 106. VDF keyboard tracking EG time switch/polarity

## *Specify how greatly VDF EG times will be affected by keyboard location*




This parameter specifies how the Attack Time (112), Decay Time (114), Slope Time (116), and Release Time (118) of the VDF EG will be affected by keyboard tracking.

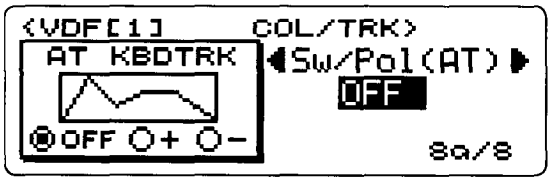
Increasingly positive (+) settings of this parameter will cause notes in the area specified by [102] Keyboard Tracking Mode and [103] Keyboard Tracking Key to have shorter VDF EG times as higher notes are played, producing quicker change in tone. As lower notes are played, the various VDF EG times will become longer, producing slower change in tone.

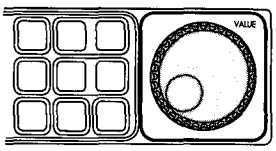
Conversely, increasingly negative (–) settings of this parameter will cause slower tonal change as higher notes are played, and faster tonal change as lower notes are played.

# 106. VDF keyboard tracking EG time switch/polarity


↑ 105. VDF keyboard tracking EG time

## *Specify the time and direction of the EG change produced by keyboard location*




Specify the direction in which keyboard tracking will affect each of the VDF EG parameters Attack Time (112), Decay Time (114), Slope Time (116) and Release Time (118).

For each of these times, a setting of "+" will cause times to be shortened as you play notes higher than the [103] Keyboard Tracking Key, and a setting of "–" will cause times to be lengthened. With a setting of 0, keyboard location will not affect VDF EG times.

This parameter sets the directions (±) in which the four Time parameters will be affected, but the amount of the change is specified by the [105] Keyboard Tracking EG Time parameter.

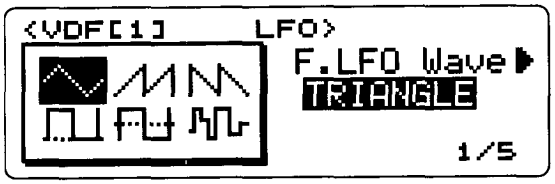
# VDF LFO

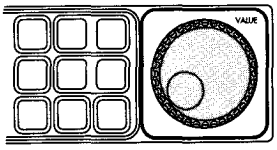
## 107. VDF LFO waveform

↓ 108. VDF LFO frequency

### Select the waveform of the wah effect

**TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RAMDOM**



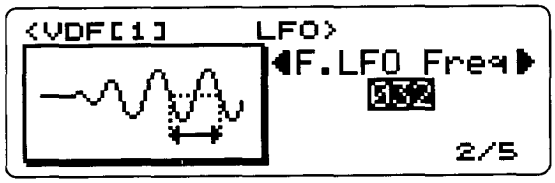

Select the waveform that will be used for VDF modulation (the wah effect produced by cyclically modulating the tone).

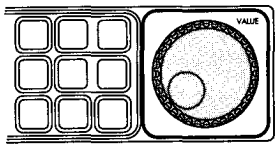
## 108. VDF LFO frequency

↑ 107. VDF LFO waveform
↓ 109. VDF LFO intensity

### Specify the frequency of the wah effect

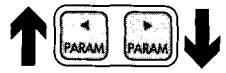
**000—127**



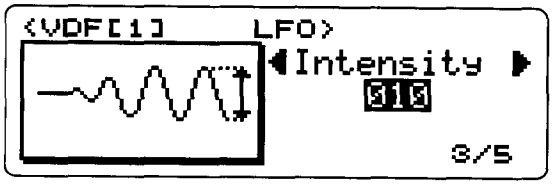

Specify the frequency of the VDF modulation waveform.

## 109. VDF LFO intensity

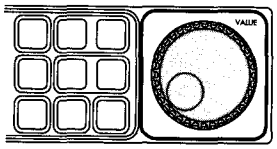



↑ 108. VDF LFO frequency
↓ 110. VDF LFO delay

### Specify the depth of the wah effect

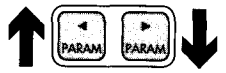



000—127



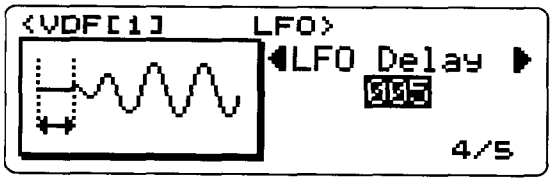
Specify the depth (strength) of the VDF modulation effect.

## 110. VDF LFO delay

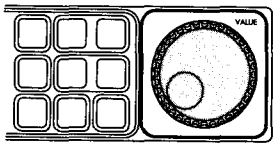



↑ 109. VDF LFO intensity
↓ 111. VDF LFO fade-in time

### Specify the delay until the wah begins to apply

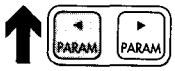



000—127



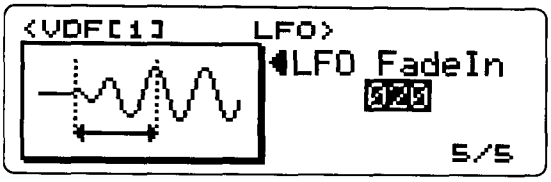
Specify the time delay from when a Note-on message is received (i.e., from when the keyboard is played) until VDF modulation begins to apply to the note that sounds.

## 111. VDF LFO fade-in time

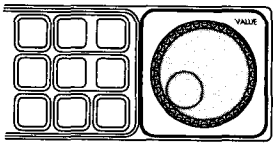



↑ 110. VDF LFO delay

### Specify the time until the full wah effect is reached




000—127



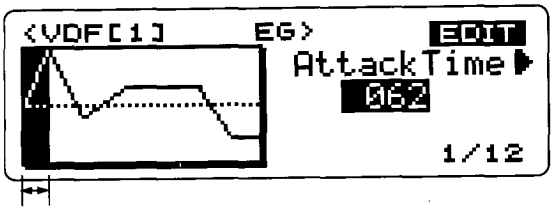
Specify the time from when VDF modulation begins to apply until the full strength specified by [109] VDF LFO Intensity is reached.

# VDF EG

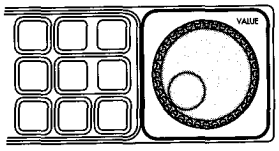
## 112. VDF EG attack time

↓ 113.VDF EG attack level

*Specify the time over which the tone will reach the attack level*




000—127

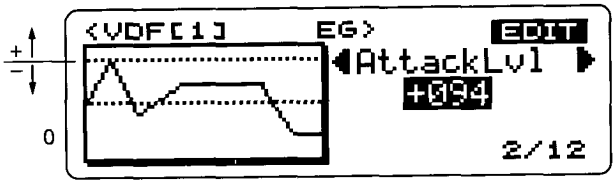



Specify the time from Note-on until the VDF cutoff frequency reaches the value specified by [113] Attack Level.

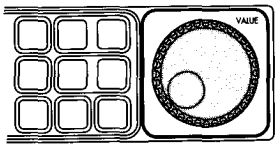
## 113. VDF EG attack level

↑ 112. VDF EG attack time
↓ 114. VDF EG decay time

*Specify the level which the tone will reach after the attack time*




−128—000—+127

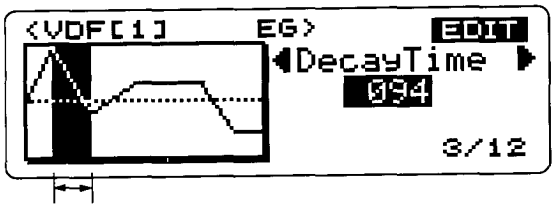



Specify the cutoff frequency level which will be reached after the [112] Attack Time has elapsed.

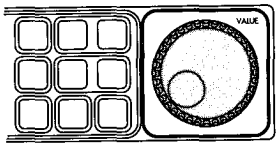
## 114. VDF EG decay time

↑ 113. VDF EG attack level
↓ 115. VDF EG break point

*Specify the time over which the tone will reach the break point*




000—127

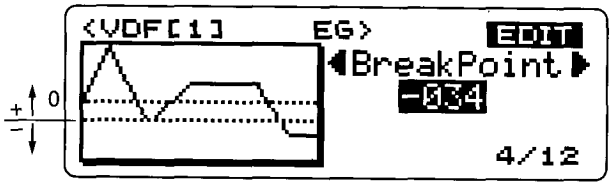



Specify the time over which the cutoff frequency will move to the [115] Break Point (the level of brightness which will be maintained as long as the key is pressed) after the [112] Attack Time has elapsed.

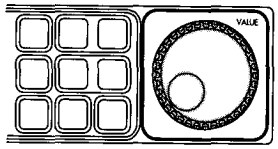
## 115. VDF EG break point


↑ 114. VDF EG decay time
↓ 116. VDF EG slope time

### *Specify the level which the tone will reach after the decay time*

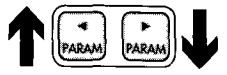



**–128—000—+127**



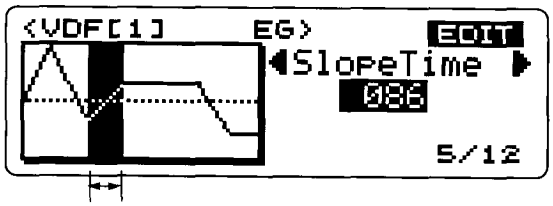

Specify the cutoff frequency which will be reached after the [114] Decay Time has elapsed.

## 116. VDF EG slope time

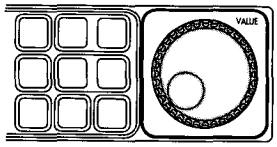



↑ 115. VDF EG break point
↓ 117. VDF EG sustain level

### *Specify the time over which the tone will reach the normal level*

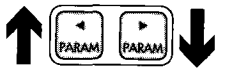



**000—127**



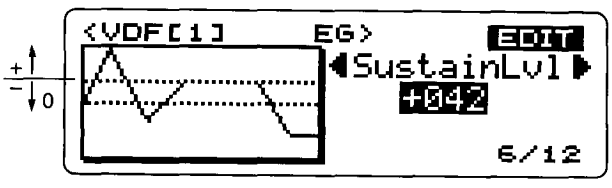

Specify the time over which the cutoff frequency will move to the normal level (the level of brightness which will be maintained as long as the key is pressed) after the [116] Slope Time has elapsed.

## 117. VDF EG sustain level

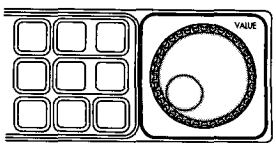



↑ 116. VDF EG slope time
↓ 118. VDF EG release time

### *Specify the brightness of the tone which will be maintained until the key is released*

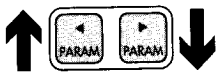



**000—127**



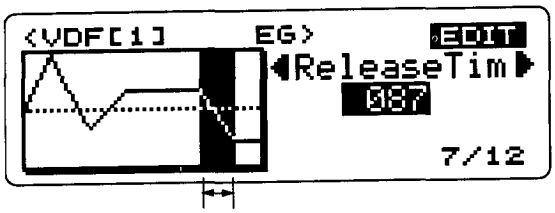

Specify the normal cutoff frequency for the VDF which will be maintained as long as the key is pressed.

## 118. VDF EG release time

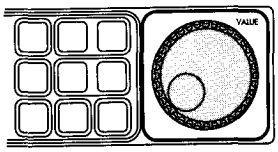



↑ 117. VDF EG sustain level
↓ 118. VDF EG release level

*Specify the time over which the tone will change after the key is released*

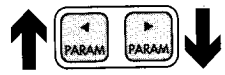



**000—127**



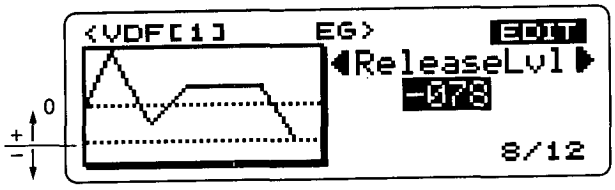

Specify the time over which the VDF cutoff frequency will move to the [119] Release Level after Note-off (i.e., when the key is released).

## 119. VDF EG release level

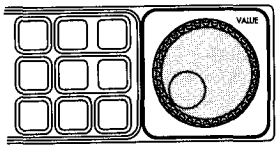



↑ 118. VDF EG release time
↓ 120. VDF EG intensity

*Specify the brightness level toward which the tone will change after the key is released*

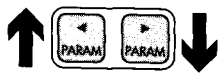



**–128—000—+127**



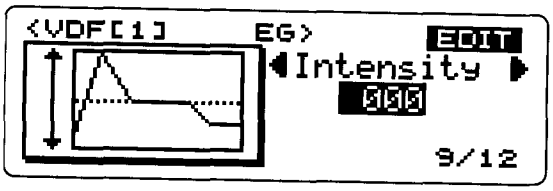

Specify the level at which the cutoff frequency will arrive after the [118] Release Time has elapsed.

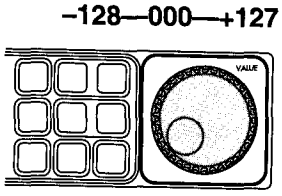
## 120. VDF EG intensity




↑ 119. VDF EG release level
↓ 121. VDF EG intensity velocity sensitivity

### Specify the depth of the VDF EG effect



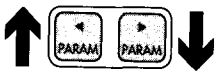




Specify the depth (strength) of the VDF EG effect.

With a setting of 0, the VDF EG will not cause the cutoff frequency to change. With negative (–) settings, the cutoff frequency will change in the direction opposite to the Attack Level and Decay Level etc. specified by the VDF EG.

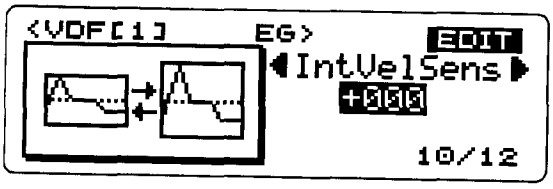
For example if [113] Attack Level is set higher than the normal cutoff frequency, positive (+) settings of this Intensity parameter will cause the tone to gradually become brighter from the beginning of the sound until it reaches the maximum level (Attack Level). However if Intensity is set to a negative (–) setting, the tone will gradually become darker from the beginning of the sound until it reaches the minimum level (the inverse of the Attack Level).

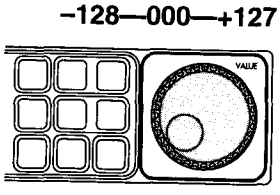
## 121. VDF EG intensity velocity sensitivity




↑ 120. VDF EG intensity
↓ 122. VDF EG time velocity sensitivity

### Specify how the VDF EG will be affected by keyboard dynamics

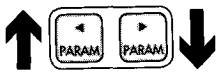



Specify how greatly MIDI velocity data will affect the depth (strength) of the VDF EG effect.

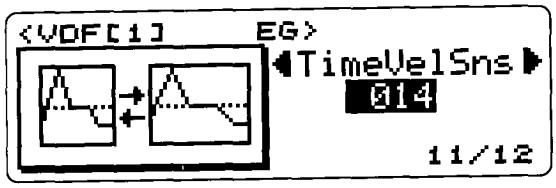
With positive (+) settings of this parameter, the VDF EG effect will be deeper for strongly played notes, and will be less for softly played notes. Conversely, negative (–) settings will cause the VDF EG effect to be less for strongly played notes, and deeper for softly played notes.

# 122. VDF EG time velocity sensitivity

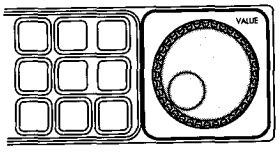



↑ 122. VDF EG intensity velocity sensitivity
↓ 123. VDF EG velocity sensitivity switch/polarity

## *Specify how greatly the VDF EG times will be affected by keyboard dynamics*




**–128—000—+127**



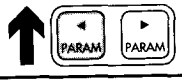

Specify how MIDI velocity data will affect the Attack Time (112), Decay Time (114), Slope Time (116), and Release Time (118) of the VDF EG.

With positive (+) settings of this parameter, the VDF EG times will be shortened for strongly played notes, causing the tone to change more rapidly. Softly played notes will have longer VDF EG times, causing the tone to change more slowly.

Conversely, negative (–) settings will cause the tone to change more slowly when notes are played strongly, and cause the tone to change more quickly as notes when played softly.

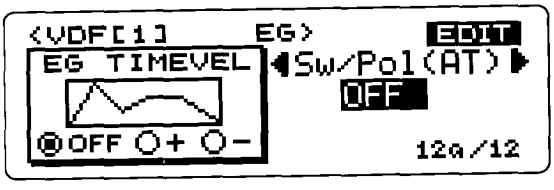
Positive/negative polarity is specified by the [123] VDF EG Time Velocity Sensitivity Switch/Polarity setting.

# 123. VDF EG velocity sensitivity switch/polarity

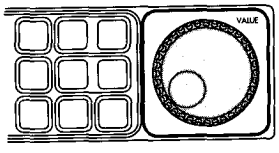



↑ 122. VDF EG time velocity sensitivity

## *Specify the direction in which keyboard dynamics will affect the VDF EG times*




**AT, DT, ST, RT, OFF, ON (+), ON (–)**




Specify the direction in which MIDI velocity data will affect the VDF EG parameters Attack Time (112), Decay Time (114), Slope Time (116) and Release Time (118).

For each value, a setting of "+" will cause the VDF EG time to be shortened for strongly played notes. A setting of "–" will cause the time to be lengthened for strongly played notes. With a setting of 0 there will be no effect.

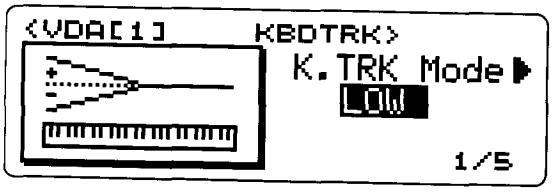
These parameters set the direction (±) in which the four Time parameters will be affected, but the amount of the effect is specified by the [122] VDF EG Time Velocity Sensitivity parameter.

VDA KBDTRK

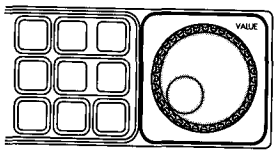
## 124. VDA keyboard tracking mode

↓ 125. VDA keyboard tracking key

### Specify how volume will be affected by keyboard location




**OFF, LOW, HIGH, ALL**




Specify how volume change dependent on keyboard location (VDA keyboard tracking) will occur.

When LOW is selected, keyboard tracking will occur in the area below the point specified by [125] Keyboard Tracking Key. When HIGH is selected, keyboard tracking will occur in the area above the specified key.

When ALL is selected, keyboard tracking will occur over the entire keyboard. When OFF is selected, keyboard tracking will not occur. In this case the settings of the [126] Keyboard Tracking Intensity, [127] Keyboard Tracking EG Time, and [128] Keyboard Tracking EG Time Switch/Polarity parameters will be ignored.

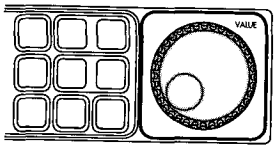
## 125. VDA keyboard tracking key

↑ 124. VDA keyboard tracking mode

↓ 126. VDA keyboard tracking intensity

### Specify the key around which volume will change

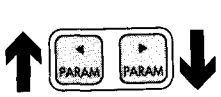

**C-1—G9**




When [124]Keyboard Tracking Mode is set either to LOW or HIGH, keyboard tracking will be applied beginning at the key that is specified here, and extending toward the lower or the upper range of the keyboard.

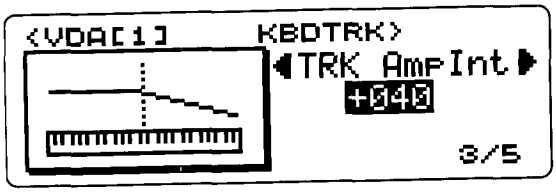
When the Tracking Mode is set to ALL, this setting specifies the key which will be the center of keyboard tracking. (Keyboard tracking will not apply to this key.)

# 126. VDA keyboard tracking intensity

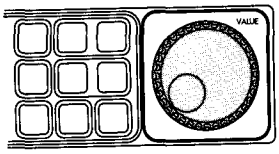



↑ 125. VDA keyboard tracking key
↓ 127. VDA keyboard tracking EG time

## Specify how greatly the volume EG will be affected by keyboard location



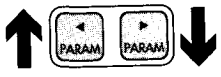

–128—000—+127




Specify the strength (depth) with which keyboard tracking will apply to the area specified by the [124]Keyboard Tracking Mode and [125]Keyboard Tracking Key parameters.

Positive (+) settings will cause the volume to increase as higher notes are played. Negative (–) settings will have the opposite effect.

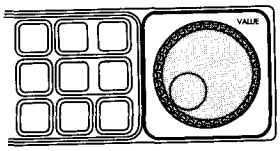
# 127. VDA keyboard tracking EG time




↑ 126. VDA keyboard tracking intensity
↓ 128. VDA keyboard tracking EG time switch/polarity

## Specify how greatly the volume EG times will be affected by keyboard location


000—127




Specify how greatly the VDA EG parameters Attack Time (134), Decay Time (136), Slope Time (138) and Release Time (140) will be affected by keyboard tracking.

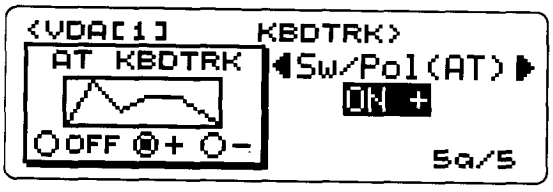
Increasingly positive (+) settings of this parameter will cause the VDA EG times to become shorter as higher notes are played in the area specified by the [124] Keyboard Tracking Mode and [125] Keyboard Tracking Key parameters, causing faster volume change. As lower notes are played, VDA EG times will become longer, causing slower volume change.

Conversely, increasingly negative (–) settings of this parameter will cause slower volume change as higher notes are played, and faster volume change as lower notes are played.

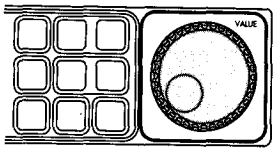
# 128. VDA keyboard tracking EG time switch/polarity


↑ 127. VDA keyboard tracking EG time

## *Specify the direction in which the volume EG will be affected by keyboard location*




**AT, DT, ST, RT**
**OFF, ON (+), ON (–)**




Specify the direction in which keyboard tracking will affect the VDA EG time parameters Attack Time (134), Decay Time (136), Slope Time (138) and Release Time (140).

For each time parameter, a setting of "+" will cause the time to be shortened as higher notes are played in the area above the [125] Keyboard Tracking Key. A setting of "–" will cause the time to be lengthened. With a setting of 0, there will be no effect.

These parameters set the direction (±) in which the four Time parameters will be affected, but the amount of the effect is specified by the [127] Keyboard Tracking EG Time parameter.

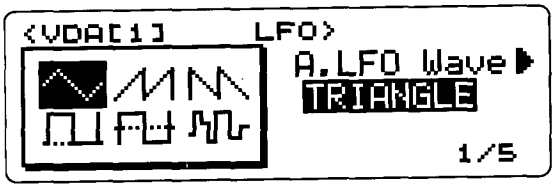
# VDA LFO

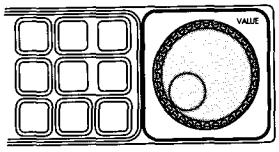
## 129. VDA LFO waveform

↓ 130.VDA LFO frequency

### Select the waveform for the tremolo effect

**TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RANDOM**



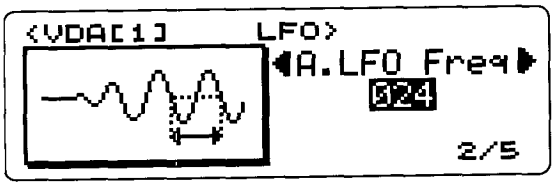

Select the waveform that will be used for VDA modulation (the tremolo effect produced by cyclically modulating the volume).

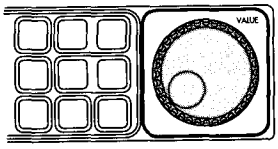
## 130. VDA LFO frequency

↑ 129. VDA LFO waveform
↓ 131. VDA LFO intensity

### Specify the frequency of the tremolo effect

**000—127**



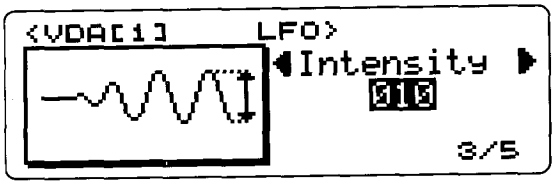

Specify the frequency of the VDA modulation waveform.

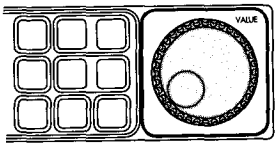
## 131. VDA LFO intensity

↑ 130. VDA LFO frequency
↓ 132. VDA LFO delay

### Specify the depth of the tremolo effect

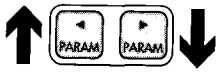
**000—127**



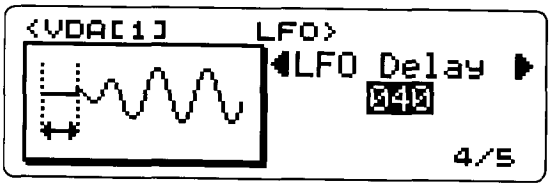

Specify the depth (strength) of the VDA modulation effect.

## 132. VDA LFO delay

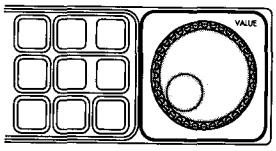



↑ 131. VDA LFO intensity
↓ 133. VDA LFO fade-in time

### *Specify the time delay until the tremolo effect will begin to apply*

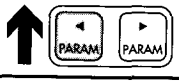



000—127



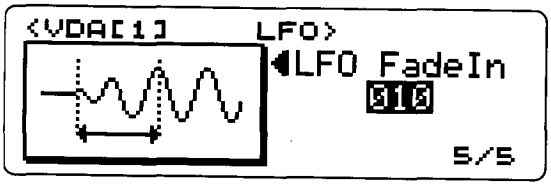

Specify the time from when the Note-on message is received (i.e., from when the keyboard is played) until VDA modulation begins to apply to the sound.

## 133. VDA LFO fade-in time

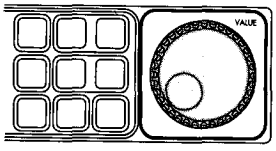



↑ 132. VDA LFO delay

### *Specify the time over which the maximum tremolo effect will be reached*




000—127



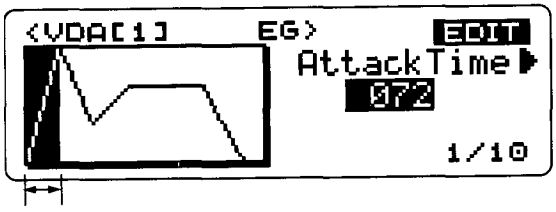

Specify the time from when VDA modulation begins to take effect until the full strength specified by [131] VDA LFO Intensity is reached.

# VDA EG

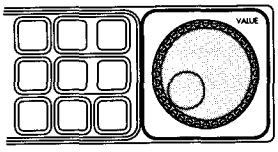
## 134. VDA EG attack time

↓ 135. VDA EG attack level

*Specify the time over which the volume will reach the attack level*




000—127

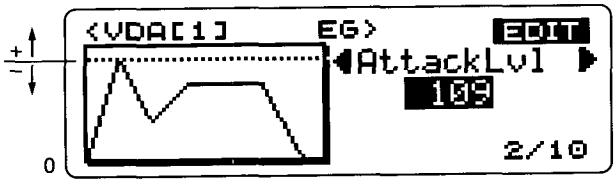


Specify the time over which the VDA volume will change from Note-on until it reaches the [135] Attack Level.

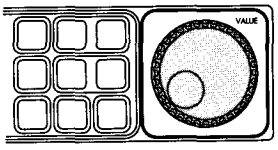
## 135. VDA EG attack level

↑ 134. VDA EG attack time
↓ 136. VDA EG decay time

*Specify the level which the volume will reach after the attack time*




000—127

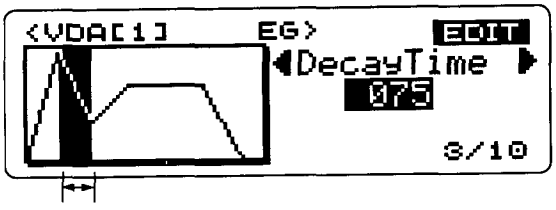


Specify the volume which will be reached when the [134] Attack Time has elapsed.

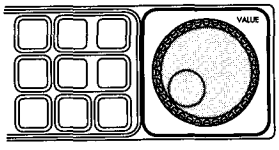
## 136. VDA EG decay time

↑ 135. VDA EG attack level
↓ 137. VDA EG break point

*Specify the time over which the volume will reach the break point*




000—127

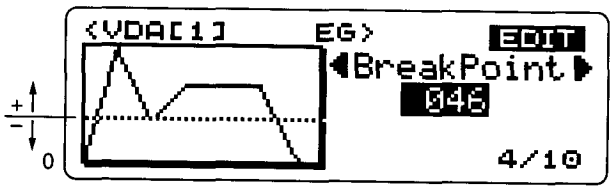


Specify the time over which the volume will change toward the [137] Break Point (the volume which will be maintained as long as the key remains pressed), after the [134] Attack Time has elapsed.

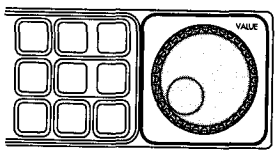
## 137. VDA EG break point


↑ 136. VDA EG decay time
↓ 138. VDA EG slope time

*Specify the level which the volume will reach after the decay time*

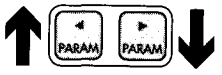



**000—127**



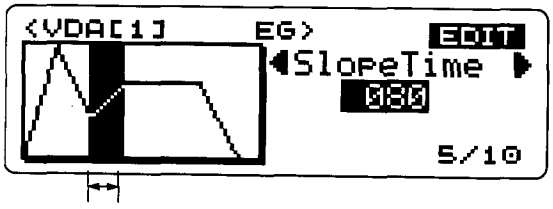

Specify the volume which will be reached when the [136] Decay Time has elapsed.

## 138. VDA EG slope time

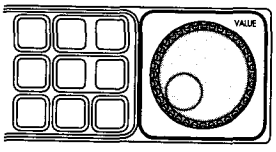



↑ 137. VDA EG break point
↓ 139. VDA EG sustain level

*Specify the time over which the volume will reach the normal level*

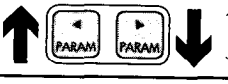



**000—127**



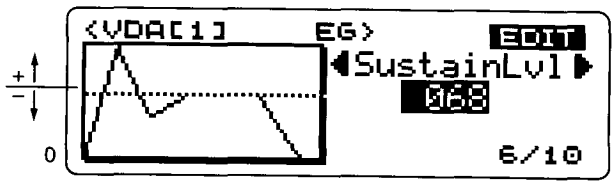

Specify the time over which the volume will change toward the normal level (the volume which will be maintained as long as the key remains pressed), after the [137] Slope Time has elapsed.

## 139. VDA EG sustain level

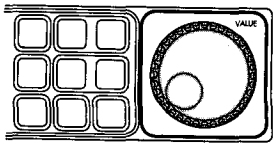



↑ 138. VDA EG slope time
↓ 140. VDA EG release time

*Specify the volume level which will be maintained until the key is released*

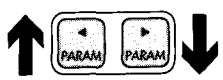



**001—127**



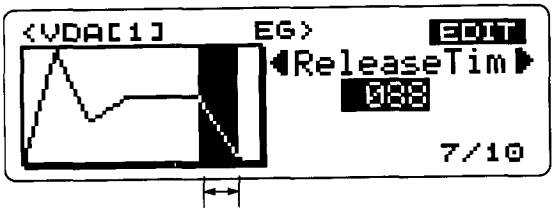

Specify the normal VDA volume level which will be maintained as long as the key remains pressed.

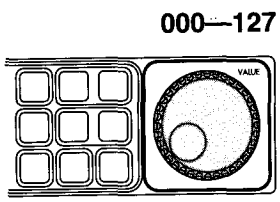
## 140. VDA EG release time




↑ 139. VDA EG sustain level
↓ 141. VDA EG amplitude velocity sensitivity

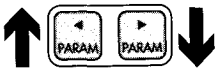
### *Specify the time over which the volume will decrease to silence after the key is released*



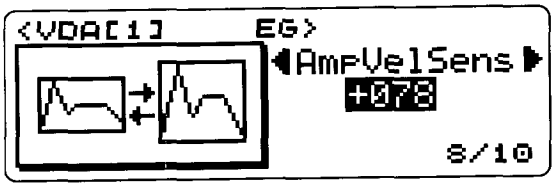

Specify the time over which the volume will decrease from Note-off (the moment the key is released) until the volume specified by the [**] Release Level is reached.

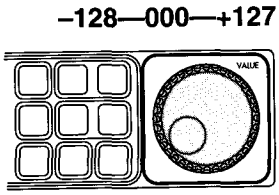
## 141. VDA EG amplitude velocity sensitivity




↑ 140. VDA EG release time
↓ 142. VDA EG time velocity sensitivity

### *Specify how greatly the VDA EG will be affected by keyboard dynamics*

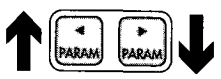



Specify how the strength (depth) of the VDA EG effect will be affected by MIDI velocity data.

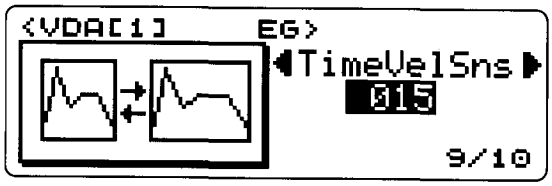
With increasingly positive (+) settings of this parameter, strongly played notes will cause the VDA EG to become deeper, and softly played notes will cause the VDA EG to become shallower. Conversely, negative (–) settings will cause the VDA EG to become shallower for strongly played notes, and deeper for softly played notes.

# 142. VDA EG time velocity sensitivity

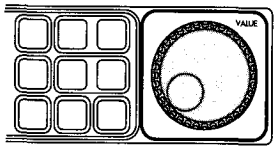



↑ 141. VDA EG amplitude velocity sensitivity
↓ 143. VDA EG velocity sensitivity switch/polarity

## *Specify how greatly the VDA EG times will be affected by keyboard dynamics*



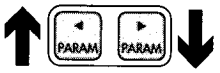

**000—127**




Specify how MIDI velocity data will affect the VDA EG times Attack Time (134), Decay Time (136), Slope Time (138) and Release Time (140).

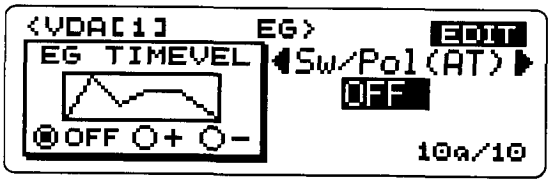
As this value is increased, strongly played notes will cause the VDA EG times to become shorter, producing more rapid change in volume. Softly played notes will cause the VDA EG times to become longer, producing slower change in volume.

# 143. VDA EG velocity sensitivity switch/polarity

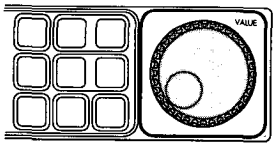



↑ 142. VDA EG time velocity sensitivity

## *Specify the direction in which the VDA EG will be affected by keyboard dynamics*




**AT, DT, ST, RT**
**OFF, ON (+), ON (–)**




Specify the direction in which MIDI velocity data will affect the VDA EG times Attack Time (134), Decay Time (136), Slope Time (138) and Release Time (140).

For each time parameter, a setting of "+" will cause the time to be shortened as notes are played more strongly. A setting of "–" will cause the time to be lengthened. With a setting of 0, there will be no effect.

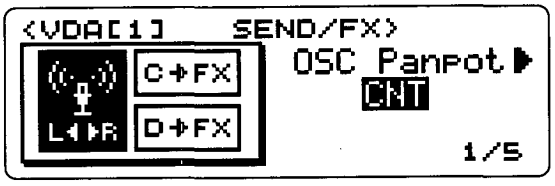
These parameters set the direction (+/–) in which the four Time parameters will be affected, but the amount of the effect is specified by the [142] VDA EG Time Velocity Sensitivity parameter.

VDA PAN/FX

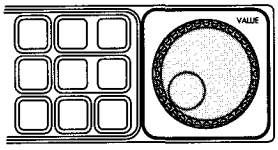
# 144. Oscillator panpot

↓ 145, 146. C send level/ D send level

## *Specify the stereo balance of the send level to the effects*




**RND, L63—CNT—R63. *****




When the program sounds are output from the NS5R in stereo, this parameter specifies the stereo location at which the sound will be heard: from center position (output with identical volume from both L and R outputs) all the way to one or the other side (when either the L or R output will be at minimum volume).

With a setting of CNT, the sound of the part will be heard from the center. As the value is increased, the sound will move toward the left or right edge. A setting of L63 is full left, and R63 is full right.

With a setting of RND, the sound of that part will be heard from a different location each time a MIDI Note-on message is received. This means that (for example) when a MIDI keyboard connected the NS5R is played, each note will be heard from a different location, just as though the sound were jumping here and there.

* *If [074] Oscillator Mode is set to DRUMS, this parameter will be displayed as ***, indicating that in this case the parameter setting is invalid.*

On the NS5R, parameters which determine the panpot setting exist separately in each of the three modes Program, Combination, and Multi. The actual pan location at which the sound is heard is determined by the sum of the settings in these three modes.

For example if for a certain part in Multi mode, [006] Panpot is set to R63 (far right) and the [144] Oscillator Panpot is set to L63 (far left) in the program selected for that part, the sound will actually be heard in the location determined as follows:

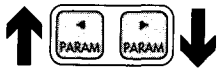
R63 (far right) + L63 (far left) = (same level for both) = (heard from the center)

Thus, the sound will be heard from the center.

If the sound selected for that part is a combination sound (rather than simply a program sound), the [055] Program Panpot setting will be added to this equation.

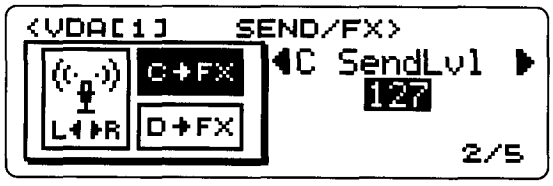
However if even one of these values is set to RND, the sound of that part will be heard from a random location for each note.

# 145, 146.C send level/D send level

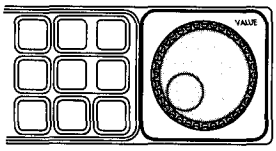



↑ 144. Oscillator panpot
↓ 147. Effect bank

## Specify the send level to the effect




**000—127**

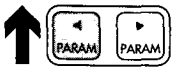



Specify the level of the sound that is sent to the two effect processors inside the NS5R. As this value is increased, the effects will apply more strongly to that part.

* The way in which the sound is sent to the two effect processors, and how the levels are adjusted by the Send Level parameters, differs widely according to the Effect Placement setting. →P.135 "Effect Placement"

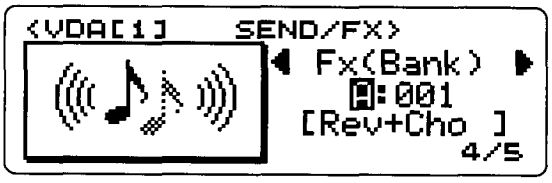
On the NS5R, parameters which determine send levels to the effect processors exist separately in each of the three modes Program, Combination, and Multi. The maximum value of the Multi mode parameters [007] Reverb Send Level and [008] Chorus Send Level will be the values of the Program Edit mode parameters [145] C Send Level and [146] D Send Level. In the case of a combination sound, the send levels will also be limited by the settings of the [058] C Send Level and [049] D Send Level parameters.

# 147. Effect bank

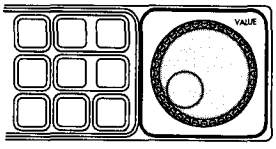



↑ 145, 146. C send level/
D send level
↓ 148. Effect number

## Select the bank of the desired effect




**A, B, C, D, E, F, G, H**

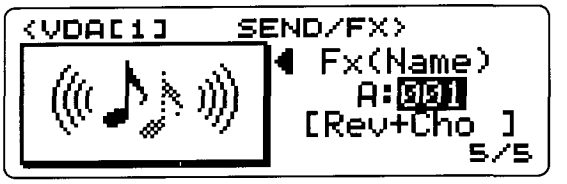



Specify the bank of the effect program that will be used for the currently selected program sound.

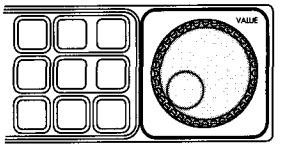
## 148. Effect number


↑ 147. Effect bank

### Select the number of the desired effect

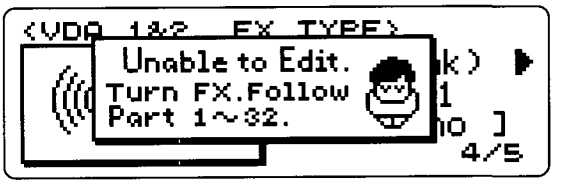



**001—128**

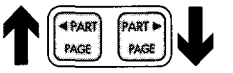



Specify the effect program number that will be used for the currently selected program sound.

* *In order to select an effect program, you must first specify the part by which it will be used. If the Global mode [047] Effect Follow Part is OFF, it will not be possible to select an effect program. In this case, the following display will appear.*

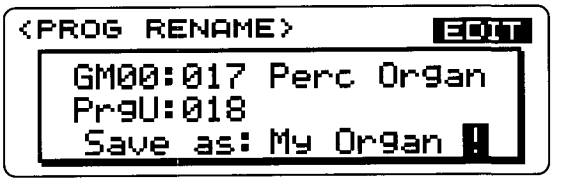


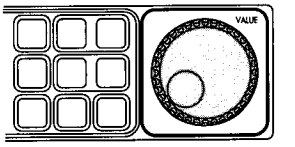

In order to select an effect, specify the part number in [047] Effect Follow Part.




## 149. Program rename

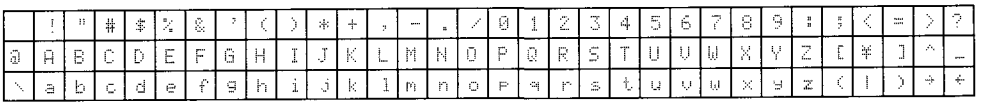
### Assign a name to the program and save it




After assigning a program name to the currently selected sound program (if desired), you can save it to the desired program number within the User program bank.

If you wish to modify the program name, use the [PARAM] buttons to move the cursor to the character of the program name that you wish to modify, and use the VALUE controller to select a character. By repeating this process, you can create any desired name. The following characters can be used.



# 7. Drum Kit Edit mode

A Drum Kit is a waveform in which various percussion instrument sounds are assigned to each note number of the keyboard. Since a sound program which uses a drum kit will arrange many different drum sounds across the keyboard, you can play different notes on your MIDI keyboard to "play the drums," just as if you were playing a set of acoustic drums and percussion instruments.

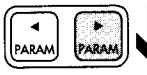
To enter this mode, make sure that a drum kit is selected for the oscillator, and from any editing page in Program Edit mode (except for the program rename and PAN/FX pages) press and hold the [EDIT/ENTER] button (for approximately 2 seconds). A drum kit will be selected for the oscillator if in Multi mode you select a program which uses a drum kit, or if in Program Edit mode you set [074] Oscillator Mode to DRUMS.

The following items can be set in this mode.

| Button | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 150 Drum sample select | Select the drum sound for each note | →P.128 |
| | 151 Drum sample level | Specify the volume of each drum sound | →P.128 |
| | 152 Transpose | Adjust the pitch of each drum sound in semitones | →P.128 |
| | 153 Fine tune | Make fine adjustments to the pitch of each drum sound | →P.129 |
| | 154 Panpot | Specify the stereo location of each drum sound | →P.129 |
| | 155 Assign mode | Specify how successive notes will be sounded | →P.130 |
| | 156 Exclusive group | Specify drum sounds which will not sound simultaneously | →P.130 |
| | 157 Reverb send level | Specify the depth of the reverb effect for each drum sound | →P.131 |
| | 158 Chorus send level | Specify the depth of the chorus effect for each drum sound | →P.131 |
| | 159 Cutoff | Adjust the brightness of each drum sound | →P.132 |
| | 160 Color | Adjust the tonal character of each drum sound | →P.132 |
| | 161 Attack time | Adjust the attack time for the volume and tone of each drum sound | →P.132 |
| | 162 Decay time | Adjust the decay time for the volume and tone of each drum sound | →P.133 |
| | 163 Receive note-on switch | Limit the sounding of each drum sound | →P.133 |
| | 164 Receive note-off switch | Limit the silencing of each drum sound | →P.133 |

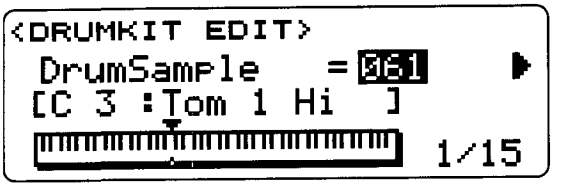
In Drum Kit Edit mode, a graphic of the keyboard will appear in the LCD. The small downward pointing triangle graphically indicates the note which is alpha-numerically indicated above the keyboard graphic, and tells you the note for which you are now making settings. Use the [PART/PAGE] buttons to select the note that you wish to edit. If a MIDI keyboard is connected to the NS5R, you can also select a note for editing simply by pressing the corresponding key.

## 150. Drum sample select

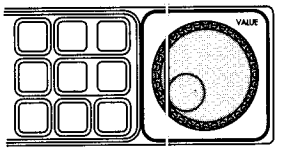



↓ 151. Drum sample level

### Select the drum sound for each note

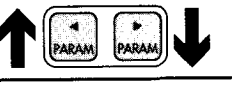



000—285



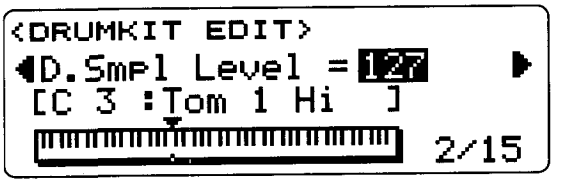

Specify the drum sound which will be assigned to the currently selected note. The drum sounds in the NS5R are numbered from 000 to 285, and are listed in the "Drum Sound" list at the end of this manual.

## 151. Drum sample level

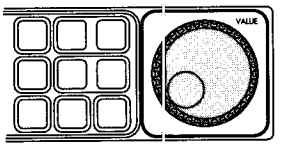



↑ 150. Drum sample select
↓ 152. Transpose

### Specify the volume of each drum sound

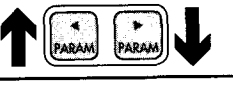



000—127



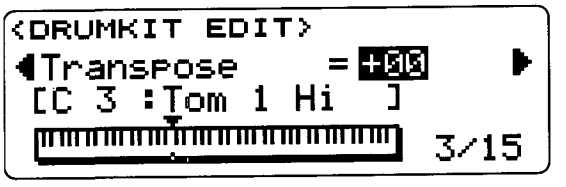

Specify the volume of the drum sound assigned to the currently selected note.

## 152. Transpose

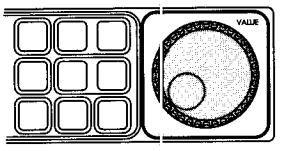



↑ 151. Drum sample level
↓ 153. Fine tune

### Adjust the pitch of each drum sound in semitones

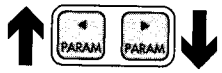



–64—+00—063



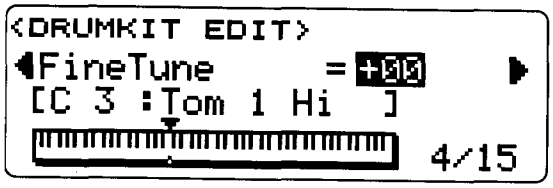

Adjust the pitch of the drum sound assigned to the currently selected note, in semitone steps.

## 153. Fine tune

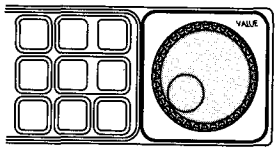



↑ 152. Transpose
↓ 154. Panpot

### *Make fine adjustments to the pitch of each drum sound*

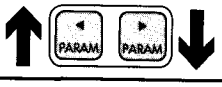



**–64—+00—063**



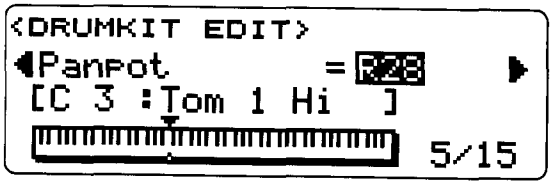

Make fine adjustments to the pitch of the drum sound assigned to the currently selected note.

## 154. Panpot

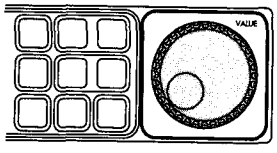



↑ 153. Fine tune
↓ 155. Assign mode

### *Specify the stereo location of each drum sound*




**RND, L63—CNT—R63**

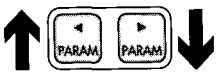



For the drum sound assigned to the currently selected note, specify the location when stereo output is used: center (equal volume from L and R outputs), or toward the left or right (the volume of either the L or R outputs will decrease).

With a setting of CNT, the sound of that Part will be heard from the center. As the setting is increased, the sound will be heard further away from the center and toward the left or right. With a setting of L63 the sound will be fully left, and with a setting of R63 it will be fully right.

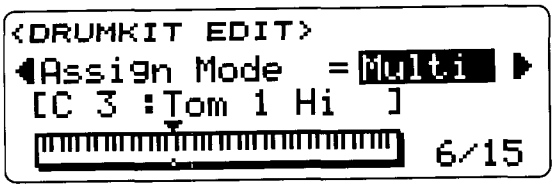
When RND is selected, that drum sound will be heard from a different location each time a MIDI note-on message is received.

## 155. Assign mode

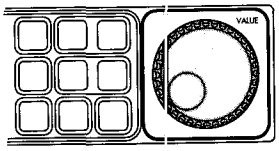



↑ 154. Panpot
↓ 156. Exclusive group

### Specify how successive notes will be sounded




**Single, Multi**




For the currently selected note, specify how the drum sound will be triggered when successive note-on messages are received.

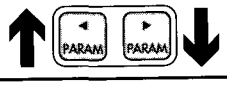
With a setting of Single, note-on messages received for this note while the drum sound is still sounding will cause the note to be forced off, and then re-triggered.

This means that only one instance of the drum sound for this note will play at a given time.

With a setting of Multi, note-on messages received for this note while the drum sound is still sounding will play the note again, without interrupting the already-sounding note.

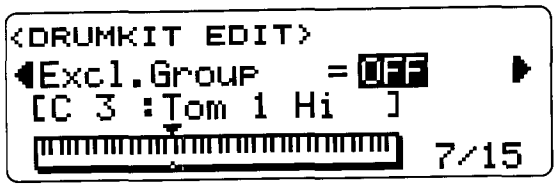
This means that if additional note-on messages are received, it will be possible for two, three, or more identical drum sounds of the same note number to be sounding at the same time, as determined by the length of the sound and by when note-off messages are received. Of course, the number of notes which can be sounding simultaneously will be limited by the maximum polyphony of the NS5R.

## 156. Exclusive group

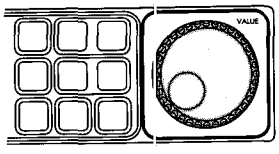



↑ 155. Assign mode
↓ 157. Reverb send level

### Specify drum sounds which will not sound simultaneously




**OFF, 001—127**

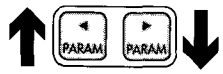



The currently selected note can be assigned an Exclusive Group number between 001 and 127. Drum sounds which are assigned to the same Exclusive Group number will not be able to sound simultaneously.

If a note-on message is received for a note which has the same Exclusive Group number as a different note that is already sounding, the already-sounding note will be forced off, and the newly requested note will sound.

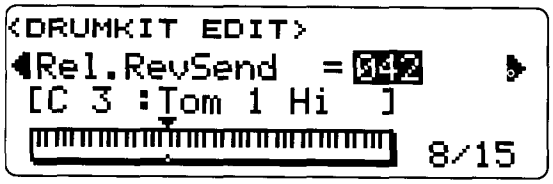
For example, you may wish to specify the same Exclusive Group number for drum sounds which would produce an unnatural effect if they were heard at the same time, such as open hi-hat and closed hi-hat sounds.

## 157. Reverb send level

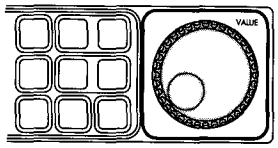



↑ 156. Exclusive group
↓ 158. Chorus send level

### Specify the depth of the reverb effect for each drum sound



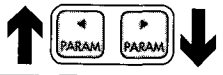

000—127




For the drum sound of each note, adjust the level of the sound that will be sent to the C input of the two built-in effect processors. As this value is increased, the effect will apply more strongly to that drum sound.

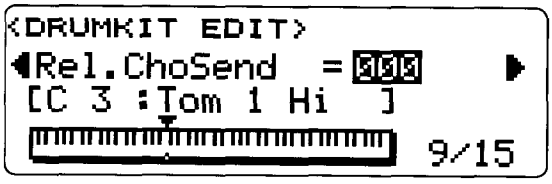
* *The way in which the sound is sent to the two effect processors, and the way in which the level will be adjusted by the Reverb Send Level parameter is greatly dependent on the Effect Placement setting.* *→P.135 "Effect Placement"*

## 158. Chorus send level

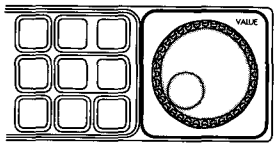



↑ 157. Reverb send level
↓ 159. Cutoff

### Specify the depth of the chorus effect for each drum sound



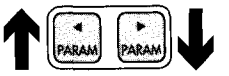

000—127




In the same way as for the C Send Level parameter, adjust the level of the sound that will be sent to the D input of the two built-in effect processors, for the drum sound of each note. As this value is increased, the effect will apply more strongly to that drum sound.

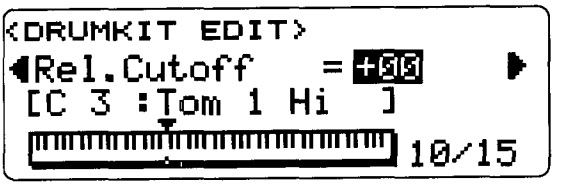
* *The way in which the sound is sent to the two effect processors, and the way in which the level will be adjusted by the Chorus Send Level parameter is greatly dependent on the Effect Placement setting.* *→P.135 "Effect Placement"*

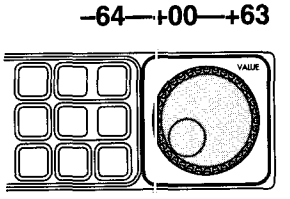
## 159. Cutoff




↑ 158. Chorus send level
↓ 160. Color

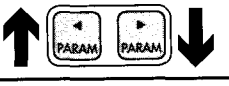
### Adjust the brightness of each drum sound



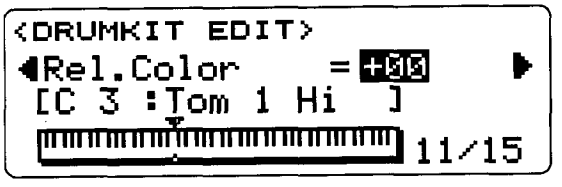

Adjust the cutoff frequency (brightness) of the drum sound for the currently selected note.

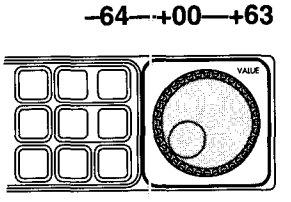
## 160. Color




↑ 159. Cutoff
↓ 161. Attack time

### Adjust the tonal character of each drum sound

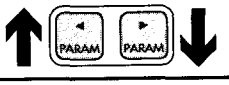



For the drum sound of the currently selected note, this setting adjusts the emphasis applied to the region around the cutoff frequency, adding a unique tonal character to the sound.

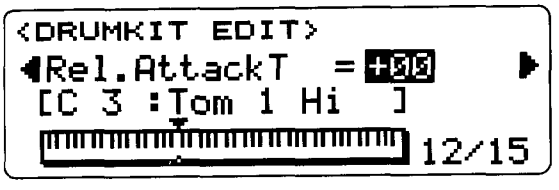
* *The effect that this will have will depend on the original sound. For some drum sounds, the effect may not be very noticeable.*

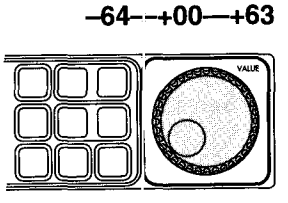
## 161. Attack time




↑ 160. Color
↓ 162. Decay time

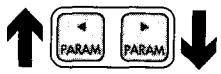
### Adjust the attack time for the volume and tone of each drum sound



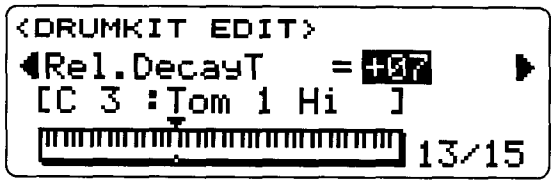

Adjust the attack time (the time over which the tone and volume will rise to their highest point) for the drum sound of the currently selected note.

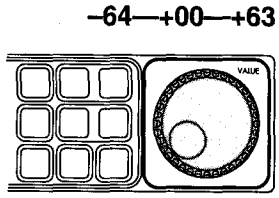
## 162. Decay time




↑ 161. Attack time
↓ 163. Receive note-on switch

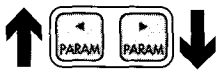
### *Adjust the decay time for the volume and tone of each drum sound*



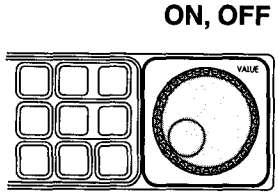

Adjust the decay time (the time over which the tone and volume will diminish) for the drum sound of the currently selected note.

## 163. Receive note-on switch



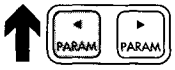

↑ 162. Decay time
↓ 164. Receive note-off switch

### *Limit the sounding of each drum sound*

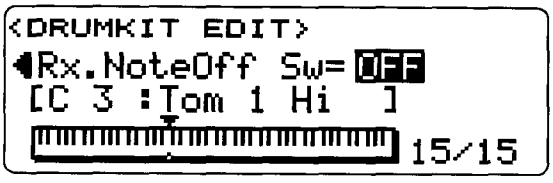

Specify whether or not the currently selected note will receive note-on messages. If this parameter is turned OFF, the drum sound of the note will not play.

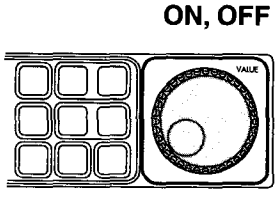
## 164. Receive note-off switch




↑ 163. Receive note-on switch

### *Limit the silencing of each drum sound*



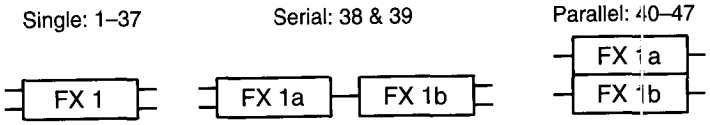




Specify whether or not the currently selected note will receive note-off messages. You can turn set parameter OFF for drum sounds which you do not want turned off before they complete their decay.

# 8. Effect Edit mode

The NS5R contains two digital effect processors. For each effect (EFFECT 1, 2) you can select one of 47 types of effect (referred to as Effect Type), such as reverb, delay, flanger, distortion, and exciter etc.

The 47 Effect Types are numbered: 1—37 are Single effects, 38—39 are series-connected effects, and 40—47 are parallel-connected effects. By using parallel-connected effects, a maximum of 4 independent effects can be used at once.




The effect section consists of four inputs (A, B, C, D), the two effects (EFFECT 1,2), two panpots (PAN 3, 4), and two outputs (L/MONO, R).

* *In a Combination, the effect settings of each Program 01—08 are ignored, and the effect settings of the Combination are used. Similarly in a Multi, the effect settings of the Program for each Part are ignored, and the effect settings specified for that Multi will be used.*

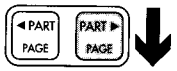
To enter this mode, make sure that either [009] Effect Bank or [010] Effect Program are selected in Multi mode, and press and hold the [EDIT/ENTER] button (for approximately 2 seconds).

The following items can be set in this mode.

| Key | Parameter | Edit | Refer to |
|---|---|---|---|
|  | 165 Effect placement | Specify how the two effects will be connected | →P.135 |
| | 166 Effect 1 type | Select the type for effect 1 | →P.137 |
| | 167 Effect 1 switch | Turn effect 1 on/off | →P.137 |
| | 168 Effect 2 type | Select the type for effect 2 | →P.137 |
| | 169 Effect 2 switch | Turn effect 2 on/off | →P.137 |
| | 170 Effect 1 balance | Adjust the depth of effect 1 | →P.138 |
| | 171 Dynamic modulation source 1 | Select the controller which will control dynamic modulation | →P.138 |
| | 172 Dynamic modulation intensity 1 | Adjust the depth of dynamic modulation | →P.139 |
| | 173 Effect 1 parameters | Parameters for effect 1 | →P.140 |
| | 174 Effect 2 balance | Adjust the depth of effect 2 | →P.138 |
| | 175 Dynamic modulation source 2 | Select the controller which will control dynamic modulation | →P.138 |
| | 176 Dynamic modulation intensity 2 | Adjust the depth of dynamic modulation | →P.139 |
| | 177 Effect 2 parameters | Parameters for effect 2 | →P.140 |
| | 178 Panpot/output level | Adjust the volume/panning of the output signal | →P.140 |
| | 179 Effect rename | Assign a name to the effect program | →P.141 |

When the power is turned on, [053] Initialize has been performed, or when a GM System On MIDI message is received, the Multi mode settings will be initialized for GM: effect 1 will be set to 01 Hall, effect 2 will be set to 19 Chorus 2, and Placement will be set to Parallel 3.

EDIT EFFECT



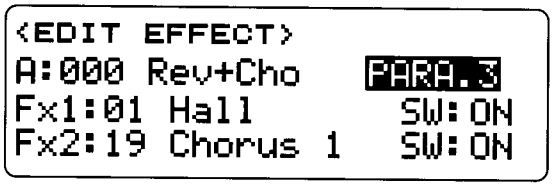

↓ FX.1 CONTROL

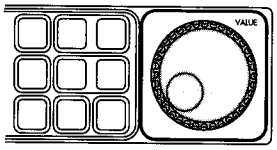
# 165. Effect placement


↓ 166. Effect 1 type

## Specify how the two effects will be connected

**SERIAL, PARA.1, PARA.2, PARA.3**

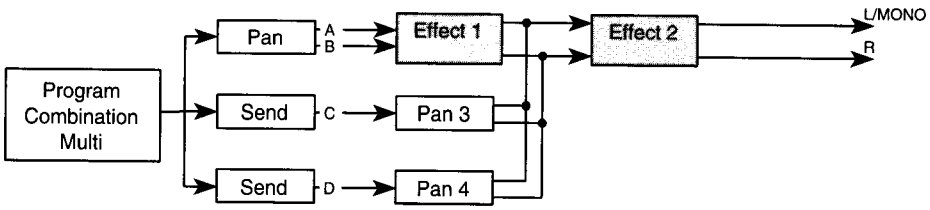



This setting determines how the sound from the four inputs (A, B, C, D) will pass through the effects.

The A and B inputs are controlled by Pan, and C and D by Send. These parameters are located in Program Edit mode [144][145][146], Combination Edit mode [055][058][059], and Multi mode [006][007][008].

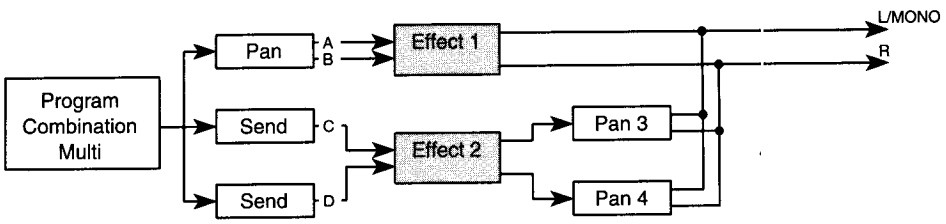
## SERIAL (Serial placement)




With Serial Placement, effects 1 and 2 will apply to the sound which is input to A and B, and the result will be output from L/MONO and R. The sound which is input to C and D will be mixed with the output of effect 1, and sent through effect 2.

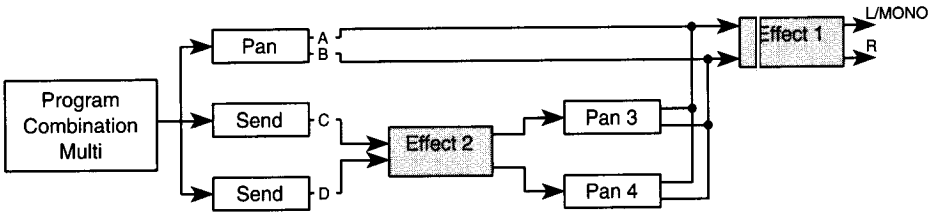
By using the C and D inputs, you can avoid applying effect 1 to specific sounds, or conversely to apply effect 1 only to specific sounds and then apply effect 2 to all of the sound.

## PARA.1 (Parallel 1 placement)



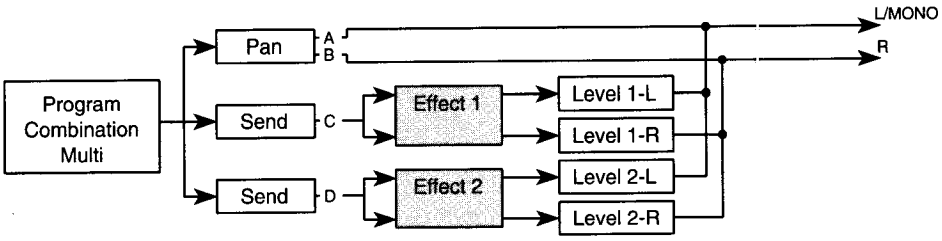

When Parallel 1 is selected, effect 1 will be applied to the sound which is input to A and B. Effect 2 will be applied to the sound which is input to C and D, and the output will be mixed with the output of effect 1. This placement allows effects 1 and 2 to be used independently.

## PARA.2 (Parallel 2 placement)



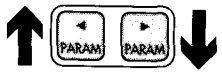

When Parallel 2 is selected, effect 1 will be applied to the sound which is input to A and B. Effect 2 will be applied to the sound which is input to C and D, and the output will be mixed into the input of effect 1.

## PARA.3 (Parallel 3 placement)



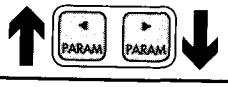

When Parallel 3 is selected, the sound which is input to A and B will be output without being processed. The sound which is input to C and D will be sent respectively to effects 1 and 2, and then each is adjusted separately and mixed into the L/MONO and R outputs. GM will normally use this placement.

## 166. Effect 1 type



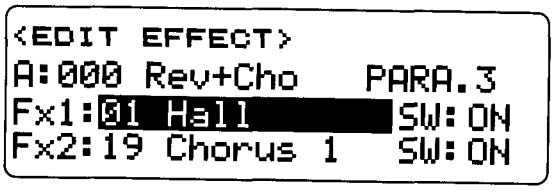

↑ 165. Effect placement
↓ 167. Effect 1 switch

## 168. Effect 2 type

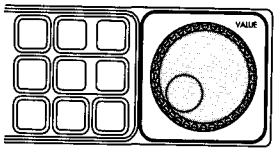



↑ 167. Effect 1 switch
↓ 169. Effect 2 switch

### *Select the type for effect 1 and effect 2.*



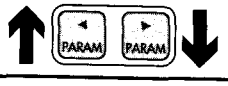

**(P.148)**




Select the effects which will be used by effect 1 and effect 2. When you select the effect type, the effect parameters [173][174] will be set to their default values.

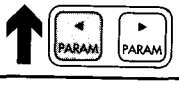
> *If effect type 24 (Symphonic Ensemble) is selected for either [166] or [167], certain other effects will become unavailable for selection for the other effect (refer to p.146 "Symphonic Ensemble").*

## 167. Effect 1 switch



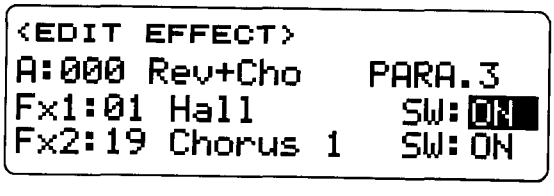

↑ 166. Effect 1 type
↓ 168. Effect 2 type

## 169. Effect 2 switch

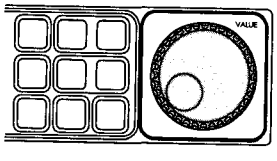



↑ 168. Effect 2 type

### *Turn effect 1 and effect 2 on/off*



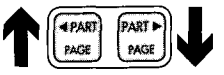

**ON, OFF**




Turn effect 1 and effect 2 on/off. With a setting of OFF, that effect will not be applied.

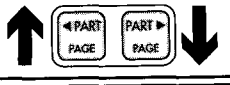
> *For the following effects, the equalizer settings (EQ High, EQ Low) will remain in effect even if the Effect Switch is turned off.*
> *13: Stereo Delay, 14: Cross Delay, 19: Chorus 1, 20: Chorus 2, 28: Exciter, 35: Auto Pan, 36: Tremolo*

## FX.1 CONTROL



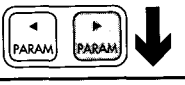

↑ FX1 PARAM
↓ FX2 PARAM

## FX.2 CONTROL



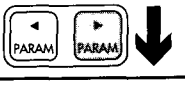

↑ EDIT EFFECT
↓ FX1 PARAM

## 170. Effect 1 balance



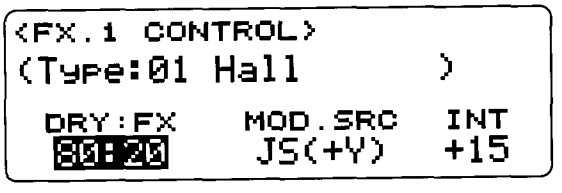

↓ 171. Dynamic modulation source 1

## 174. Effect 2 balance

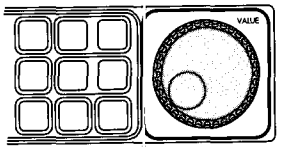



↓ 175. Dynamic modulation source 2

### Adjust the depth of effect 1 and effect 2

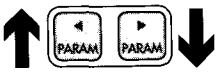



**DRY, 99:01—01:99, EFF**



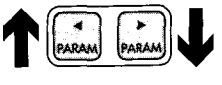

For each effect 1 and 2, adjust the level balance between the unprocessed original sound the processed effect sound. With a setting of DRY only the unprocessed sound will be heard. With a setting of FX only the processed effect sound will be heard.

## 171. Dynamic modulation source 1




↑ 170. Effect 1 balance
↓ 172. Dynamic modulation intensity 1

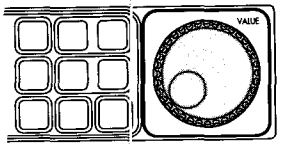
## 175. Dynamic modulation source 2




↑ 174. Effect 2 balance
↓ 176. Dynamic modulation intensity 2

### Select the controller which will control dynamic modulation

**NONE, JS (+Y), JS (–Y), AFTR.T, PEDAL1, PEDAL2, VDA-EG**

Dynamic Modulation is a function which allows specific effect parameters such as Effect Level Balance or Modulation Speed etc. to be adjusted while you play. This lets you add complex and subtle variation to your performance.

The modulation source can be selected from six types of controllers such as joystick or foot pedal. For each effect type, one parameter can be controlled using dynamic modulation, and you can specify the Modulation Source and Modulation Intensity separately for effect 1 and effect 2.

JS (+Y) : Modulation will be controlled by the MIDI messages [Bn, 01, xx] (control change #1) that are transmitted when the joystick on a MIDI keyboard is moved in the +Y direction.

JS (–Y) :Modulation will be controlled by the MIDI messages [Bn, 02, xx] (control change #2) that are transmitted when the joystick on a MIDI keyboard etc. is moved in the –Y direction.

AFTT :Aftertouch [Dn, xx]

PEDAL1 :Modulation will be controlled by the MIDI messages [Bn, 0C, xx] (control change #12) that are transmitted when the assignable pedal of a MIDI keyboard etc. is operated.

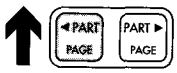
PEDAL2 :Modulation will be controlled by the MIDI messages [Bn, 0D, xx] (control change #13).

VDA EG :This is the sum of the VDA EG levels for all 64 voices. Modulation will apply more strongly when chords are played simultaneously.

(n indicates the MIDI channel)



## *172. Dynamic modulation intensity 1*

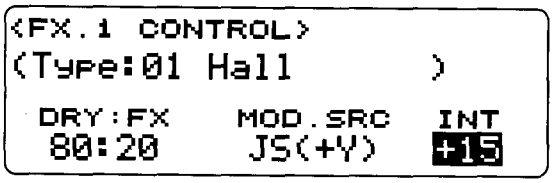


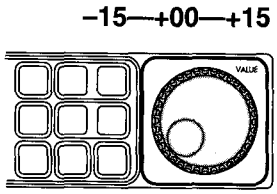

↑ 171. Dynamic modulation source 1

## *176. Dynamic modulation intensity 2*


↑ 175. Dynamic modulation source 2

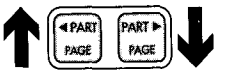
### *Adjust the depth of dynamic modulation*



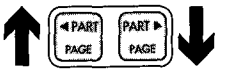

For effect 1 and effect 2, specify the depth of the dynamic modulation effect. The range of settings is from –15 to +15. Positive (+) settings will allow dynamic modulation to increase the value of the parameter being controlled. Negative (–) settings will have the opposite effect.

## EX. PARAM



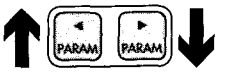

↑ FX.1 CONTROL
↓ FX.2 CONTROL

## FX. PARAM

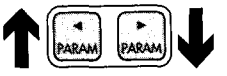



↑ FX.2 CONTROL
↓ PAN/OUT

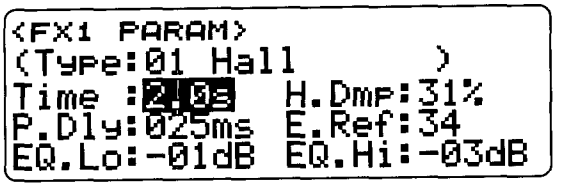
## 173. Effect 1 parameters



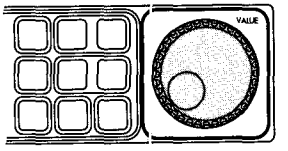

## 177. Effect 2 parameters




### Parameters for effect 1 and effect 2

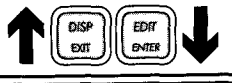



**(P141, following)**



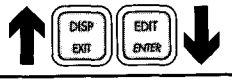

Effect parameters are explained on p.141 and following.

## PAN/OUT



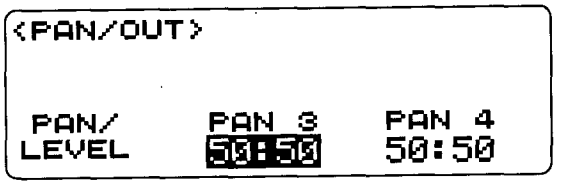

↑ FX.2 PARAM
↓ EFFECT RENAME

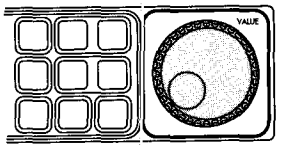
## 178. Panpot/output level




### Adjust the volume/panning of the output signal

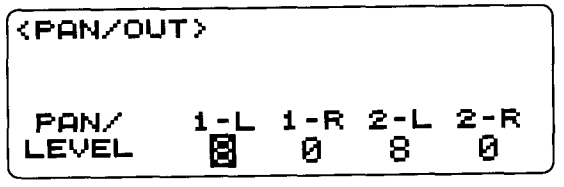
**OFF, L, 99:01—01:99, R**

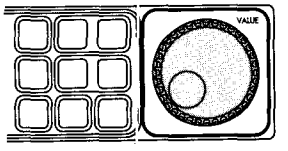



When the Placement setting is Serial, Parallel 1 or Parallel 2, the above display will appear. Here you can adjust the L/R output balance to Pan 3 and Pan 4.

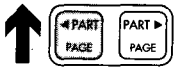
**0—9**



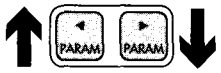

When the Placement setting is Parallel 3, the above display will appear. Here you can adjust the individual output levels (rather than the L/R output balance).

EFFECT RENAME



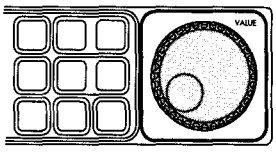

↑ PAN/OUT

## 179. Effect rename




### *Assign a name to the effect program*


000—127




If you wish, you can assign a new name to the effect program, and save it in one of the program numbers of the user program bank (bank H).

To modify the program name, use the [PARAM] buttons to move the cursor to the character of the name that you wish to modify, and use the VALUE controller to select the desired character. By repeating this process you can specify any name you wish. The following characters can be used.

# Effect types and parameters

The parameters will depend on the effect type that you select. For each effect 1 and 2, you can select any effect from 00 (No Effect) to 47 (Delay/Rotary Speaker).

## *NO EFFECT*

### 00: No Effect

For some of the effects, the equalizer settings (EQ High, EQ Low) will still be in effect even if the [167] [169] Effect Switch is OFF (refer to p.137). If you wish to cut the effects out completely, select 0 (No Effect).

## *REVERB*

These effects simulate the acoustics of a hall etc., adding a reverberant ambiance to the sound.

### 01: Hall

This simulates the reverberation and natural acoustics of a medium-sized hall.

### 02: Ensemble Hall

This reverb is suitable for string or brass ensembles etc., and simulates the natural reverberation of an ensemble hall.

### 03: Concert Hall

This simulates the reverberation of a large hall, with the early reflections emphasized.

### 04: Room

This simulates the acoustics of a small room.

### 05: Large Room

This simulates the acoustics of a large room, and emphasizes the density of the reverb. With a Reverb Time setting of approximately 0.5 seconds, an effect similar to gated reverb will be produced.

### 06: Live Stage

This simulates the reverberation and acoustic characteristic of a live performance in a large room.

### 07: Wet Plate

This produces a deep plate reverb effect.

### 08: Dry Plate

This produces a shallow plate reverb effect.

### 09: Spring Reverb

This simulates the effect of a spring reverb device.

| Parameter | Range | Description |
|---|---|---|
| Reverb Time (Time) | 0.2 ~ 9.9 sec<br>0.2 ~ 4.9 sec<br>00 ~99 sec | Time over which the reverberation will decay<br>(HALL type)<br>(ROOM type)<br>(PLATE/SPRING type) |
| High Damp (H. Dmp) | 0 ~ 99% | Attenuation of the high frequency range<br>Higher settings will cause the high range to decay faster, making the tone darker. |
| Pre delay (P.Dly) | 0 ~200 ms | Time interval from the direct sound to the early reflections |
| Early Reflection Level (E.R) | 0 ~ 99<br>1 ~10 | Level of the early reflections<br>(HALL/ROOM type)<br>(PLATE/SPRING type) |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 01—09, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## EARLY REFLECTION

Out of all the components of reverberant sound, the Early Reflection effects isolate the early reflections which are such an important factor in determining the character of an acoustical space. A variety of effects can be created by adjusting the Early Reflection Time, such as thickening the sound or creating echo-like reflections.

### 10: Early Reflection 1

This effect isolates the early reflections which are such an important factor in determining the character of an acoustical space. Since the low frequency range is emphasized, this is especially suitable for percussion such as drums.

### 11: Early Reflection 2

Compared to Early Reflection 1, the level of the early reflections will change in a different way over time. This effect may be more suitable for other types of sound.

### 12: Early Reflection 3

The envelope of the early reflections is reversed in this effect, compared with Early Reflection 1 and Early Reflection 2. When applied to a sound that has a strong attack, such as a cymbal, a "reverse-tape" effect will be obtained.

| Parameter | Range | Description |
|---|---|---|
| Early Reflection Time (Time) | 100 ~ 800 ms | Early reflection time (10 ms steps) |
| Pre Delay (P. Dly) | 0 ~ 200 ms | Time interval from the direct sound until the early reflections |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 10—12, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## STEREO DELAY

These effects allow you to specify the L/R channel delay times independently, to produce a delay pattern in stereo. The High Damp parameter lets you create a natural-sounding decay for the repeating delay sounds.

### 13: Stereo Delay

This is a stereo delay with feedback, that allows you to specify independent delay times for the left and right channels.

### 14: Cross Delay

This is a stereo delay that allows you to specify independent delay times for the left and right channels. Since the delayed sound can be fed back to the input of the opposite channel, the delay repeats will alternate between left and right.

| Parameter | Range | Description |
|---|---|---|
| Delay Time Left (D. Time L) | 0 ~ 500 ms | Delay time for the left channel (input A or C) |
| Delay Time Right (R) | 0 ~ 500 ms | Delay time for the right channel (input B or D) |
| Feedback (FB) | –99 ~ +99% | The amount of delayed sound that will be fed back into the effect<br>Negative settings will invert the phase |
| High Damp (H. Dmp) | 0 ~ 99% | Attenuation of the high frequency range<br>Higher settings will cause the high range to decay faster, making the tone darker. |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 13 and 14, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance. Also, the equalizer settings (EQ Low, EQ High) will remain effective even if the Effect Switch [167][169] is OFF. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

## *DUAL MONO DELAY*

### 15: Dual Mono Delay

This effect provides two mono delays, each with independent delay time, feedback, and high damp settings.

| Parameter | Range | Description |
|---|---|---|
| Delay Time Left (D. Time L) | 0 ~ 500 ms | Left channel delay time |
| High Damp Left (H. Damp L) | 0 ~ 99% | Left channel attenuation of the high frequency range<br>Higher settings will cause the high range to decay faster, making the tone darker. |
| Feedback Left (F. Back L) | –99 ~ +99% | The amount of delayed sound that will be fed back into the left channel<br>Negative settings will invert the phase |
| Delay Time Right (D. Time R) | 0 ~ 500 ms | Right channel delay time |
| High Damp Right (H. Dmp R) | 0 ~ 99% | Right channel attenuation of the high frequency range<br>Higher settings will cause the high range to decay faster, making the tone darker. |
| Feedback Right (F. Back R) | –99 ~ +99% | The amount of delayed sound that will be fed back into the right channel<br>Negative settings will invert the phase |

For effect 15, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## *MULTI-TAP DELAY*

In these effects, each effect input is equalized, and sent to two independent delays. The output of one delay will be fed back to the input.

### 16: Multi-Tap Delay 1

This is a 2-channel multi-repeat delay.

### 17: Multi-Tap Delay 2

This is a 2-channel multi-repeat delay with cross panning.

### 18: Multi-Tap Delay 3

This is a 2-channel multi-repeat delay with alternating feedback.

| Parameter | Range | Description |
|---|---|---|
| Delay Time 1 (D. Time 1) | 0 ~ 500 ms | Delay time for delay 1 |
| Delay Time 2 (D. Time 2) | 0 ~ 500 ms | Delay time for delay 2 |
| Feedback (FB) | –99 ~ +99% | The amount of delayed sound that will be fed back into the effect<br>Negative settings will invert the phase |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 16—18, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## CHORUS

These are stereo chorus effects with two chorus blocks. They can be applied to any type of sound, such as piano, strings or brass etc. to add a natural spaciousness and depth.

### 19: Chorus 1

The left channel modulation is in opposite phase to the right channel modulation. This produce a spacious stereo chorus.

### 20: Chorus 2

Same-phase modulation is applied to the left and right channels.

| Parameter | Range | Description |
|---|---|---|
| Delay Time (Time) | 0 ~ 200 ms | Delay time |
| Mod Waveform (Wave) | Sine (SIN)<br>Triangle (TRI) | Select the modulation waveform |
| Mod Depth (Depth) | 0 ~ 99 | Modulation depth |
| Mod Speed (Speed) | 0.03 ~ 30 Hz | Modulation speed |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 19 and 20, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance. Also, the equalizer settings (EQ Low, EQ High) will remain effective even if the Effect Switch [167][169] is OFF. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

### 21: Quadrature Chorus

This is a stereo chorus in which the channels are modulated 90 degrees out of phase.

### 22: Crossover Chorus

This is a stereo chorus in which the two channels are modulated 90 degrees out of phase, and the chorus portion of each channel is mixed into the output of the opposite channel.

| Parameter | Range | Description |
|---|---|---|
| Delay Time Left (Time:L) | 0 ~ 250 ms | Left channel delay time |
| Delay Time Right (R) | 0 ~ 250 ms | Right channel delay time |
| Mod Depth (Depth) | 0 ~ 99 | Modulation depth |
| Mod Speed (Speed) | 1 ~ 99 | Modulation speed |
| Mod Shape (Shape) | T+10 ~ T–10<br>S–10 ~ S+10 | Select the modulation waveform. T: triangle wave, S: sine wave<br>+10 to –10 adjusts the character of the waveform. |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 21 and 22, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

### 23: Harmonic Chorus

Harmonic Chorus splits the signal into two frequency ranges: high frequency and low frequency. Quadrature Chorus is applied to the high frequency range, and the low frequency range is output as is. This is especially suitable for low-range instruments such as bass.

| Parameter | Range | Description |
|---|---|---|
| Delay Time 1 (DT1) | 0 ~ 500 ms | Left channel delay time |
| Delay Time 2 (DT2) | 0 ~ 500 ms | Right channel delay time |
| Mod Depth (Depth) | 0 ~99 | Modulation depth |
| Mod Speed (Speed) | 1 ~ 99 | Modulation speed |
| Frequency Split Point (Split Point) | 0 ~18 | Frequency at which the input signal will be split into high and low ranges. |

For effect **23**, the dynamic modulation selected by [171] and [175] will control the Mod Speed.

## *SYMPHONIC ENSEMBLE*

### 24: Symphonic Ensemble

This is a multi-layered chorus effect, and is especially suitable for rich and deep sound such as strings.

| Parameter | Range | Description |
|---|---|---|
| Mod Depth | 0 ~ 99 | Modulation depth |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effect 24, the dynamic modulation selected by [171] and [175] will control the Dry:Effect Balance.

*This effect cannot be used at the same time as the following effects.*

*19 ~23 : Chorus*
*24 : Symphonic Ensemble*
*25 ~27 : Flanger*
*32 ~33 : Phaser*
*34 : Rotary Speaker*
*35 ~36 : Tremolo*
*38 ~39 : Chorus-/Flanger-Delay*
*42 : Delay/Chorus*
*43 : Delay/Flanger*
*46 : Delay/Phaser*
*47: Delay/Rotary Speaker*

## *FLANGER*

This effect adds feedback to a chorus effect. When used on sounds such as cymbals that contain a rich variety of overtones, a powerful effect that adds a sense of pitch as well as modulation will be applied.

### 25: Flanger 1
Same-phase modulation will be applied to both channels.

### 26: Flanger 2
Opposite-phase modulation will be applied to the right and left channels. This will produce a spacious stereo flanging effect.

### 27: Crossover Flanger
Two flangers with opposite phase will apply feedback to each other.

| Parameter | Range | Description |
|---|---|---|
| Delay Time (Time) | 0 ~ 200 ms | Delay time |
| Resonance (Reso) | –99 ~ +99 | Amount of the output signal that will be fed back to the input |
| Mod Depth (Depth) | 0 ~ 99 | Modulation depth |
| Mod Speed (Speed) | 1 ~ 99 | Modulation speed |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 25—27, the dynamic modulation selected by [171] and [175] will control the Mod Speed.

## *EXCITER*

### 28: Exciter
This effect adds sparkle to the sound itself, sharpening its definition.

| Parameter | Range | Description |
|---|---|---|
| Blend (Blend) | –99 ~ +99 | Depth of the exciter effect |
| Emphatic Point (Emphatic Point) | 1~ 10 | Center frequency at which the exciter effect will be applied |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effect 28, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance. Also, the equalizer settings (EQ Low, EQ High) will remain effective even if the Effect Switch [167][169] is OFF. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

## *ENHANCER*

### 29: Enhancer
This is a 2-channel enhancer. It includes a delay which makes the sound more spacious. An enhancer improves the clarity of the sound, sharpening the definition, and gives the sound a presence that brings it forward in the mix.

| Parameter | Range | Description |
|---|---|---|
| Harmonic Density (Density) | 1 ~ 99 | Depth of the enhancer effect |
| Hot Spot (H. Spot) | 1 ~ 20 | Center frequency at which the enhancer effect will be applied |
| Stereo Width (S. Width) | 0 ~ 99 | Width of the stereo image expanded by the delay |
| Delay Time (D. Time) | 1 ~ 99 | Delay time |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effect 29, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## DISTORTION

### 30: Distortion

This effect covers a range from light distortion to intense distortion, and also provides a wah effect. It is effective on solos. The Hot Spot and Resonance parameters adjust the wah effect. The Hot Spot parameter can be controlled in realtime using dynamic modulation.

### 31: Overdrive

This effect applies a smooth overdrive. As for the distortion effect described above, dynamic modulation can be used to control the Hot Spot of the wah filter.

| Parameter | Range | Description |
|---|---|---|
| Drive (Drive) | 1 ~ 111 | Amount of distortion/overdrive |
| Resonance (Reso) | 0 ~ 99 | Gain of the wah resonance filter |
| Hot Spot (H. Spot) | 0 ~ 99 | Center frequency of the wah filter |
| Out Level (Level) | 0 ~ 99 | Output level of the distorted sound |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 30 and 31, the dynamic modulation selected by [171] and [175] will control the Hot Spot.

## PHASER

These are 2-channel stereo phase shifters.

While chorus or flanger effects modulate the delay time to produce a modulation effect, the phaser effect modulates the phase of the input signal, producing a effect that is different than either chorus or flanger. This is especially suitable for electric piano or guitar sounds.

The maximum effect will be achieved with a [170][174] Dry:Effect Balance of 50:50.

### 32: Stereo Phaser 1

Since the right and left channels are modulated in inverse phase, a spacious phaser effect is produced.

### 33: Stereo Phaser 2

Same-phase modulation is applied to the two phaser blocks.

| Parameter | Range | Description |
|---|---|---|
| Manual (Manual) | 0 ~ 99 | Center frequency at which the phase shift effect will be applied |
| Mod Depth (Depth) | 0 ~ 99 | Depth of the phase shift modulation effect |
| Mod Speed (Speed) | 0.03 ~ 30 Hz | Modulation speed |
| Feedback (F. Back) | –99 ~ +99 | Amount of signal that will be fed back to the effect<br>Negative settings will invert the phase |
| Mod Waveform (Wave) | Sine (SIN)<br>Triangle (TRI) | Modulation waveform |

For effects 32 and 33, the dynamic modulation selected by [171] and [175] will control the Mod Speed.

## ROTARY SPEAKER

This simulates the rotary speaker effect that is often applied to organ sounds.

### 34: Rotary Speaker

Independent LFOs are used to simulate the rotor section and horn section of the rotary speaker. Fast and Slow speeds can be switched by the dynamic modulation source selected in [171][174]. The rotational speed will change at the rate specified by Acceleration, regardless of the speed at which the controller is moved. Also, the speed change will not be affected by the dynamic modulation Intensity setting of [172][176].

| Parameter | Range | Description |
|---|---|---|
| Vibrato Depth (Vib, Depth) | 0 ~ 15 | Depth of the effect |
| Acceleration (Accel) | 1 ~ 15 | Time required for the change in speed to occur |
| Slow Speed (Slow Speed) | 1 ~ 99 | Speed during slow rotation |
| Fast Speed (Fast Speed) | 1 ~ 99 | Speed during fast rotation |

For effect 34, the dynamic modulation selected by [171] and [175] will switch between the Slow Speed and Fast Speed.

## TREMOLO

These effects cyclically modulate the volume.

### 35: Auto Pan

This effect combines two tremolo blocks into stereo type program. Opposite-phase modulation is applied to the two tremolo blocks, producing an effect of the sound being panned in stereo.

### 36: Tremolo

In contrast with the Auto Pan effect described above, this applies same-phase modulation to the two tremolo blocks.

| Parameter | Range | Description |
|---|---|---|
| Mod Waveform (Wave) | Sine (SIN)<br>Triangle (TRI) | Select the waveform |
| Mod Shape (Shape) | –99 ~ +99 | |
| Mod Depth (Depth) | 0 ~ 99 | Modulation depth |
| Mod Speed (Speed) | 0.03 ~ 30 Hz | Modulation speed |
| EQ Low (EQ. Lo) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| EQ High (EQ. Hi) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effects 35 and 36, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance. Also, the equalizer settings (EQ Low, EQ High) will remain effective even if the Effect Switch [167][169] is OFF. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

## PARAMETRIC EQ (Parametric equalizer)

### 37: Parametric EQ

This is a 3-band equalizer which allows you to adjust the cutoff frequency and gain for the low, mid and high ranges. For the mid-range, the width of the area affected can also be adjusted.

| Parameter | Range | Description |
|---|---|---|
| Low Freq (L=Freq) | 0 ~ 29 | Low range cutoff frequency |
| Low Gain (Gain) | –12 ~ +12 dB | Amount of cut/boost for LOW EQ |
| Mid Freq (M=Freq) | 0 ~ 99 | Mid range cutoff frequency |
| Mid Gain (Gain) | –12 ~ +12 dB | Amount of cut/boost for MID EQ |
| Mid Width (W) | 0 ~ 99 | Width of mid range band |
| High Freq (H=Freq) | 0 ~ 29 | High range cutoff frequency |
| High Gain (Gain) | –12 ~ +12 dB | Amount of cut/boost for HIGH EQ |

For effect 37, the dynamic modulation selected by [171] and [175] will control the Mid Freq, allowing you to create a wah effect.

## COMBINATION EFFECT SERIAL

Effects 38 and 39 connect a mono-input/stereo-output chorus or flanger in series with a stereo delay.

### 38: Chorus-Delay

A mono-input stereo-output chorus with LFOs 90 degrees out of phase is connected to a stereo delay. Feedback can be specified independently for chorus and delay.

### 39: Flanger-Delay

A mono-input stereo-output flanger with LFOs 90 degrees out of phase is connected to a stereo delay. Feedback can be specified independently for flanger and delay.

#### Chorus, Flanger

| Parameter | Range | Description |
|---|---|---|
| Delay Time (Cho. DT) | 0 ~ 50 ms | Chorus/flanger delay time<br>Amount fed back to the effect |
| Feedback (FB) | –99 ~ +99% | Negative values will invert the phase |
| Mod Depth (Cho. Depth) | 0 ~ 99 | Modulation depth |
| Mod Speed (Speed) | 1 ~ 99 | Modulation speed |

#### Delay

| Parameter | Range | Description |
|---|---|---|
| Delay Time (Dly. DT) | 0 ~ 450 ms | Delay time (2 ms steps) |
| Delay Feedback (FB) | –99 ~ +99 | Amount fed back to the effect<br>Negative values will invert the phase |

For effects 38 and 39, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## COMBINATION EFFECT PARALLEL

* *The following effect types (40—47) connect two effects in parallel, allowing independent effects to be applied to two channels.*

For details on each effect, refer to the explanations for effects 1 through 34.

## MONO DELAY/REVERB

### 40: Delay/Hall Reverb

This effect provides a delay in the left channel and a hall type reverb in the right channel.

### 41: Delay/Room Reverb

This effect provides a delay in the left channel and a room type reverb in the right channel.

## MONO DELAY/MODULATED DELAY

### 42: Delay/Chorus

This effect provides a delay in the left channel, and a chorus in the right channel.

### 43: Delay/Flanger

This effect provides a delay in the left channel, and a flanger in the right channel.

## *MONO DELAY/PHASER*

### 46: Delay/Phaser

This effect provides a delay in the left channel, and a phaser in the right channel.

#### Delay

| Parameter | Range | Description |
|---|---|---|
| Delay time (Dly. DT) | 0 ~ 500 ms | Delay time |
| Feedback (Dly. FB) | –99 ~ +99% | Amount fed back to the effect<br>Negative values will invert the phase |
| High Damp (H. Dmp) | 0 ~ 99% | High frequency attenuation<br>Higher settings will cause the high frequency range to decay faster, producing a darker sound. |

#### Room (Hall, Room)

| Parameter | Range | Description |
|---|---|---|
| Reverb Time (Time) | 0.2 ~ 9.9 sec<br>0.2 ~ 4.9 sec | Time over which the reverb will decay<br>(for Hall) (for Room) |
| High Damp (H. Dmp) | 0 ~ 99% | High frequency attenuation<br>Higher settings will cause the high frequency range to decay faster, producing a darker sound. |
| Pre Delay (P. Dly) | 0 ~ 150 ms | Time interval from the direct sound until the first early reflection |

#### Chorus

| Parameter | Range | Description |
|---|---|---|
| Mod Depth (Depth) | 0 ~ 99% | Modulation depth |
| Mod Speed (Spd) | 0.03 ~ 30 Hz | Modulation speed |
| Mod Waveform (Wave) | Sine (SIN)<br>Triangle (TRI) | Modulation waveform |

#### Flanger

| Parameter | Range | Description |
|---|---|---|
| Mod Depth (Depth) | 0 ~ 99% | Modulation depth |
| Mod Speed (Spd) | 0.03 ~ 30 Hz | Modulation speed |
| Feedback (FB) | –99 ~ +99% | Amount fed back to the effect<br>Negative values will invert the phase |

#### Phaser

| Parameter | Range | Description |
|---|---|---|
| Mod Depth (Depth) | 0 ~ 99% | Modulation depth |
| Mod Speed (Spd) | 0.03 ~ 30 Hz | Modulation speed |
| Feedback (FB) | –99 ~ +99% | Amount fed back to the effect<br>Negative values will invert the phase |

For effects 40, 41, 42, 43 and 46, the dynamic modulation selected by [171] and [175] will control the Dry:Effect balance.

## *MONO DELAY/DISTORTION, OVERDRIVE*

### 44: Delay/Distortion

This effect provides a delay in the left channel, and distortion in the right channel.

### 45: Delay/Overdrive

This effect provides a delay in the left channel, and overdrive in the right channel.

## *MONO DELAY/ROTARY*

### 47: Delay/Rotary Speaker

This effect provides a delay in the left channel, and rotary speaker in the right channel.

#### Delay

| Parameter | Range | Description |
|---|---|---|
| Delay Time (Dly. DT) | 0 ~ 500 ms | Delay time |
| Feedback (FB) | –99 ~ +99% | Amount fed back to the effect<br>Negative values will invert the phase |

#### Distortion, Overdrive

| Parameter | Range | Description |
|---|---|---|
| Drive (Drive) | 1 ~ 111 | Amount of distortion/overdrive |
| Resonance (Res) | 0 ~ 99 | Wah resonance filter gain |
| Hot Spot (HotSpot) | 1 ~ 99 | Wah filter center frequency |
| Level (Level) | 1 ~ 99 | Output level of distorted sound |

#### Rotary Speaker

| Parameter | Range | Description |
|---|---|---|
| Acceleration (Accel) | 1 ~ 15 | Time required for rotor speeds to change |
| Slow Speed (Slow) | 1 ~ 99 | Slow rotation speed |
| Fast Speed (Fast) | 1 ~ 99 | Fast rotation speed |

For effect 47, the dynamic modulation selected by [171] and [175] will switch between the Slow Speed and the Fast Speed.

# Effect Parameter Table

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **REVERB** | **Reverb Time** | | **Pre Delay** | | **E.R Level** | |
| 1 | Hall | 0.2~9.9 | [2.3] | 0~200 | [60] | 0~99 | [62] |
| 2 | Ensemble Hall | 〃 | [3.1] | 〃 | [15] | 〃 | [23] |
| 3 | Concert Hall | 〃 | [3.3] | 〃 | [80] | 〃 | [46] |
| 4 | Room | 0.2~4.9 | [1.3] | 〃 | [8] | 〃 | [68] |
| 5 | Large Room | 〃 | [2.4] | 〃 | [25] | 〃 | [51] |
| 6 | Live Stage | 〃 | [2.2] | 〃 | [12] | 〃 | [81] |
| 7 | Wet Plate | 0~99 | [59] | 〃 | [29] | 1~10 | [7] |
| 8 | Dry Plate | 〃 | [30] | 〃 | [26] | 〃 | [5] |
| 9 | Spring Reverb | 〃 | [25] | 〃 | [0] | 〃 | [9] |
| | **EARLY REFLECTION** | **E.R Time** | | | | **Pre Delay** | |
| 10 | Early Reflection 1 | 100~800 | [220] | | | 0~200 | [10] |
| 11 | 〃 2 | 〃 | [180] | | | 〃 | [30] |
| 12 | 〃 3 | 〃 | [300] | | | 〃 | [90] |
| | **STEREO DELAY** | **Delay Time L** | | **Delay Time R** | | **Feedback** | |
| 13 | Stereo Delay | 0~500 | [185] | 0~500 | [370] | −99~+99 | [−40] |
| 14 | Cross Delay | 〃 | [190] | 〃 | [380] | 〃 | [+40] |
| | **DUAL MONO DELAY** | **Delay Time L** | | **Feedback L** | | **Hight Damp L** | |
| 15 | Dual Mono Delay | 0~500 | [20] | −99~+99 | [0] | 0~99 | [0] |
| | **MULTI TAP DELAY** | **Delay Time** | | | | **Delay Time 2** | |
| 16 | Multi Tap Delay 1 | 0~500 | [175] | | | 0~500 | [350] |
| 17 | 〃 2 | 〃 | [200] | | | 〃 | [400] |
| 18 | 〃 3 | 〃 | [250] | | | 〃 | [500] |
| | **CHORUS** | **Delay Time** | | **Mod Speed** | | **Mod Depth** | |
| 19 | Stereo Chorus 1 | 0~200 | [3] | 0.03~30 | [0.33] | 0~99 | [99] |
| 20 | 〃 2 | 〃 | [2] | 〃 | [0.42] | 〃 | [84] |
| | **CHORUS** | **Delay Time L** | | **Delay Time R** | | **Mod Speed** | |
| 21 | Quadrature Chorus | 0~250 | [24] | 0~250 | [12] | ●1~99 | [30] |
| 22 | Cross Over Chorus | 〃 | [2] | 〃 | [24] | ● 〃 | [16] |
| | **HARMONIC CHORUS** | **Delay Time L** | | **Delay Time R** | | | |
| 23 | Harmonic Chorus | 0~500 | [4] | 0~500 | [12] | | |
| | **SYMPHONIC ENSEMBLE** | **Mod Depth** | | | | | |
| 24 | Symphonic Ensemble | 0~99 | [92] | | | | |
| | **FLANGER** | **Delay Time** | | **Mod Depth** | | **Mod Speed** | |
| 25 | Flanger 1 | 0~200 | [5] | 0~99 | [50] | ●1~99 | [20] |
| 26 | 〃 2 | 〃 | [24] | 〃 | [99] | ● 〃 | [42] |
| 27 | Cross Over Flanger | 〃 | [1] | 〃 | [60] | ● 〃 | [22] |
| | **EXCITER** | **Blend** | | | | **Emphatic Point** | |
| 28 | Exciter | −99~+99 | [+60] | | | 1~10 | [01] |
| | **ENHANCER** | **Harmonic Density** | | **Hot Spot** | | **Stereo Width** | |
| 29 | Enhancer | 1~99 | [28] | 1~20 | [3] | 0~99 | [85] |
| | **DISTORTION** | **Drive** | | **Hot Spot** | | **Resonance** | |
| 30 | Distortion | 1~111 | [107] | ●0~99 | [99] | 0~99 | [07] |
| 31 | Over Drive | 〃 | [85] | ● 〃 | [70] | 〃 | [63] |
| | **PHASER** | **Manual** | | **Mod Speed** | | **Mod Depth** | |
| 32 | Stereo Phaser 1 | 0~99 | [98] | ●0.03~30 | [0.24] | 0~99 | [90] |
| 33 | 〃 2 | 〃 | [96] | ● ~ | [0.24] | 〃 | [90] |
| | **ROTARY SPEAKER** | **Vibrato Depth** | | | | **Acceleration** | |
| 34 | Rotary Speaker | 0~15 | [2] | | | 1~15 | [12] |
| | **TREMOLO** | **Mod Waveform** | | **Mod Wave Shape** | | **Mod Speed** | |
| 35 | Auto Pan | SIN, TRI | [TRI] | −99~+99 | [+96] | 0.03~30 | [0.21] |
| 36 | Tremolo | 〃 | [TRI] | 〃 | [−99] | 〃 | [3.9] |
| | **PARAMETRIC EQ** | **Low Freq** | | **Low Gain** | | **Mid Freq** | |
| 37 | Parametric EQ | 0~29 | [15] | −12~+12 | [+06] | ●0~99 | [50] |
| | **COMBINATION SERIAL** | **Flg / Cho Delay** | | **Flg / Cho F·Back** | | **Mod Speed** | |
| 38 | Chorus-Delay | 0~50 | [24] | −99~+99 | [+24] | 1~99 | [12] |
| 39 | Flanger-Delay | 〃 | [1] | 〃 | [+80] | 〃 | [04] |
| | **COMBINATION PARALLEL** | **Delay Time** | | **Feedback** | | **High Damp** | |
| 40 | Delay / Hall | 0~500 | [30] | −99~+99 | [0] | 0~99 | [0] |
| 41 | Delay / Room | 〃 | [20] | 〃 | [0] | 〃 | [0] |
| | | **Delay Time** | | **Feedback** | | **High Damp** | |
| 42 | Delay / Chorus | 0~500 | [220] | −99~+99 | [+15] | 0~99 | [50] |
| | | **Delay Time** | | **Feedback** | | **High Damp** | |
| 43 | Delay / Flanger | 0~500 | [400] | −99~+99 | [+20] | 0~99 | [60] |
| | | **Delay Time** | | **Feedback** | | | |
| 44 | Delay / Distortion | 0~500 | [250] | −99~+99 | [+40] | | |
| 45 | Delay / Over Drive | 〃 | [350] | 〃 | [+50] | | |
| | | **Delay Time** | | **Feedback** | | **High Damp** | |
| 46 | Delay / Phaser | 0~500 | [300] | −99~+99 | [+15] | 0~99 | [60] |
| | | **Delay Time** | | **Feedback** | | | |
| 47 | Delay / Rotary Speaker | 0~500 | [280] | −99~+99 | [+15] | | |

[ ] : Initial Value ●: Dynamic Mod Dest

| High Damp | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| 0~99 [31] | −12~+12 [−3] | −12~+12 [−1] | ●DRY~FX [80:20] |
| 〃 [32] | 〃 [−1] | 〃 [−3] | ● 〃 [80:20] |
| 〃 [41] | 〃 [−2] | 〃 [−4] | ● 〃 [80:20] |
| 〃 [36] | 〃 [+1] | 〃 [+2] | ● 〃 [78:22] |
| 〃 [32] | 〃 [−1] | 〃 [+2] | ● 〃 [78:22] |
| 〃 [36] | 〃 [−5] | 〃 [−4] | ● 〃 [75:25] |
| 〃 [51] | 〃 [0] | 〃 [−4] | ● 〃 [80:20] |
| 〃 [47] | 〃 [+2] | 〃 [+2] | ● 〃 [80:20] |
| 〃 [30] | 〃 [+2] | 〃 [−4] | ● 〃 [78:22] |

| | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| | −12~+12 [−4] | −12~+12 [−4] | ●DRY~FX [68:32] |
| | 〃 [+1] | 〃 [0] | ● 〃 [65:35] |
| | 〃 [0] | 〃 [0] | ● 〃 [75:25] |

| High Damp | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| 0~99 [10] | −12~+12 [0] | −12~+12 [0] | ●DRY~FX [80:20] |
| 〃 [10] | 〃 [0] | 〃 [0] | ● 〃 [80:20] |

| Dry : FX Balance L | Delay Time R | Feedback R | High Damp R | Dry : FX Balance R |
|---|---|---|---|---|
| DRY~FX [50:50] | 0~500 [40] | −99~+99 [0] | 0~99 [0] | ●DRY~FX [35:65] |

| Feedback | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| −99~+99 [+30] | −12~+12 [0] | −12~+12 [0] | ●DRY~FX [80:20] |
| 〃 [0] | 〃 [0] | 〃 [0] | ● 〃 [70:30] |
| 〃 [+20] | 〃 [0] | 〃 [0] | ● 〃 [75:25] |

| Mod Waveform | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| SIN, TRI [TRI] | −12~+12 [+4] | −12~+12 [+4] | ●DRY~FX [50:50] |
| 〃 [SIN] | 〃 [+3] | 〃 [+4] | ● 〃 [60:40] |

| Mod Depth | Mod Waveform | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|---|
| 0~99 [50] | T+10~S+10 [T+0] | −12~+12 [0] | −12~+12 [0] | DRY~FX [50:50] |
| 〃 [99] | 〃 [T+0] | 〃 [0] | 〃 [0] | 〃 [50:50] |

| Mod Speed | Mod Depth | Filter Split Point | Dry : FX Balance |
|---|---|---|---|
| ● 1~99 [36] | 0~99 [99] | 0~18 [3] | DRY~FX [25:75] |

| | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| | −12~+12 [0] | −12~+12 [0] | ●DRY~FX [67:33] |

| | Resonance | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|---|
| | −99~+99 [+80] | −12~+12 [0] | −12~+12 [0] | DRY~FX [50:50] |
| | 〃 [+36] | 〃 [0] | 〃 [0] | 〃 [50:50] |
| | 〃 [+80] | 〃 [0] | 〃 [0] | 〃 [50:50] |

| | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| | −12~+12 [+3] | −12~+12 [+3] | ●DRY~FX [50:50] |

| Delay Time | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| 1~99 [25] | −12~+12 [0] | −12~+12 [0] | ●DRY~FX [50:50] |

| EQ Low | EQ High | Out Level | Dry : FX Balance |
|---|---|---|---|
| −12~+12 [0] | −12~+12 [0] | 0~99 [6] | DRY~FX [50:50] |
| 〃 [0] | 〃 [0] | 〃 [8] | 〃 [50:50] |

| Feedback | Mod Waveform | Dry : FX Balance |
|---|---|---|
| −99~+99 [96] | SIN, TRI [TRI] | DRY~FX [50:50] |
| 〃 [90] | 〃 [SIN] | 〃 [50:50] |

| | Slow Speed | Fast Speed | Dry : FX Balance |
|---|---|---|---|
| | 1~99 [25] | 1~99 [69] | DRY~FX [34:66] * |

| Mod Depth | EQ Low | EQ High | Dry : FX Balance |
|---|---|---|---|
| 0~99 [96] | −12~+12 [0] | −12~+12 [0] | ●DRY~FX [20:80] |
| 〃 [99] | 〃 [0] | 〃 [0] | ● 〃 [50:50] |

| Mid Gain | Mid Width | High Freq | High Gain | Dry : FX Balance |
|---|---|---|---|---|
| −12~+12 [+6] | 0~99 [50] | 0~29 [12] | −12~+12 [+6] | DRY~FX [50:50] |

| Mod Depth | Delay Time | Feedback | Dry : FX Balance |
|---|---|---|---|
| 0~99 [75] | 0~450 [120] | −99~+99 [+16] | ●DRY~FX [60:40] |
| 〃 [99] | 〃 [300] | 〃 [+30] | ● 〃 [50:50] |

| Dry : FX Balance | Reverb Time | Pre Delay | High Damp | Dry : FX Balance |
|---|---|---|---|---|
| ●DRY~FX [FX] | 0.2~9.9 [3.0] | 0~150 [68] | 0~99 [34] | ●DRY~FX [70:30] |
| ● 〃 [FX] | 0.2~4.9 [1.1] | 〃 [0] | 〃 [28] | ● 〃 [65:35] |

| Dry : FX Balance | Mod Speed | Mod Depth | Mod Waveform | Dry : FX Balance |
|---|---|---|---|---|
| ●DRY~FX [70:30] | 0.03~30 [0.39] | 0~99 [99] | SIN, TRI [TRI] | ●DRY~FX [50:50] |

| Dry : FX Balance | Mod Speed | Mod Depth | Feedback | Dry : FX Balance |
|---|---|---|---|---|
| ●DRY~FX [70:30] | 0.03~30 [0.21] | 0~99 [96] | −99~+99 [−75] | ●DRY~FX [50:50] |

| Dry : FX Balance | Drive | Hot Spot | Resonance | Out Level |
|---|---|---|---|---|
| DRY~FX [79:21] | 1~111 [105] | 1~99 [99] | 0~99 [07] | 1~99 [10] |
| 〃 [75:25] | 〃 [65] | 〃 [90] | 〃 [63] | 〃 [20] |

| Dry : FX Balance | Mod Speed | Mod Depth | Feedback | Dry : FX Balance |
|---|---|---|---|---|
| ●DRY~FX [60:40] | 0.03~30 [0.69] | 0~99 [90] | −99~+99 [+99] | ●DRY~FX [25:75] |

| Dry : FX Balance | Acceleration | Slow Speed | Fast Speed | Dry : FX Balance |
|---|---|---|---|---|
| DRY~FX [70:30] | 1~15 [10] | 1~99 [25] | 1~99 [69] | DRY~FX [30:70] * |

* *Dynamic Modulation allows you to switch between "Slow speed" and "Fast speed".*

# Additional functions of the NS5R

## Frame Draw function

MIDI system exclusive messages can be used to display any desired pattern, picture or characters on the NS5R's LCD screen.
This is called the Frame Draw function.
This function is called Frame Draw. The following explanation provides examples of how the data is actually transmitted.

< Example image to be transmitted (32 * 16 dot) >

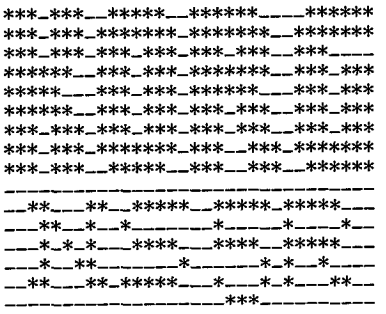


Figure 1-1

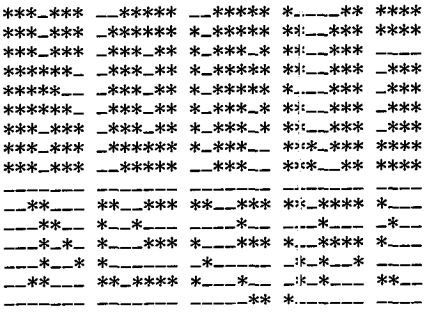


Figure 1-2

In order to convert this into exclusive data,

1. Divide it into groups of 7 dots (figure 1-2). Then specify "-" as a data bit of 0, and "*" as a data bit of 1.

2. Add a 0 bit ("-") at the beginning of each group (figure 2).
3. Group the data into 8 dot units, as follows.

```
   76543210     76543210     76543210     76543210     76543210
20 01110111  30 00011111  40 00011111  50 01000011  60 01111000
21 01110111  31 00111111  41 01011111  51 01100111  61 01111000
22 01110111  32 00111011  42 01011101  52 01100111  62 00000000
23 01111110  33 00111011  43 01011111  53 01100111  63 00111000
24 01111100  34 00111011  44 01011111  54 01000111  64 00111000
25 01111110  35 00111011  45 01011101  55 01100111  65 00111000
26 01110111  36 00111011  46 01011101  56 01100111  66 00111000
27 01110111  37 00111111  47 01011100  57 01110111  67 01111000
28 01110111  38 00011111  48 00011100  58 01110011  68 01111000
29 00000000  39 00000000  49 00000000  59 00000000  69 00000000
2A 00011000  3A 01100111  4A 01100111  5A 01101111  6A 01000000
2B 00001100  3B 01001000  4B 00000100  5B 00001000  6B 00100000
2C 00001010  3C 01000111  4C 01000111  5C 01001111  6C 01000000
2D 00001001  3D 01000000  4D 00100000  5D 00101001  6D 00000000
2E 00011000  3E 01101111  4E 01000100  5E 00101000  6E 01100000
2F 00000000  3F 00000000  4F 00000011  5F 01000000  6F 00000000
```

Figure 2

4. In this case, the exclusive message which is actually transmitted will have the following format.

```
F0 42 3n 42 12 08 00 20 xx..... F7(n=Excl Ch. xx=data)
```

Taking the data which was grouped into 8 dot units as binary data, convert this into hexadecimal data as 01110111=77h, 01111110=7Eh, ... etc., and place it in addresses 20 through 6F.

```
F0 42 30 42 12 08 00 20
77 77 77 7E 7C 7E 77 77 77 00 18 0C 0A 09 18 00
1F 3F 3B 3B 3B 3B 3F 1F 00 67 48 47 40 6F 00
1F 5F 5D 5F 5F 5D 5D 5C 1C 00 67 04 47 20 44 03
43 67 67 67 47 67 67 77 73 00 6F 08 4F 29 28 40
78 78 00 38 38 38 38 78 78 00 40 20 40 00 60 00
F7
```

This exclusive data will cause the graphic shown in figure 1-1 to be displayed in the LCD.

# Compatibility with other devices

The NS5R has two GM banks: GM-a and GM-b. The GM-b bank differs from the regular GM bank in that it is arranged to be suitable for playing back data that was created for the Korg 05R/W *ai-squared synthesis* module. The GM-a bank is the regular GM bank. When the Global mode [046] Bank Map Type parameter is set to 05R/W, the NS5R will be given a setup suitable for playing back musical data created for the 05R/W. Refer to page 71.

The "r" bank and "y" bank respectively contain sounds for playing back GS and XG music data. Utility mode [053] Preset/Initialize allows you to initialize the NS5R to the same state as when a GS Reset message or an XG System On message has been received. For details refer to page 76.
These banks contain some program numbers to which no sounds have been assigned. If such a program number is selected, the NS5R will assign a substitute sound and play it. Such substituted sounds will be indicated by a "c" character at the right of the sound name in the LCD.

The NS5R can be used as a 32-channel multi-timbral tone generator. The NS5R's Multi mode settings are compatible with the Multi mode settings of the Korg X5 and X5DR. However, only the effect settings are compatible between NS5R and Korg 05R/W Multis.

# Specifications and Options

## Specifications

| | NS5R |
|---|---|
| Tone generation method | AI-squared synthesis system (full-digital processing) |
| Tone generator section | 64 voices, 64 oscillators (single mode)<br>32 voices, 64 oscillators (double mode) |
| Waveform memory | 12 Mbytes PCM |
| Effect section | Two digital multi-effect units |
| Effects | 47 effects |
| Programs | 1177 programs (128 RAM, 1049 ROM) |
| Combinations | 512 (128 RAM, 384 ROM) |
| Outputs | L/MONO, R, PHONES (stereo mini-jack) |
| MIDI connectors | IN, OUT, THRU |
| Communication connector | TO HOST |
| Display | 144 x 40 full dot graphic LCD (with two-color backlight) |
| Power supply | AC Local Voltage |
| Power consumption | 14 W |
| Dimensions | 218 (W) x 242.1 (D) x 45 (H) mm |
| Weight | 1.8 kg |
| Included items | AC power cable |

Specifications and appearance are subject to change without notice for product improvement.

## Options

AG-001B IBM-PC connection kit (connection cable, "Korg MIDI Driver" driver software)

AG-002B Macintosh connection kit (connection cable, "Korg MIDI Driver" driver software)

AG-004 9 pin ↔ 25 pin connection adapter for IBM-PC

MIDI cables

# Program/Combination Bank List

## Program/Combination Bank list

| Bank Map List | |
|---|---|
| Bank Name | Bank Select (MSB:LSB) |
| GM-a | 00:00(GS/XG)<br>00:01(GS) |
| r:01 | 01:xx |
| r:02 | 02:xx |
| r:03 | 03:xx |
| r:04 | 04:xx |
| r:05 | 05:xx |
| r:06 | 06:xx |
| r:07 | 07:xx |
| r:08 | 08:xx |
| r:09 | 09:xx |
| r:10 | 0A:xx |
| r:11 | 0B:xx |
| r:16 | 10:xx |
| r:17 | 11:xx |
| r:18 | 12:xx |
| r:19 | 13:xx |
| r:24 | 18:xx |
| r:25 | 19:xx |
| r:26 | 1A:xx |
| r:32 | 20:xx |
| r:33 | 21:xx |
| r:40 | 28:xx |
| r:CM | 7D:xx<br>7F:xx(GS) |
| y:01 | 00:01(XG) |
| y:03 | 00:03 |
| y:06 | 00:06 |
| y:08 | 00:08 |
| y:12 | 00:0C |
| y:14 | 00:0E |
| y:16 | 00:10 |

| Bank Map List | |
|---|---|
| Bank Name | Bank Select (MSB:LSB) |
| y:17 | 00:11 |
| y:18 | 00:12 |
| y:19 | 00:13 |
| y:20 | 00:14 |
| y:24 | 00:18 |
| y:25 | 00:19 |
| y:27 | 00:1B |
| y:28 | 00:1C |
| y:32 | 00:20 |
| y:33 | 00:21 |
| y:34 | 00:22 |
| y:35 | 00:23 |
| y:36 | 00:24 |
| y:37 | 00:25 |
| y:38 | 00:26 |
| y:39 | 00:27 |
| y:40 | 00:28 |
| y:41 | 00:29 |
| y:42 | 00:2A |
| y:43 | 00:2B |
| y:45 | 00:2D |
| y:64 | 00:40 |
| y:65 | 00:41 |
| y:66 | 00:42 |
| y:67 | 00:43 |
| y:68 | 00:44 |
| y:69 | 00:45 |
| y:70 | 00:46 |
| y:71 | 00:47 |
| y:72 | 00:48 |

| Bank Map List | |
|---|---|
| Bank Name | Bank Select (MSB:LSB) |
| y:96 | 00:60 |
| y:97 | 00:61 |
| y:98 | 00:62 |
| y:99 | 00:63 |
| y100 | 00:64 |
| y101 | 00:65 |
| ySFX | 40:xx |
| GM-b | 38:00<br>39:00 |
| PrgU | 50:xx |
| PrgA | 51:xx<br>00:00(05) |
| PrgB | 52:xx |
| PrgC | 53:xx |
| CmbU | 58:xx |
| CmbA | 59:xx |
| CmbB | 5A:xx |
| CmbC | 5B:xx |
| yDr1 | 7E:xx |
| yDr2 | 7F:xx(XG)<br>78:xx(XG) |
| rDrm | 3D:xx<br>78:xx(GS) |
| kDrm | 3E:xx<br>78:xx(05) |
| **** | 3F:xx |

* (GS) : after GS Reset
* (XG) : after XG System ON
* (05) : 05R/W Map

'yDr2' Bank (Bank MSB=7Fh)

| Drum Kit List (Drum Bank) | |
|---|---|
| Program No. (PC# xxh) | Drum Kit Name |
| 1 (00h) | Standard |
| 2 (01h) | Standard |
| 9 (08h) | Room |
| 17 (10h) | Rock |
| 25 (18h) | Electro |
| 26 (19h) | Analog |
| 33 (20h) | Jazz |
| 41 (28h) | Brush |
| 49 (30h) | Classic |

'yDr1' Bank (Bank MSB=7Eh)

| Drum Kit List (Drum Bank) | |
|---|---|
| Program No. (PC# xxh) | Drum Kit Name |
| 1 (00h) | SFX 1 |
| 2 (01h) | SFX 2 |

'rDrm' Bank (Bank MSB=3Dh)

| Drum Kit List (Drum Bank) | |
|---|---|
| Program No. (PC# xxh) | Drum Kit Name |
| 1 (00h) | STANDARD |
| 2 (01h) | STANDARD |
| 9 (08h) | ROOM |
| 17 (10h) | POWER |
| 25 (18h) | ELECTRONIC |
| 26 (19h) | ANALOG |
| 27 (1Ah) | DANCE |
| 33 (20h) | JAZZ |
| 41 (28h) | BRUSH |
| 49 (30h) | ORCHESTRA |
| 50 (31h) | ETHNIC |
| 51 (32h) | KICK&SNARE |
| 57 (38h) | SFX |
| 128 (7Fh) | C/M |

'kDrm' Bank (Bank MSB=3Eh)

| Drum Kit List (Drum Bank) | |
|---|---|
| Program No. (PC# xxh) | Drum Kit Name |
| 1(00h)...16(0Fh) | GM Kit |
| 17(10h)...24(17h) | Power Kit |
| 25(18h) | Dance Kit |
| 26(19h) | Analog Kit |
| 27(1Ah)...32(1Fh) | Dance Kit |
| 33(20h)...40(27h) | Jazz Kit |
| 41(28h)...48(2Fh) | Brush Kit |
| 49(30h)...56(37h) | Orch Kit |
| 57(38h)...64(3Fh) | GM Kit |
| 65(40h)...72(47h) | Perc Kit |
| 73(48h) | User Kit 1 |
| 74(49h) | User Kit 2 |
| 75(4Ah)..128(7Fh) | GM Kit |

# KORG NS5R MIDI Implementation

* n : Channel 0~F
* vv : Value 00~7F
* kk : Note No. 00~7F (C-1~G9)

## Channel Messages

| Message | MIDI(Hex) | Description (Value) |
|---|---|---|
| Note On | 9n kk vv | kk:C-1~G9 vv:1~127(velocity) |
| *Note Off* | *9n kk 00* | kk:C-1~G9 |
| Note Off | 8n kk vv | kk:C-1~G9 vv:Ignore |
| Program Change | Cn vv | 00~7F 0~127 |
| Channel Pressure | Dn vv | 00~7F 0~127 |
| PitchBend Change | En mm ll | mm:ll= 00:00~40:00~7F:7F |
| Poly Key Pressure | An kk vv | kk:C-1~G9 vv:1~127 |
| Control Changes | | |
| Bank select(MSB) | Bn 00 vv | -> See ProgName list |
| Bank select(LSB) | Bn 20 vv | |
| Pitch Modulation (JS+Y) | Bn 01 vv | 00~7F 0~127 |
| CutoffModulation (JS-Y) | Bn 02 vv | 00~7F 0~127 |
| Panpot | Bn 0A vv | 00~40~7F L63-CNT-R63 |
| Expression | Bn 0B vv | 00~7F |
| Volume | Bn 07 vv | 00~7F |
| Hold1 On/Off (Damper) | Bn 40 vv | 00~3F:Off, 40~7F:On |
| Sostenuto | Bn 42 vv | 00~3F:Off, 40~7F:On |
| Soft Pedal | Bn 43 vv | 00~3F:Off, 40~7F:On |
| Harmonic Content | Bn 47 vv | 00~7F Color |
| EG Release Time | Bn 48 vv | 00~40~7F :-64~0~+63 (relative) |
| EG Attack Time | Bn 49 vv | 00~40~7F :-64~0~+63 (relative) |
| Brightness | Bn 4A vv | Filter Cutoff |
| Reverb Send Level (C Send Level) | Bn 5B vv | 00~7F 0~127 |
| Chorus Send Level (D Send Level) | Bn 5D vv | 00~7F 0~127 |
| Effect1 Balance | Bn 0C vv | 00~7F |
| Effect2 Balance | Bn 0D vv | 00~7F |
| Portamento Switch | Bn 41 vv | 00~7E : Off, 7F:On |
| Portamento Time (MSB) | Bn 05 vv | 00~7F : 0=short,127=long |
| Portamento Control | Bn 54 kk | 00~7F : C-1~G9 source Key |

| Message | MIDI(Hex) | Description (Value) |
|---|---|---|
| NRPN LSB | Bn 62 vv | vv -> See Table 1-2[NRPN] |
| NRPN MSB | Bn 63 vv | vv -> See Table 1-2[NRPN] |
| RPN LSB | Bn 64 vv | vv -> See Table 1-1[RPN] |
| RPN MSB | Bn 65 vv | vv -> See Table 1-1[RPN] |
| Data entry MSB | Bn 06 vv | 00~7F RPN,NRPN value |
| Data Increment | Bn 60 00 | Data Increment MSB value |
| Data Decrement | Bn 61 00 | Data Decrement MSB value |
| Channel Mode Message | | |
| All Sound off | Bn 78 00 | |
| Reset All Controllers | Bn 79 00 | PitchBend Change = Center<br>Pitch Modulation = 0<br>CutoffModulation = 0<br>AssignControl 1 = 0<br>AssignControl 2 = 0<br>Expression = 0<br>Portamento = 0 (OFF)<br>Channel Pressure = 0<br>PolyKey Pressure = 0 (All Key)<br>Hold1(Damper) = 0 (OFF)<br>Sostenuto = 0 (OFF)<br>Soft Pedal = 0 (OFF)<br>NRPN = Null<br>RPN = Null |
| Local on/off | Bn 7A vv | 00=ON(effective all part), 7F=OFF<br>Receive if 'n'=EXCL channel |
| All Note off | Bn 7B 00 | |
| MONO mode ON | Bn 7E 0m | (m=1 only) |
| POLY mode ON | Bn 7F 00 | |

## Table 1: RPM/NRPN

< Table 1-1 : [RPN] >

| Message | RPN Number MSB : LSB | Data (MSB) | vv (Hex) |
|---|---|---|---|
| Pitch Bend Sense | *00 : 00* | vv | *00~40~7F -64~0~+63(relative)* |
| Fine Tune | 00 : 01 | vv | 00~40~7F -64~0~+63(relative) |
| Coarse Tune | 00 : 02 | vv | 00~40~7F -64~0~+63(relative) |
| RPN Null | 7F : 7F | ~~ | |

* value LSB has no effect

< Table 1-2 : [NRPN] >

| Message | NRPN Number MSB : LSB | Data (MSB) | vv (Hex) |
|---|---|---|---|
| Vibrato Rate | 01 : 08 | vv | 00~40~7F -64~0~+63(relative) |
| Vibrato Depth | 01 : 09 | vv | 00~40~7F -64~0~+63(relative) |
| Vibrato Delay | 01 : 0A | vv | 00~40~7F -64~0~+63(relative) |
| Filt CutOff | 01 : 20 | vv | 00~40~7F -64~0~+63(relative) |
| Color | 01 : 21 | vv | 00~40~7F -64~0~+63(relative) |
| EG Attack Time | 01 : 63 | vv | 00~40~7F -64~0~+63(relative) |
| EG Decay Time | 01 : 64 | vv | 00~40~7F -64~0~+63(relative) |
| EG Release Time | 01 : 66 | vv | 00~40~7F -64~0~+63(relative) |
| Drum Filt CutOff | 14 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum Filt Color | 15 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum EG AttackTime | 16 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum EG Decay Time | 17 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum Coarse Tune | 18 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum Fine Tune | 19 : kk | vv | 00~40~7F -64~0~+63(relative) |
| Drum Volume | 1A : kk | vv | 00~7F 0~127 (absolute) |
| Drum Panpot | 1C : kk | vv | 00, 01~40~7F (RND,L63-CNT-R63 - absolute) |
| Drum Rev(C) Send | 1D : kk | vv | 00~7F 0~127 (absolute) |
| Drum Cho(D) Send | 1E : kk | vv | 00~7F 0~127 (absolute) |

* kk:Drum Inst No.(0Ch-6Ch : 'C0' ~ 'C8')
* value LSB has no effect

[Universal System Exclusive Message]

| | | |
|---|---|---|
| Device Inquiry | F0,7E,nn,06,01,F7 | |
| GM Mode ON | F0,7E,nn,09,01,F7 | |
| Master Volume | F0,7F,nn,04,01,ll,mm,F7 | mm : 00~7F |
| Master Balance | F0,7F,nn,04,02,ll,mm,F7 | mm : 00~40~7F (L63~Center~R63) |

* nn : receive channel 00~0F = Receive if EXCL channel(Global Mode)
7F = Receive any Channel

* ll : value LSB has no effect

[Device Inquiry Reply]

| Data(HEX) | Val(HEX) | Description | |
|---|---|---|---|
| F0 | | Exclusive Status | |
| 7E | | Exclusive Non Realtime | |
| 0n | 0~F | Exclusive Channel (Global Mode) | |
| 06 | | Inquiry Message | |
| 02 | | Identity Reply | |
| 42 | | KORG ID | (MANUFACTURERS ID) |
| 42 | | NS5R ID | (FAMILY CODE LSB) |
| 00 | | | (FAMILY CODE MSB) |
| 00 | | | (MEMBER CODE LSB) |
| 00 | | | (MEMBER CODE MSB) |
| ** | 00~7F | SYSTEM Minor Version No. | (Minor Version LSB) |
| 00 | | | (Minor Version MSB) |
| ** | 00~7F | SYSTEM Major Version No. | (Major Version LSB) |
| 00 | | | (Major Version MSB) |
| F7 | | End of Exclusive | |

* Transmits when 'Device Inquiry'(F0,7E,nn,06,01,F7) request Received

KORG NS5R Exclusive Data Format

```
*************************************************************************
*  1. Mode Change (Rx)                                                  *
*     format: F0,42,3n,42,00,rr,F7                                      *
*          n  = EXCL Channel (0-F)                                      *
*          rr = mode                                                    *
*************************************************************************
```

| < rr > | <reply> | <Rx when> |
|---|---|---|
| 00h. Global Mode | Success/Error | Always |
| 01h. Multi Mode | Success/Error | Always |
| 02h. Prog Edit Mode | Success/Error | Part Select Prog/Drum |
| 03h. Combi Edit Mode | Success/Error | Part Select Combi |
| 04h. Drum Edit Mode | Success/Error | Part Select Drum |
| 05h. Effect Edit Mode | Success/Error | Always |

```
*************************************************************************
*  2. MAP Change (Rx)                                                   *
*     format: F0,42,3n,42,01,rr,F7                                      *
*          n  = EXCL Channel (0-F)                                      *
*          rr = MAP No.                                                 *
*************************************************************************
```

| < rr > | <reply> | <Rx when> |
|---|---|---|
| 00h. Default(GS/XG) Map | None | Multi Mode |
| 01h. 05R/W Map | None | Multi Mode |

```
*************************************************************************
*  3. Data Dump (Rx/Tx)                                                 *
*     format: F0,42,3n,42,cc,dd.....,ss,F7                              *
*          n  = EXCL Channel (0-F)                                      *
*          cc = command                                                 *
*          dd = datas (7-8)                                             *
*          ss = check sum (dd-ss)                                       *
*************************************************************************
```

| <cc> | <Rx reply> | <Rx when> |
|---|---|---|
| 30h. *Global Dump* | Success/Error | Always |
| 31h. Current Program Dump | Success/Error | Prog Edit Mode |
| 32h. Current Combination Dump | Success/Error | Combi Edit Mode |
| 33h. Current Drumkit Dump | Success/Error | Drum Edit Mode |
| 34h. Current Effect Dump | Success/Error | Effect Edit Mode |
| 35h. Current Multi Dump | Success/Error | Multi Mode |
| 36h. All Program Dump | Success/Error | Always |
| 37h. All Combination Dump | Success/Error | Always |
| 38h. *All User Drum Dump* | Success/Error | Always |
| 39h. All Effect Dump | Success/Error | Always |
| 3Ah. All Multi Dump | Success/Error | Always |
| 3Bh. Part Common Parameter Dump | Success/Error | Multi Mode |
| 3Ch. All Part Parameter Dump | Success/Error | Multi Mode |

[Dump Data Size]

| | | |
|---|---|---|
| *Global Dump* | *10 byte* | *See Table 3-1. |
| Part Common Parameter | 152 byte | *See Table 4-1. |
| Current Program Dump | 158 byte | *See Table 5-1. |
| Current CombinationDump | 14+(14 * 8) = 126 byte | *See Table 6-1. |
| Current DrumKit Dump | 14 * 97inst = 1358 byte | *See Table 4-3. |
| Current Effect Dump | 38 byte | *See Table 2. |
| Current Multi Dump | 92 * 32part = 2944 byte | 32 part parameters |
| | | *See Table 4-2. |
| | *152 byte part common parameter* | |
| | 38 byte | Current Effect parameter |
| | 1358 * 4 = 5432byte | 4 Modify Drum parameters |
| TOTAL : | 2944+152+38+5432 = 8566byte | |

| | | |
|---|---|---|
| All Program Dump | 158 * 128 = 20224byte | Bank 'PrgU' 128 programs |
| All Combination Dump | 126 * 128 = 16128byte | Bank 'CmbU' 128 combinations |
| All User Drum Dump | 1358 * 2 = 2716byte | *User Kit1, Kit2* |
| All Effect Dump | 38 * 128 = 4864byte | Bank 'H' 128 Effects |
| All Multi Dump | 8566 * 4 = 34264byte | 4 Multi parameters |
| All Parameter Dump | 92 * 32 = 2944byte | 32 Part parameters |

for MORE Information, See Table 3 ... Table 6.

```
*************************************************************************
*  4. Dump Request (Rx)                                                 *
*     format: F0,42,3n,42,cc,F7                                         *
*          n  = EXCL Channel (0-F)                                      *
*          cc = command                                                 *
*************************************************************************
```

| <cc> | <Rx reply> | <Rx when> |
|---|---|---|
| 20h. Global Dump Request | Global Dump | Always |
| 21h. Current Program Dump Request | Current Program Dump | Prog Edit Mode |
| 22h. Current Combi Dump Request | Current Combi Dump | Combi Edit Mode |
| 23h. Current Drumkit Dump Request | Current Drumkit Dump | Drum Edit Mode |
| 24h. Current Effect Dump Request | Current Effect Dump | Effect Edit Mode |
| 25h. Current Multi Dump Request | Current Multi Dump | Multi Mode |
| 26h. All Program Dump *Request* | All *Program Dump* | Always |
| 27h. All Combination Dump Request | All Combination Dump | Always |
| 28h. All User Drumkit Dump Request | All User Drum Dump | Always |
| 29h. All Effect Dump Request | All Effect Dump | Always |
| 2Ah. All Multi Part Dump Request | All Multi Part Dump | Multi Mode |
| 2Bh. Part Common Params Dump Req. | Part Common Params.Dump | Multi Mode |
| 2Ch. All Part Params Dump Req. | All Part Parameter Dump | Multi Mode |
| 10h. Mode Request | Mode Change | Always |
| 11h. MAP type Request | MAP Change | Always |

```
*************************************************************************
*  5. GS/XG Part Parameters compatible (Rx)                             *
*     format: F0,42,3n,42,12,a1,a2,a3,dd.........,F7                    *
*          n  = EXCL Channel (0-F)                                      *
*       a1-a3 = address                                                 *
*          dd = datas                                                   *
*************************************************************************
```

NS5R EXCL: F0,42,3n,42,12,a1,a2,a3,dd...F7
XG EXCL: F0,43,1n,4C,a1,a2,a3...F7
GS EXCL: F0,41,1n,42,12,a1,a2,a3,dd...,ss,F7

n= NS5R: EXCL channel (30h-3Fh)
XG : Device No. (10h-1Fh)
GS : Device ID (10h-1Fh)

a1=Address High
a2=Address Mid
a3=Address Low
dd...=Value
ss=check sum -> ((12+a1+a2+a3+dd+....+ss) & 7Fh)=00h

<Part Parameters>

| [NS5R] | [ XG ] | [ GS ] | [Value] | [Description] |
|---|---|---|---|---|
| 00,00,7C | 00,00,7F | | 00 | All Parameter Reset |
| 00,00,7D | 00,00,7D | | 00 | Drum Setup Reset |
| 00,00,7E | 00,00,7E | | 00 | XG System ON ("NS5R" System Reset(Y) ) |
| 00,00,7F | | 40,00,7F | 00 | GS Reset ("NS5R" System Reset(R) ) |
| 00,00,00 | 00,00,00 | 40,00,00 | 00 | MasterTune (bit15-12) -100.0-0-+100.0[cent] |
| ..... 01 | ..... 01 | ..... 01 | 00-07 | MasterTune (bit11- 8) (0018...07E8) |
| ..... 02 | ..... 02 | ..... 02 | 00-0F | MasterTune (bit 7- 4) |
| ..... 03 | ..... 03 | ..... 03 | 00-0F | MasterTune (bit 3- 0) |
| 00,00,04 | 00,00,04 | 40,00,04 | 00-7F | MasterVolume 0-127 |
| 00,00,05 | 00,00,06 | 40,00,05 | 00-7F | MasterKeyShift -24-0-+24[semitone] |
| 00,00,06 | | 40,00,06 | 01-7F | MasterBalance L63~CNT~R63 |
| 00,00,07 | | | 00-7F | Effect Bank MSB -> See Table 6-2. |
| ..... 08 | | | 00-7F | Effect Bank LSB -> See Table 6-2. |
| ..... 09 | | | 00-7F | Effect Number |

| [NS5R] | [ XG ] | [ GS ] | [Value] | [Description] |
|---|---|---|---|---|
| 00,01,00 | | | 00-02 | MIDI Ch. 1 Select Port (A,B,C=EXT) |
| 00,01,01 | | | 00-02 | MIDI Ch. 2 Select Port (A,B,C=EXT) |
| 00,01,02 | | | 00-02 | MIDI Ch. 3 Select Port (A,B,C=EXT) |
| 00,01,03 | | | 00-02 | MIDI Ch. 4 Select Port (A,B,C=EXT) |
| 00,01,04 | | | 00-02 | MIDI Ch. 5 Select Port (A,B,C=EXT) |
| 00,01,05 | | | 00-02 | MIDI Ch. 6 Select Port (A,B,C=EXT) |
| 00,01,06 | | | 00-02 | MIDI Ch. 7 Select Port (A,B,C=EXT) |
| 00,01,07 | | | 00-02 | MIDI Ch. 8 Select Port (A,B,C=EXT) |
| 00,01,08 | | | 00-02 | MIDI Ch. 9 Select Port (A,B,C=EXT) |
| 00,01,09 | | | 00-02 | MIDI Ch. 10 Select Port (A,B,C=EXT) |
| 00,01,0A | | | 00-02 | MIDI Ch. 11 Select Port (A,B,C=EXT) |
| 00,01,0B | | | 00-02 | MIDI Ch. 12 Select Port (A,B,C=EXT) |
| 00,01,0C | | | 00-02 | MIDI Ch. 13 Select Port (A,B,C=EXT) |
| 00,01,0D | | | 00-02 | MIDI Ch. 14 Select Port (A,B,C=EXT) |
| 00,01,0E | | | 00-02 | MIDI Ch. 15 Select Port (A,B,C=EXT) |
| 00,01,0F | | | 00-02 | MIDI Ch. 16 Select Port (A,B,C=EXT) |
| 00,02,00 | | | 00-03 | Program 1 Select Port (A,B,C=EXT,Ignore) |
| 00,02,01 | | | 00-03 | Program 2 Select Port (A,B,C=EXT,Ignore) |
| 00,02,02 | | | 00-03 | Program 3 Select Port (A,B,C=EXT,Ignore) |
| 00,02,03 | | | 00-03 | Program 4 Select Port (A,B,C=EXT,Ignore) |
| 00,02,7C | | | 00-03 | Program 125 Select Port (A,B,C=EXT,Ignore) |
| 00,02,7D | | | 00-03 | Program 126 Select Port (A,B,C=EXT,Ignore) |
| 00,02,7E | | | 00-03 | Program 127 Select Port (A,B,C=EXT,Ignore) |
| 00,02,7F | | | 00-03 | Program 128 Select Port (A,B,C=EXT,Ignore) |
| 01,nn,00 | 08,nn,01 | | 00-7F | Bank Select MSB 0~127 CC#00 |
| 01,nn,01 | 08,nn,02 | | 00-7F | Bank Select LSB 0~127 CC#32 |
| 01,nn,02 | 08,nn,03 | | 00-7F | Program Change 1~128 -> See ProgName list |
| 6-31=B1-B16,127=OFF | | | | |
| — | | 40,1x,02 | 00-0F | Rx Channel 0~15=A1-A16 |
| — | | 50,1x,02 | *00-0F* | *Rx Channel 0~15=B1-B16* |
| 01,nn,09 | 08,nn,05 | 40,1x,13 | 00-01 | MONO/POLY Mode 0=Mono, 1=Poly |
| 01,nn,0A | 08,nn,07 | | 00-05 | Part Mode 0=Normal,1=Drum, 2~5=MDrm1-4 |
| — | | 40,1x,15 | 00-02 | Part Mode 0=Normal,1=MDrm1,MDrm2 |
| — | | 50,1x,15 | 00-02 | Part Mode 0=Normal,1=MDrm3,MDrm4 |
| 01,nn,0B | 08,nn,08 | 40,1x,16 | 28-58 | Coarse Tune -24-0-+24 [semitone] |
| 01,nn,0C | 08,nn,09 | 40,1x,17 | 0-F(MSB) | FineTune(0:0-8:0-F:F -128~0~127=-12.8[Hz]~+12.7[Hz] |
| ..... 0D | ..... 0A | ..... 18 | 0-F(LSB) | |
| 01,nn,10 | 08,nn,0B | 40,1x,19 | 00-7F | Volume 0~127 CC#07 |
| 01,nn,11 | | | 00-7F | Expression 0~127 CC#11 |
| 01,nn,12 | 08,nn,0C | 40,1x,1A | 00-7F | Vel. Sense Depth 0~127 |
| 01,nn,13 | 08,nn,0D | 40,1x,1B | 00-7F | Vel. Sense Offset 0~127 |
| 01,nn,14 | 08,nn,0E | 40,1x,1C | 00-40-7F | Panpot 0=RND,1~127=L63~R63 CC#10 |
| 01,nn,15 | 08,nn,0F | 40,1x,1D | 00-7F | Note Window Bottom 0~127 = C-1~G9 |
| 01,nn,16 | 08,nn,10 | 40,1x,1E | 00-7F | Note Window Top 0~127 = C-1~G9 |
| 01,nn,17 | 08,nn,12 | 40,1x,21 | 00-7F | *Chorus Send* 0~127 CC#93 |
| 01,nn,18 | 08,nn,13 | 40,1x,22 | 00-7F | Reverb Send 0~127 CC#91 |
| 01,nn,19 | 08,nn,15 | 40,1x,30 | 00-40-7F | Vibrato Frequency -64~+63 NRPN#1:08(MSB) |
| 01,nn,1A | 08,nn,16 | 40,1x,31 | 00-40-7F | Vibrato Intensity -64~+63 NRPN#1:09(MSB) |
| 01,nn,1B | 08,nn,17 | 40,1x,37 | 00-40-7F | Vibrato Delay -64~+63 NRPN#1:10(MSB) |
| 01,nn,1C | 08,nn,18 | 40,1x,32 | 00-40-7F | Filter Cutoff Freq -64~+63 NRPN#1:32(MSB) |
| 01,nn,1D | 08,nn,19 | 40,1x,33 | 00-40-7F | Color (Resonance) -64~+63 NRPN#1:33(MSB) |
| 01,nn,1E | 08,nn,1A | 40,1x,34 | 00-40-7F | VDFA EG Attack Time -64~+63 NRPN#1:99(MSB) |
| 01,nn,1F | 08,nn,1B | 40,1x,35 | 00-40-7F | VDFA EG Decay Time -64~+63 NRPN#1:100(MSB) |
| 01,nn,20 | 08,nn,1C | 40,1x,36 | 00-40-7F | VDFA EG ReleaseTime -64~+63 NRPN#1:102(MSB) |
| 01,nn,21 | 08,nn,30 | 40,1x,03 | 00-01 | Rx Pitch Bend SW 0=OFF, 1=ON |
| 01,nn,22 | 08,nn,31 | 40,1x,04 | 00-01 | Rx Channel After SW 0=OFF, 1=ON |
| 01,nn,23 | 08,nn,32 | 40,1x,05 | 00-01 | Rx Program ChangeSW 0=OFF, 1=ON |
| 01,nn,24 | 08,nn,33 | 40,1x,06 | 00-01 | Rx Control ChangeSW 0=OFF, 1=ON |
| 01,nn,25 | 08,nn,34 | 40,1x,07 | 00-01 | Rx Poly After SW 0=OFF, 1=ON |
| 01,nn,26 | 08,nn,35 | 40,1x,08 | 00-01 | Rx Note ON SW 0=OFF, 1=ON |
| 01,nn,27 | 08,nn,36 | 40,1x,09 | 00-01 | Rx RPN SW 0=OFF, 1=ON |
| 01,nn,28 | 08,nn,37 | 40,1x,0A | 00-01 | Rx NRPN SW 0=OFF, 1=ON |
| 01,nn,29 | 08,nn,38 | 40,1x,0B | 00-01 | Rx Modulation SW 0=OFF, 1=ON |
| 01,nn,2A | 08,nn,39 | 40,1x,0C | 00-01 | Rx Volume 0=OFF, 1=ON |
| 01,nn,2B | 08,nn,3A | 40,1x,0D | 00-01 | Rx Panpot SW 0=OFF, 1=ON |
| 01,nn,2C | 08,nn,3B | 40,1x,0E | 00-01 | Rx Expression SW 0=OFF, 1=ON |
| 01,nn,2D | 08,nn,3C | 40,1x,0F | 00-01 | Rx Hold 1 SW 0=OFF, 1=ON |
| 01,nn,2E | 08,nn,3D | 40,1x,10 | 00-01 | Rx Portamento SW 0=OFF, 1=ON |
| 01,nn,2F | 08,nn,3E | 40,1x,11 | 00-01 | Rx Sostenuto SW 0=OFF, 1=ON |
| 01,nn,30 | 08,nn,3F | 40,1x,12 | 00-01 | Rx Soft Pedal SW 0=OFF, 1=ON |
| 01,nn,31 | 08,nn,40 | 40,1x,23 | 00-01 | Rx BankSelect SW 0=OFF, 1=ON |

<Part Parameters>

| [NS5R] | [ XG ] | [ GS ] | [Value] | [Description] | |
|---|---|---|---|---|---|
| 01,nn,32 | 08,nn,41 | 40,1x,40 | 00-40-7F | Scale C | -64..+63[cent] |
| 01,nn,33 | 08,nn,42 | 40,1x,41 | 00-40-7F | Scale C♯ | -64..+63[cent] |
| 01,nn,34 | 08,nn,43 | 40,1x,42 | 00-40-7F | Scale D | -64..+63[cent] |
| 01,nn,35 | 08,nn,44 | 40,1x,43 | 00-40-7F | Scale D♯ | -64..+63[cent] |
| 01,nn,36 | 08,nn,45 | 40,1x,44 | 00-40-7F | Scale E | -64..+63[cent] |
| 01,nn,37 | 08,nn,46 | 40,1x,45 | 00-40-7F | Scale F | -64..+63[cent] |
| 01,nn,38 | 08,nn,47 | 40,1x,46 | 00-40-7F | Scale F♯ | -64..+63[cent] |
| 01,nn,39 | 08,nn,48 | 40,1x,47 | 00-40-7F | Scale G | -64..+63[cent] |
| 01,nn,3A | 08,nn,49 | 40,1x,48 | 00-40-7F | Scale G♯ | -64..+63[cent] |
| 01,nn,3B | 08,nn,4A | 40,1x,49 | 00-40-7F | Scale A | -64..+63[cent] |
| 01,nn,3C | 08,nn,4B | 40,1x,4A | 00-40-7F | Scale A♯ | -64..+63[cent] |
| 01,nn,3D | 08,nn,4C | 40,1x,4B | 00-40-7F | Scale B | -64..+63[cent] |
| 01,nn,3E | 08,nn,59 | 40,1x,1F | 00-5F | AC1 Number | CC#0-CC#95 |
| 01,nn,3F | 08,nn,60 | 40,1x,20 | 00-5F | AC2 Number | CC#0-CC#95 |
| 01,nn,40 | 08,nn,1D | 40,2x,00 | 28-40-58 | MOD Pitch Control | -24-0-+24[semitone] |
| 01,nn,41 | 08,nn,1E | 40,2x,01 | 00-40-7F | MOD Filt Control | -64-+63 |
| 01,nn,42 | 08,nn,1F | 40,2x,02 | 00-40-7F | MOD Amp Control | -64-+63 |
| 01,nn,43 | | 40,2x,03 | 00-40-7F | MOD LFO Rate | -64-+63 |
| 01,nn,44 | 08,nn,20 | 40,2x,04 | 00-7F | MOD LFO Pitch Depth | 0-127 |
| 01,nn,45 | 08,nn,21 | 40,2x,05 | 00-7F | MOD LFO VDF Depth | 0-127 |
| 01,nn,46 | 08,nn,22 | 40,2x,06 | 00-7F | MOD LFO VDA Depth | 0-127 |
| 01,nn,48 | 08,nn,23 | 40,2x,10 | 28-40-58 | Bend Pitch Control | -24-0-+24[semitone] |
| 01,nn,49 | 08,nn,24 | 40,2x,11 | 00-40-7F | Bend Filt Control | -64-+63 |
| 01,nn,4A | 08,nn,25 | 40,2x,12 | 00-40-7F | Bend Amp Control | -64-+63 |
| 01,nn,4B | | 40,2x,13 | 00-40-7F | Bend LFO Rate | -64-+63 |
| 01,nn,4C | 08,nn,26 | 40,2x,14 | 00-7F | Bend LFO PitchDepth | 0-127 |
| 01,nn,4D | 08,nn,27 | 40,2x,15 | 00-7F | Bend LFO VDF Depth | 0-127 |
| 01,nn,4E | 08,nn,28 | 40,2x,16 | 00-7F | Bend LFO VDA Depth | 0-127 |
| 01,nn,50 | 08,nn,4D | 40,2x,20 | 28-40-58 | CAf Pitch Control | -24-0-+24[semitone] |
| 01,nn,51 | 08,nn,4E | 40,2x,21 | 00-40-7F | CAf Filt Control | -64-+63 |
| 01,nn,52 | 08,nn,4F | 40,2x,22 | 00-40-7F | CAf Amp Control | -64-+63 |
| 01,nn,53 | | 40,2x,23 | 00-40-7F | CAf LFO Rate | -64-+63 |
| 01,nn,54 | 08,nn,50 | 40,2x,24 | 00-7F | CAf LFO Pitch Depth | 0-127 |
| 01,nn,55 | 08,nn,51 | 40,2x,25 | 00-7F | CAf LFO VDF Depth | 0-127 |
| 01,nn,56 | 08,nn,52 | 40,2x,26 | 00-7F | CAf LFO VDA Depth | 0-127 |
| 01,nn,58 | 08,nn,53 | 40,2x,30 | 28-40-58 | PAf Pitch Control | -24-0-+24[semitone] |
| 01,nn,59 | 08,nn,54 | 40,2x,31 | 00-40-7F | PAf Filt Control | -64-+63 |
| 01,nn,5A | 08,nn,55 | 40,2x,32 | 00-40-7F | PAf Amp Control | -64-+63 |
| 01,nn,5B | | 40,2x,33 | 00-40-7F | PAf LFO Rate | -64-+63 |
| 01,nn,5C | 08,nn,56 | 40,2x,34 | 00-7F | PAf LFO Pitch Depth | 0-127 |
| 01,nn,5D | 08,nn,57 | 40,2x,35 | 00-7F | PAf LFO VDF Depth | 0-127 |
| 01,nn,5E | 08,nn,58 | 40,2x,36 | 00-7F | PAf LFO VDA Depth | 0-127 |
| 01,nn,60 | 08,nn,5A | 40,2x,40 | 28-40-58 | AC1 Pitch Control | -24-0-+24[semitone] |
| 01,nn,61 | 08,nn,5B | 40,2x,41 | 00-40-7F | AC1 Filt Control | -64-+63 |
| 01,nn,62 | 08,nn,5C | 40,2x,42 | 00-40-7F | AC1 Amp Control | -64-+63 |
| 01,nn,63 | | 40,2x,43 | 00-40-7F | AC1 LFO Rate | -64-+63 |
| 01,nn,64 | 08,nn,5D | 40,2x,44 | 00-7F | AC1 LFO Pitch Depth | 0-127 |
| 01,nn,65 | 08,nn,5E | 40,2x,45 | 00-7F | AC1 LFO VDF Depth | 0-127 |
| 01,nn,66 | 08,nn,5F | 40,2x,46 | 00-7F | AC1 LFO VDA Depth | 0-127 |
| 01,nn,68 | 08,nn,61 | 40,2x,50 | 28-40-58 | AC2 Pitch Control | -24-0-+24[semitone] |
| 01,nn,69 | 08,nn,62 | 40,2x,51 | 00-40-7F | AC2 Filt Control | -64-0-63 |
| 01,nn,6A | 08,nn,63 | 40,2x,52 | 00-40-7F | AC2 Amp Control | -64-0-63 |
| 01,nn,6B | | 40,2x,53 | 00-40-7F | AC2 LFO Rate | -64-0-63 |
| 01,nn,6C | 08,nn,64 | 40,2x,54 | 00-7F | AC2 LFO Pitch Depth | 0-127 |
| 01,nn,6D | 08,nn,65 | 40,2x,55 | 00=7F | AC2 LFO VDF Depth | 0-127 |
| 01,nn,6E | 08,nn,66 | 40,2x,56 | 00-7F | AC2 LFO VDA Depth | 0-127 |
| 01,nn,70 | 08,nn,67 | | 00-01 | Portamento Switch | 0=OFF, 1=ON |
| 01,nn,71 | 08,nn,68 | | 00-7F | Portamento Time | 0-127 |
| 01,nn,72 | 08,nn,69 | | 00-40-7F | Pitch EG Stt. Level | -64-0-63 |
| 01,nn,73 | 08,nn,6A | | 00-40-7F | Pitch EG Att. Time | -64-0-63 |
| 01,nn,74 | 08,nn,6B | | 00-40-7F | Pitch EG Rel. Level | -64-0-63 |
| 01,nn,75 | 08,nn,6C | | 00-40-7F | Pitch EG Rel. Time | -64-0-63 |
| 01,nn,76 | 08,nn,6D | | 01-7F | Vel. Window Bottom | 1-127 |
| 01,nn,77 | 08,nn,6E | | 01-7F | Vel. Window Top | 1-127 |

nn = Part Number

00h = Part 01
01h = Part 02
. .
. .
1Fh = Part 32

x = GS Block Number
Type [40,**,**] Type [50,**,**]
0 = Part 10 0 = Part 26
1 = Part 1 1 = Part 17
2 = Part 2 2 = Part 18
. .
. .
9 = Part 9 9 = Part 32

* CAf = Channel After Touch
* PAf = Polyphonic After Touch
* AC1 = Assignable Controller 1
* AC2 = Assignable Controller 2

<Drum Parameters>

| [NS5R] | [ XG ] | [ GS ] | [Value] | [Description] | | |
|---|---|---|---|---|---|---|
| 3n,rr,00 | 3n,rr,00 | | 00-40-7F | Coarse Tune | -64-0-+63[semitone] | NRPN#24:rr(MSB) |
| 3n,rr,01 | 3n,rr,01 | | 00-40-7F | Fine Tune | -64-0-+63[cent] | NRPN#25:rr(MSB) |
| 3n,rr,02 | 3n,rr,02 | 41,m2,rr | 00-7F | Level | 0-127 | NRPN#26:rr(MSB) |
| 3n,rr,03 | 3n,rr,03 | 41,m3,rr | 00-7F | Excl Group | 0=OFF,1-127 | |
| 3n,rr,04 | 3n,rr,04 | 41,m4,rr | 00-40-7F | Panpot | 0,1-64-127 (RND,L63-CNT-R63) | NRPN#28:rr(MSB) |
| 3n,rr,05 | 3n,rr,05 | 41,m5,rr | 00-7F | Reverb Send | 0-127 | NRPN#29:rr(MSB) |
| 3n,rr,06 | 3n,rr,06 | 41,m6,rr | 00-7F | Chorus Send | 0-127 | NRPN#30:rr(MSB) |
| 3n,rr,08 | 3n,rr,08 | | 00-01 | Key Assign Mode | 0=Single, 1=Multi | |
| 3n,rr,09 | 3n,rr,09 | 41,m7,rr | 00-01 | Receive Note OFF | 0=OFF, 1=ON | |
| 3n,rr,0A | 3n,rr,0A | 41,m8,rr | 00=01 | Receive Note ON | 0=OFF, 1=ON | |
| 3n,rr,0B | 3n,rr,0B | | 00-40-7F | Cutoff | -64-0-+63 | NRPN#20:rr(MSB) |
| 3n,rr,0C | 3n,rr,0C | | 00-40-7F | Color | -64-0-+63 | NRPN#21:rr(MSB) |
| 3n,rr,0D | 3n,rr,0D | | 00-40-7F | Attack Time | -64-0-+63 | NRPN#22:rr(MSB) |
| 3n,rr,0E | 3n,rr,0E | | 00-40-7F | Decay time | -64-0-+63 | NRPN#23:rr(MSB) |

* m=MDrm1~2(0~1)
* n=MDrm1~4(0~3)
* rr=note number(0Ch~6Ch='C0'~'C8')

<Display>

NS5R EXCL: F0,42,3n,42,12,a1,a2,a3,dd...F7
XG EXCL: F0,43,1n,4C,a1,a2,a3,dd...F7
GS EXCL: F0,41,1x,45,12,a1,a2,a3,dd...,ss,F7

| [NS5R] | [ XG ] | [ GS ] | [Value] | [Description] | |
|---|---|---|---|---|---|
| 08,00,00 | 06,00,00 | 10,00,00 | 20-7F | Display Letter 0 | (max 32 chars) |
| 08,00,1F | 06,00,1F | 10,00,1F | 20-7F | Display Letter 31 | |
| — | 07,00,00 | | 00-7F | Display Bitmap Data 0 | (16 x 16 dots) |
| — | 07,00,2F | | 00-7F | Display Bitmap Data 47 | (16 x 16 dots) |
| — | | 10,0p,40 | 00-1F | Display Bitmap Data 0 | |
| — | | 10,0p,7F | 00-1F | Display Bitmap Data 63 | |
| 08,00,20 | | | 00-7F | Display Bitmap Data 0 | (32 x 16 dots) |
| 08,00,7F | | | 00-7F | Display Bitmap Data 79 | |

```
*************************************************************************
*  6. Write Request (Rx)                                                *
*     format: F0,42,3n,42,cc,11,F7                                      *
*           n  = EXCL Channel (0-F)                                     *
*           cc = command                                                *
*           ll = destination No.                                        *
*************************************************************************
```

| <cc> | <Rx reply> | <Rx when> |
|---|---|---|
| 41h. Program Write | Success/Error | Prog Edit Mode |
| 42h. Combination Write | Success/Error | Combi Edit Mode |
| 43h. Drum Write | Success/Error | Drum Edit Mode |
| 44h. Effect Write | Success/Error | Effect Edit Mode |
| 45h. Multi Write | Success/Error | Multi Mode |

```
*************************************************************************
*  7. Exclusive Reply (Tx)                                              *
*     format: F0,42,3n,42,0E,rr,dd,F7                                   *
*           n  = EXCL Channel (0-F)                                     *
*           rr = reply answer                                           *
*           dd = received EXCL command No.                              *
*************************************************************************
```

| <rr> | <Tx when> |
|---|---|
| 00h. Success END | Dump Receive Success |
| 01h. Checksum Error | Receive Dump/KORG Frme Draw Data |
| 02h. Invalid conditions | Write Protect. etc.. |
| 03h. Invalid value | Invalid Value |

( No reply when an unknown format command received... )

```
*************************************************************************
*  8. Parameter Change (Rx)                                             *
*     format: F0,42,3n,42,08,ll,mm,dd,ee,F7                             *
*           n  = EXCL Channel (0-F)                                     *
*           ll = parameter No. LSB                                      *
*           mm = parameter No. MSB                                      *
*           dd = data LSB (value bit0- 6)                               *
*           ee = data MSB (value bit7-13)                               *
*************************************************************************
```

<Receive/Transmit in Edit Mode>

| | |
|---|---|
| Multi Mode | : Multi Utility Control |
| Global Mode | : Global Parameter Change |
| Program Edit Mode | : Program Parameter Change |
| Combination Edit Mode | : Combination Parameter Change |
| Drumkit Edit Mode | : Drumkit Parameter Change |
| Effect Edit Mode | : Effect Parameter Change |

<Multi Mode Parameter Change>
<Parameter No.(MSB) = 0>

| ParamNo.(LSB) | name | value | description |
|---|---|---|---|
| 0 | Change Part | 0-31 | Part Number(0=Part1-31=Part32) |
| 1 | Select Multi | 0-3 | Backup Multi Number (0:Multi1 ... 3:Multi4) |

<Global Mode Parameter Change>
<Parameter No.(MSB) = 0>

| ParamNo.(LSB) | name | offset | value | description |
|---|---|---|---|---|
| 0 | PC/IF BPS | 0 | 0,1 | 0=31.25, 1=38.4 |
| 1 | Bank Map Type | 1 | 0,1 | 0=XG/GS, 1=05R/W |
| 2 | Exclusive Channel | 2 | 0-15 | Channel 1-16 |
| 3 | Prog MemProtect | 3(bit0) | 0,1 | 0=OFF, 1=ON |
| 4 | Combi MemProtect | 3(bit1) | 0,1 | 0=OFF, 1=ON |
| 5 | Drumkit MemProtect | 3(bit2) | 0,1 | 0=OFF, 1=ON |
| 6 | Effect MemProtect | 3(bit3) | 0,1 | 0=OFF, 1=ON |
| 7 | Boot by Multi Set #1 | 3(bit4) | 0,1 | 0=OFF, 1=ON |
| 8 | PC/IF setting | 3(bit5) | 0,1 | 0=Native, 1=Emulate |
| 9 | GM_ON Back Color | 4(bit0) | 0,1 | 0=Green, 1=Orange |
| 10 | GS_Reset Back Color | 4(bit1) | 0,1 | 0=Green, 1=Orange |
| 11 | XG_ON Back Color | 4(bit2) | 0,1 | 0=Green, 1=Orange |
| 12 | Receive GM_ON SW | 5(bit0) | 0,1 | 0=OFF, 1=ON |
| 13 | Receive GS_Reset SW | 5(bit1) | 0,1 | 0=OFF, 1=ON |
| 14 | Receive XG_ON SW | 5(bit2) | 0,1 | 0=OFF, 1=ON |
| 15 | Tone ON Key Note | 6 | 0-11 | 'C'-'B' |
| 16 | Tone ON Key Velocity | 7 | 1-127 | 1-127 |
| 17 | LCD contrast | 8 | 0-31 | 1-32 |
| 18 | Effect Follow | 9 | 0,1-32 | 0=OFF,1-32=Part1-32 |

<Program Edit Mode Parameter Change>

| Parameter No.(MSB) | |
|---|---|
| 0 | Program Name,OSC Mode |
| 1 | OSC 1 |
| 2 | OSC 2 |

<Parameter No.(MSB) = 0>

| ParameterNo.(LSB) | name | offset | value | description |
|---|---|---|---|---|
| 0 | Program Name | 0 | 20h~7Fh | ASCII character |
| . | . | . | . | . |
| . | . | . | . | . |
| 9 | Program Name | 9 | 20h~7Fh | ASCII character |
| 10 | OSC Mode | 10 | 0~3 | 0:Single Prog<br>1:Double Prog<br>2:Drum |
| 11 | Own FX BankMSB | 11 | 0~127 | -> See Table 6-2. |
| 12 | Own FX BankLSB | 12 | 0~127 | -> See Table 6-2. |
| 13 | Own FX Number | 13 | 0~127 | -> See Table 6-2. |

<Parameter No.(MSB) = 1(OSC1) >

| ParamNo.(LSB) | name | offset | value | description |
|---|---|---|---|---|
| **Oscillator 1** | | | | |
| 0 | MultiSound No. | 14(MSB)<br>15(LSB) | 0-527 | |
| 1 | Octave | 16 | 0~3 (-24,-12,+0,+12) | '32, '16, '8, '4 |
| 2 | OSC Level | 17 | 0~127 | |
| 3 | Coarse Tune | 18 | -12~+12 | [semitone] |
| 4 | Fine Tune | 19 | -99~+99 | [cent] |
| 5 | Pitch Slope | 20 | -10~+20 | -1.0 ~ +2.0 step 0.1 |
| 6 | Vel Win Bottom | 21 | 1~127 | |
| 7 | Vel Win Top | 22 | 1~127 | |
| 8 | OSC Delay Start | 23 | 0~127 | |
| **Pitch MG** | | | | |
| 9 | Wave Form | 24 | 0~ 5 | TRI,SawUp,SawDn,Sqr1,Sqr2,Rnd |
| 10 | Frequency | 25 | 0~127 | |
| 11 | Delay | 26 | 0~127 | |
| 12 | FadeIn | 27 | 0~127 | |
| 13 | Intensity | 28 | 0~127 | |
| **Pitch EG** | | | | |
| 14 | Intensity | 29 | -128~127 | Intensity by Velocity Sense |
| 15 | *Level VelSense* | *30* | *-128~127* | Level by Velocity Sense |
| 16 | Time VelSense | 31 | -128~127 | Time by Velocity Sense |
| 17 | Start Level | 32 | -128~127 | Pitch EG Start Level |
| 18 | Attack Time | 33 | 0~127 | Pitch EG Attack Time |
| 19 | Attack Level | 34 | -128~127 | Pitch EG Attack Level |
| 20 | Decay Time | 35 | 0~127 | Pitch EG Decay Time |
| 21 | Release Time | 36 | 0~127 | Pitch EG Release Time |
| 22 | Release Level | 37 | -128~127 | Pitch EG Release Level |
| **VDF MG** | | | | |
| 23 | Wave Form | 38 | 0~ 5 | TRI,SawUp,SawDown,Sqr1,Sqr2,Randm |
| 24 | Frequency | 39 | 0~127 | |
| 25 | Delay | 40 | 0~127 | |
| 26 | FadeIn | 41 | 0~127 | |
| 27 | Intensity | 42 | 0~127 | |
| 28 | VDF Cutoff | 43 | 0~127 | Cutoff Fc |
| **VDF Keyboard Track** | | | | |
| 29 | Center Key | 44 | 0~127 | C-1 ~ G9 |
| 30 | Traking Mode | 45 | 0~ 3 | OFF,LOW,HIGH,ALL |
| 31 | Fc Intensity | 46 | -128~127 | Cutoff Tracking Intensity |
| 32 | EG Time | 47 | -128~127 | VDF EGTime Tracking Intensity |
| 33 | Att_Time Sw/Pol | 48(bit0,4) | 0,1,2 | 0=OFF,1=ON+,2=ON- (0:OFF/ON, 4:+/-) |
| 34 | Dcy_Time Sw/Pol | 48(bit1,5) | 0,1,2 | 0=OFF,1=ON+,2=ON- (1:OFF/ON, 5:+/-) |
| 35 | Slp_Time Sw/Pol | 48(bit2,6) | 0,1,2 | 0=OFF,1=ON+,2=ON- (2:OFF/ON, 6:+/-) |
| 36 | Rel_Time Sw/Pol | 48(bit3,7) | 0,1,2 | 0=OFF,1=ON+,2=ON- (3:OFF/ON, 7:+/-) |
| **Color** | | | | |
| 37 | Intensity | 49 | 0~127 | |
| 38 | Velocity Sense | 50 | -128~127 | |
| **VDF EG** | | | | |
| 39 | Intensity | 51 | -128~127 | VDF EG Intensity |
| 40 | IntVelSense | 52 | -128~127 | VDF EG Intensity by Velocity |
| 41 | TimeVelSense | 53 | 0~127 | VDF EG Time by Velocity |
| 42 | Att_Time Sw/Pol | 54(bit0,4) | 0,1,2 | 0=OFF,1=ON+,2=ON- (0:OFF/ON, 4:+/-) |
| 43 | Dcy_Time Sw/Pol | 54(bit1,5) | 0,1,2 | 0=OFF,1=ON+,2=ON- (1:OFF/ON, 5:+/-) |
| 44 | Slp_Time Sw/Pol | 54(bit2,6) | 0,1,2 | 0=OFF,1=ON+,2=ON- (2:OFF/ON, 6:+/-) |
| 45 | Rel_Time Sw/Pol | 54(bit3,7) | 0,1,2 | 0=OFF,1=ON+,2=ON- (3:OFF/ON, 7:+/-) |
| 46 | Attack Time | 55 | 0~127 | VDF EG Attack Time |
| 47 | Attack Level | 56 | -128~127 | VDF EG Attack Level |
| 48 | Decay Time | 57 | 0~127 | VDF EG Decay Time |
| 49 | Break Point | 58 | -128~127 | VDF EG Break Point |
| 50 | Slope Time | 59 | 0~127 | VDF EG Slope Time |
| 51 | Sustain Level | 60 | -128~127 | VDF EG Sustain Level |
| 52 | Release Time | 61 | 0~127 | VDF EG Release Time |
| 53 | Release Level | 62 | -128~127 | VDF EG Release Level |
| **VDA MG** | | | | |
| 54 | Wave Form | 63 | 0~ 5 | TRI,SawUp,SawDown,Sqr1,Sqr2,Randm |
| 55 | Frequency | 64 | 0~127 | |
| 56 | Delay | 65 | 0~127 | |
| 57 | FadeIn | 66 | 0~127 | |
| 58 | Intensity | 67 | 0~127 | |
| **VDA Keyboard Track** | | | | |
| 59 | Center Key | 68 | 0~127 | C-1 ~ G9 |
| *60* | *Tracking Mode* | *69* | *0~ 3* | *OFF,LOW,HIGH,ALL* |
| 61 | Amp Intensity | 70 | -128~127 | Amp Tracking Intensity |
| 62 | EG Time | 71 | -128~127 | VDA EGTime Tracking Intensity |
| 63 | Att_Time Sw/Pol | 72(bit0,4) | 0,1,2 | 0=OFF,1=ON+,2=ON- (0:OFF/ON, 4:+/-) |
| 64 | Dcy_Time Sw/Pol | 72(bit1,5) | 0,1,2 | 0=OFF,1=ON+,2=ON- (1:OFF/ON, 5:+/-) |
| 65 | Slp_Time Sw/Pol | 72(bit2,6) | 0,1,2 | 0=OFF,1=ON+,2=ON- (2:OFF/ON, 6:+/-) |
| 66 | Rel_Time Sw/Pol | 72(bit3,7) | 0,1,2 | 0=OFF,1=ON+,2=ON- (3:OFF/ON, 7:+/-) |
| **VDA EG** | | | | |
| 67 | LevelVelSense | 73 | -128~127 | EG Level by Velocity |
| 68 | TimeVelSense | 74 | -128~127 | VDA EG Time by Velocity |
| 69 | Att_Time Sw/Pol | 75(bit0,4) | 0,1,2 | 0=OFF,1=ON+,2=ON- (0:OFF/ON, 4:+/-) |
| 70 | Dcy_Time Sw/Pol | 75(bit1,5) | 0,1,2 | 0=OFF,1=ON+,2=ON- (1:OFF/ON, 5:+/-) |
| 71 | Slp_Time Sw/Pol | 75(bit2,6) | 0,1,2 | 0=OFF,1=ON+,2=ON- (2:OFF/ON, 6:+/-) |
| 72 | Rel_Time Sw/Pol | 75(bit3,7) | 0,1,2 | 0=OFF,1=ON+,2=ON- (3:OFF/ON, 7:+/-) |
| 73 | Attack Time | 76 | 0~127 | VDA EG Attack Time |
| 74 | Attack Level | 77 | 0~127 | VDA EG Attack Level |
| 75 | Decay Time | 78 | 0~127 | VDA EG Decay Time |
| 76 | Break Point | 79 | 0~127 | VDA EG Break Point |
| 77 | Slope Time | 80 | 0~127 | VDA EG Slope Time |
| 78 | Sustain Level | 81 | 0~127 | VDA EG Sustain Level |
| 79 | Release Time | 82 | 0~127 | VDA EG Release Time |
| **Own Effect Parameter** | | | | |
| 80 | Own FX A/B pan | 83 | 1~64~127 | L63-CNT-R63 |
| 81 | Own FX C send | 84 | 0~127 | |
| 82 | Own FX D send | 85 | 0~127 | |

<Parameter No.(MSB) = 2(OSC2) >

| ParamNo.(LSB) | name | offset | value | description |
|---|---|---|---|---|
| **Oscillator 2** | | | | |
| 0 | | 86 | | |
| . | | . | | |
| . | | . | | { same as OSC 1 Parameters } |
| . | | . | | |
| 82 | | 157 | | |

<Combination Edit Mode Parameter Change>

| Parameter No.(MSB) | |
|---|---|
| 0 | Program Name |
| 1 | Timbre 1 |
| 2 | Timbre 2 |
| 3 | Timbre 3 |
| 4 | Timbre 4 |
| 5 | Timbre 5 |
| 6 | Timbre 6 |
| 7 | Timbre 7 |
| 8 | Timbre 8 |

<Parameter No.(MSB) = 0>

| Parameter No. (LSB) | name | value | description |
|---|---|---|---|
| 0 | Program Name | 20h~7Fh | ASCII character |
| . | . | . | . |
| . | . | . | . |
| 9 | Program Name | 20h~7Fh | ASCII character |
| 10 | Own FX BankMSB | | -> See Table 6-2. |
| 11 | Own FX BankLSB | | -> See Table 6-2. |
| 12 | Own FX Number | 00h~7Fh | 001~128 |

<Parameter No.(MSB) = 1~8>

| Parameter No. (LSB) | name | value | description |
|---|---|---|---|
| 0 | Bank No. | 0~74 | -> See following table |
| 1 | Program No. | 0~127 | |
| 2 | Volume | 0~127 | |
| 3 | Panpot | 0,1~64~127 | RND,L63~CNT~R63 |
| 4 | Reverb Send | 0~127 | |
| 5 | Chorus Send | 0~127 | |
| 6 | Note Win Bottom | 0~127 | C-1~G9 |
| 7 | Note Win Top | 0~127 | C-1~G9 |
| 8 | Vel Win Bottom | 1~127 | |
| 9 | Vel Win Top | 1~127 | |
| 10 | Transpose | -24~24(E8h~18h) | [semitone] |
| 11 | Detune | -50~50(CEh~32h) | [cent] |
| 12 | Note ON/OFF SW | 0,1 | 0=OFF 1=ON |
| 13 | CntrolChnge Sw | 0,1 | 0=OFF 1=ON |
| 14 | Pitch Bend Sw | 0,1 | 0=OFF 1=ON |
| 15 | After Touch Sw | 0,1 | 0=OFF 1=ON (Channl/Poly) |
| 16 | Damper Sw | 0,1 | 0=OFF 1=ON |
| 17 | Portamento Sw | 0,1 | 0=OFF 1=ON |

Parameter No.(LSB) = 0 : Bank No.

| | |
|---|---|
| 0 ~ 9 | GM-a, r:01, r:02, r:03, r:04, r:05, r:06, r:07, r:08, r:09 |
| 10 ~19 | r:10, r:11, r:16, r:17, r:18, r:19, r:24, r:25, r:26, r:32 |
| 20 ~29 | r:33, r:40, r:CM, y:01, y:03, y:06, y:08, y:12, y:14, y:16 |
| 30 ~39 | y:17, y:18, y:19, y:20, y:24, y:25, y:27, y:28, y:32, y:33 |
| 40 ~49 | y:34, y:35, y:36, y:37, y:38, y:39, y:40, y:41, y:42, y:43 |
| 50 ~59 | y:45, y:64, y:65, y:66, y:67, y:68, y:69, y:70, y:71, y:72 |
| 60 ~69 | y:96, y:97, y:98, y:99, y100, y101, ySFX, GM-b, PrgU, PrgA |
| 70 ~74 | PrgB, PrgC, yDr2, rDrm, kDrm |

<DrumKit Edit Mode Parameter Change>

| Parameter No.(MSB) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | C0~ | C1~ | C2~ | C3~ | C4~ | C5~ | C6~ | C7~ | C8~ |
| C | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 |
| C# | 13 | 25 | 37 | 49 | 61 | 73 | 85 | 97 | - |
| D | 14 | 26 | 38 | 50 | 62 | 74 | 86 | 98 | - |
| D# | 15 | 27 | 39 | 51 | 63 | 75 | 87 | 99 | - |
| E | 16 | 28 | 40 | 52 | 64 | 76 | 88 | 100 | - |
| F | 17 | 29 | 41 | 53 | 65 | 77 | 89 | 101 | - |
| F# | 18 | 30 | 42 | 54 | 66 | 78 | 90 | 102 | - |
| G | 19 | 31 | 43 | 55 | 67 | 79 | 91 | 103 | - |
| G# | 20 | 32 | 44 | 56 | 68 | 80 | 92 | 104 | - |
| A | 21 | 33 | 45 | 57 | 69 | 81 | 93 | 105 | - |
| A# | 22 | 34 | 46 | 58 | 70 | 82 | 94 | 106 | - |
| B | 23 | 35 | 47 | 59 | 71 | 83 | 95 | 107 | - |

| ParamNo.(LSB) | name | description |
|---|---|---|
| 0 | Instrument No. | 0~285 |
| 1 | Coarse Tune | -64~+63 [Semitone] |
| 2 | Fine Tune | -64~+63 [Cent] |
| 3 | Level | 0~127 |
| 4 | Exclusive Group | 0=OFF, 1..127=Group No. |
| 5 | Note ON Switch | 0=OFF 1=ON |
| 6 | Note OFF Switch | 0=OFF 1=ON |
| 7 | Aasign Mode | 0=Single 1=Multi |
| 8 | Relative Cutoff | -64~63 |
| 9 | Relative Color | -64~63 |
| 10 | Rel Attack Time | -64~63 |
| 11 | Rel Decay Time | -64~63 |
| 12 | Panpot | 0=Random,1=L63~64=CNT~127=R63 |
| 13 | Reverb Send | 0~127 |
| 14 | Chorus Send | 0~127 |

<Effect Edit Mode Parameter Change>
<Parameter No.(MSB) = 0>

| ParameterNo.(LSB) | name | value | description |
|---|---|---|---|
| 0~7 | Effect Name | 20h~7Fh | |
| 8 | Effect 1 Type | 0,1~47 | OFF,1~47 |
| 9 | Effect 2 Type | 0,1~47 | OFF,1~47 |
| 10 | Effect 1 OFF/ON | 0,1 | OFF,ON |
| 11 | Effect 2 OFF/ON | 0,1 | OFF,ON |
| 12 | Out-3 Pan(seri,para1/2) | 0,1~101 | OFF,R~L |
| 13 | Out-4 Pan(seri,para1/2) | 0,1~101 | OFF,R~L |
| 14 | Out-1 Level L(para3) | 0~9 | |
| 15 | Out-1 Level R(para3) | 0~9 | |
| 16 | Out-2 Level L(para3) | 0~9 | |
| 17 | Out-2 Level R(para3) | 0~9 | |
| 18 | Effect Placement | 0~3 | |

<Effect 1 Parameter : Parameter No.(MSB) = 1>

| ParameterNo.(LSB) | name | value | description |
|---|---|---|---|
| 0 | Dynamic Mod Source | 0~6 | NONE,JS(+Y),JS(-Y),AFTR.T PEDAL1,PEDAL2,VDA-EG |
| 1 | Dynamic Mod Depth | -15~15 | |
| 2 | DRY:EFF Balance 1 | 0~100 | DRY~EFF (Fx:1~47) |
| 3 | DRY:EFF Balance 2 | 0~100 | DRY~EFF (Fx:40~43,46,47) |
| 4 | Parameter 1 | | -> See Table 2. |
| 5 | Parameter 2 | | (47 Effect Parameters) |
| 6 | Parameter 3 | | |
| 7 | Parameter 4 | | |
| 8 | Parameter 5 | | |
| 9 | Parameter 6 | | |
| 10 | Parameter 7 | | |
| 11 | Parameter 8 | | |

<Effect 2 Parameter : Parameter No.(MSB) = 2>

| ParameterNo.(LSB) | name | value | description |
|---|---|---|---|
| 0 | Dynamic Mod Source | 0~6 | NONE,JS(+Y),JS(-Y),AFTR.T PEDAL1,PEDAL2,VDA-EG |
| 1 | Dynamic Mod Depth | -15~15 | |
| 2 | DRY:EFF Balance 1 | 0~100 | DRY~EFF (Fx:1~47) |
| 3 | DRY:EFF Balance 2 | 0~100 | DRY~EFF (Fx:40~43,46,47) |
| 4 | Parameter 1 | | -> See Table 2. |
| 5 | Parameter 2 | | (47 Effect Parameters) |
| 6 | Parameter 3 | | |
| 7 | Parameter 4 | | |
| 8 | Parameter 5 | | |
| 9 | Parameter 6 | | |
| 10 | Parameter 7 | | |
| 11 | Parameter 8 | | |

```
*************************************************************************
* 9. LCD BackLight Color (Rx)                                           *
*    format: F0,42,3n,42,7D,vv,F7                                       *
*          n  = EXCL Channel (0~F)                                      *
*          vv = Color (0=Green, 1=Orange, 2=Red)                        *
*************************************************************************
```

| <rr> | | <Rx when> |
|---|---|---|
| 00h. | BackLight Green | Always |
| 01h. | BackLight Orange | Always |
| 02h. | BackLight Red | Always |

```
*************************************************************************
* 10. Remote Switch (Rx)                                                *
*     format: F0,42,3n,42,7E,rr,F7                                      *
*           n  = EXCL Channel (0~F)                                     *
*           rr = SW No.(value)                                          *
*************************************************************************
```

| <rr> | | <Rx when> |
|---|---|---|
| 01h. | Tone ON | Always |
| 02h. | Tone OFF | Always |
| 03h. | Page/Part- | Always |
| 04h. | Page/Part+ | Always |
| 05h. | Param- | Always |
| 06h. | Param+ | Always |
| 07h. | Demo/Compare | Always |
| 08h. | Mute/Write | Always |
| 09h. | Disp/Exit | Always |
| 0Ah. | Edit | Always |
| 0Bh. | Full Edit | Always |
| 10~47h. | Encoder -56 ~ -1 | Always |
| 48~7Fh. | Encoder +1 ~ +56 | Always |

```
*************************************************************************
* 11. 05R/W Multi SetUp(Compatible) (Rx)                                *
*     format: F0,42,3n,36,55,00,dd....,F7                               *
*           n  = EXCL Channel (0~F)                                     *
*           dd = data (7~8) 29byte -> 34byte                            *
*************************************************************************
```

| | <reply> | <Rx when> |
|---|---|---|
| Multi Setup Dump(05R/W) | None | Multi Mode |

## Table 2: 47 Type of Effect Parameters ( 8 byte )

### Type 01:Hall, 02:Ens.Hall, 03:ConcertHL

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Reverb Time | 0.2~9.9[sec] | 00..61 |
| 2 (06) | High Damp | 0~99[%] | 00..63 |
| 3 (07) | Pre Delay | 0~200[ms] | 00..C8 |
| 4 (08) | E.R Level | 0~99 | 00..63 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 04:Room, 05:LargeRoom, 06:LiveStage

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Reverb Time | 0.2~4.9[sec] | 00..2F |
| 2 (06) | High Damp | 0~99[%] | 00..63 |
| 3 (07) | Pre Delay | 0~200[ms] | 00..C8 |
| 4 (08) | E.R Level | 0~99 | 00..63 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 07:WetPlate, 08:DryPlate, 09:Spring

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Pre Delay | 0~200[ms] | 00..C8 |
| 2 (06) | E.R Level | 1~10 | 01..0A |
| 3 (07) | Reverb Time | 00~99 | 00..63 |
| 4 (08) | High Damp | 0~99[%] | 00..63 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

### Type 10:EarlyRef1, 11:EarlyRef2, 12:EarlyRef3

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | E.R Time | 100..800 | 00..46 |
| 1 (05) | Pre Delay | 0~200[ms] | 00..C8 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 13:StereoDelay, 14:CrossDelay

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime L(Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime L(Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | High Damp | 0~99[%] | 00..63 |
| 4 (08) | DelayTime R(Lo) | 000..500 | 00..1F4 |
| 5 (09) | DelayTime R(Hi) | | |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 15:DualDelay

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime L(Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime L(Hi) | | |
| 2 (06) | FeedBack L | -99..+99 | 9D..63 |
| 3 (07) | High Damp L | 0~99[%] | 00..63 |
| 4 (08) | DelayTime R(Lo) | 000..500 | 00..1F4 |
| 5 (09) | DelayTime R(Hi) | | |
| 6 (10) | FeedBack R | -99..+99 | 9D..63 |
| 7 (11) | High Damp R | 0~99[%] | 00..63 |

### Type 16:M.TapDly1, 17:M.TapDly2, 18:M.TapDly3

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime 1(Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime 1(Hi) | | |
| 2 (06) | DelayTime 2(Lo) | 000..500 | 00..1F4 |
| 3 (07) | DelayTime 2(Hi) | | |
| 4 (08) | FeedBack | -99..+99 | 9D..63 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

### Type 19:Chorus1, 20:Chorus2

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Mod Depth | 00..99 | 00..63 |
| 1 (05) | Mod Speed | *1 | 00..D8 |
| 2 (06) | MG Status | *2 | **** |
| 4 (08) | Delay Time | 00..200 | 00..C8 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

*1 00h..63h : 0.03...3.00 ( 0.03 Step )
64h..C7h : 3.1...13.0 ( 0.1 Step )
C8h..D8h : 14 ...30 ( 1 Step )

*2 bit0=Mod.WaveForm(0:SIN,1:TRI)
bit1=Phase(1:180[deg]-fixed)
bit2=Mod.WaveShape(0:Chorus)

### Type 21:Quad.Chorus, 22:XOverChorus

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime L | 000..250 | 00..FA |
| 1 (05) | DelayTime L | 000..250 | 00..FA |
| 2 (06) | Mod Speed | 01..99 | 01..63 |
| 3 (07) | Mod Depth | 00..99 | 00..63 |
| 4 (08) | Mod WaveForm | *3 | EB..14 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

*3 EBh(T+10), EFh(T+9), EEh(T+8)... FEh(T-9), FFh(T-10),
00(S-10), 01h(S-9), 02h(S-8)... 13h(S+9), 14h(S+10).

### Type 23:Harm.Chorus

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime L(Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime L(Hi) | | |
| 2 (06) | DelayTime R(Lo) | 000..500 | 00..1F4 |
| 3 (07) | DelayTime R(Hi) | | |
| 4 (08) | Mod Speed | 01..99 | 01..63 |
| 5 (09) | Mod Depth | 00..99 | 00..63 |
| 6 (10) | Filt.SplitPoint | 00..18 | 00..12 |

### Type 24:Sym.Ensemble

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Mod Depth | 00..99 | 00..63 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 25:Flanger1, 26:Flanger2, 27:XOverFlngr

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Delay Time | 00..200 | 00..C8 |
| 1 (05) | Mod Depth | 00..99 | 00..63 |
| 2 (06) | Mod Speed | 01..99 | 01..63 |
| 3 (07) | Resonance | -99..99 | 9D..63 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

### Type 28:Exciter

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Blend | -99..99 | 9D..63 |
| 1 (05) | Emphatic Point | 01..10 | 01..0A |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

### Type 29:Enhancer

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Harmonic Density | 01..99 | 01..63 |
| 1 (05) | Hot Spot | 01..20 | 01..14 |
| 2 (06) | Stereo Width | 00..99 | 00..63 |
| 3 (07) | Delay | 01..99 | 01..63 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

### Type 30:Distortion, 31:Over Drive

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Drive(Edge) | 01..111 | 01..6F |
| 1 (05) | Hot Spot | 00..99 | 00..63 |
| 2 (06) | Resonance | 00..99 | 00..63 |
| 3 (07) | Out Level | 00..99 | 00..63 |
| 6 (10) | EQ.Low | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.High | -12~+12[dB] | F4..0C |

### Type 32:Phaser , 33:Phaser 2

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Mod Depth | 00..99 | 00..63 |
| 1 (05) | Mod Speed | *1 | 00..D8 |
| 2 (06) | MG Status | *2 | **** |
| 3 (07) | FeedBack | -99..99 | 9D..63 |
| 4 (08) | Manual | 00..99 | 00..63 |

*1 00h..63h : 0.03...3.00 ( 0.03 Step )
64h..C7h : 3.1...13.0 ( 0.1 Step )
C8h..D8h : 14 ...30 ( 1 Step )

*2 bit0=Mod.WaveForm(0:SIN,1:TRI)
bit1=Phase(0:0[deg](Phaser 2), 1:180[deg](Phaser 1))
bit2=Mod.WaveShape(0-fixed)

### Type 34:Rotary Speaker

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Vibrato Depth | 00..15 | 00..0F |
| 1 (05) | Acceleration | 01..15 | 01..0F |
| 2 (06) | Slow Speed | 01..99 | 01..63 |
| 3 (07) | Fast Speed | 01..99 | 01..63 |

### Type 35:Auto Pan, 36:Tremolo

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Depth | 00..99 | 00..63 |
| 1 (05) | Speed | *1 | 00..D8 |
| 2 (06) | MG Status | *2 | **** |
| 3 (07) | Shape | -99..99 | 9D..63 |
| 6 (10) | EQ.High | -12~+12[dB] | F4..0C |
| 7 (11) | EQ.Low | -12~+12[dB] | F4..0C |

*1 00h..63h : 0.03...3.00 ( 0.03 Step )
64h..C7h : 3.1...13.0 ( 0.1 Step )
C8h..D8h : 14 ...30 ( 1 Step )

*2 bit0=Mod.WaveForm(0:SIN,1:TRI)
bit1=Phase(0:0[deg](Tremolo), 1:180[deg](Auto Pan))
bit2=Mod.WaveShape(0-fixed)

Type 37:Para.EQ

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Low Freq | 00..29 | 00..1D |
| 1 (05) | Low Gain | -12..12 | F4..0C |
| 2 (06) | Mid Freq | 00..29 | 00..1D |
| 3 (07) | Mid Gain | -12..12 | F4..0C |
| 4 (08) | Mid Width | 00..99 | 00..63 |
| 5 (09) | High Freq | 00..29 | 00..1D |
| 6 (10) | High Gain | -12..12 | F4..0C |

Type 38:Chorus-Delay, 39:Flanger-Delay

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | Cho.DelayTime | 00..50 | 00..32 |
| 1 (05) | Cho.ModSpeed | 01..99 | 01..63 |
| 2 (06) | Cho.ModDepth | 00..99 | 00..63 |
| 3 (07) | Cho.Feedback | -99..99 | 9D..63 |
| 4 (08) | Dly.DelayTime | 00..450 | 00..E1 |
| 5 (09) | Dly.Feedback | -99..99 | 9D..63 |

Type 40:Delay/Hall

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | High Damp | 0~99[%] | 00..63 |
| 4 (08) | Reverb Time | 0.2~9.9[sec] | 00..61 |
| 6 (10) | High Damp | 0~99[%] | 00..63 |
| 7 (11) | Pre Delay | 0~150[ms] | 00..96 |

Type 41:Delay/Room

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Hi Damp | 0~99[%] | 00..63 |
| 4 (08) | Reverb Time | 0.2~4.9[sec] | 00..2F |
| 6 (10) | Hi Damp | 0~99[%] | 00..63 |
| 7 (11) | Pre Delay | 0~150[ms] | 00..96 |

Type 42:Delay/Chorus

| *Offset(ParaNo.LSB)* | *name* | *value* | *data(Hex)* |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Hi Damp | 0~99[%] | 00..63 |
| 4 (08) | Mod Depth | 00..99 | 00..63 |
| 5 (09) | Mod Speed | *1 | 00..D8 |
| 6 (10) | MG Status | *2 | **** |

*1,*2 See *Type19:Chorus 1*.

*Type 43:Delay/Flanger*

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Hi Damp | 0~99[%] | 00..63 |
| 4 (08) | Mod Depth | 00..99 | 00..63 |
| 5 (09) | Mod Speed | *1 | 00..D8 |
| 7 (11) | FeedBack | -99..+99 | 9D..63 |

*1,*2 See *Type19:Chorus 1*.

Type 44:Delay/Distortion, 45:Delay/OverDrive

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Drive(Edge) | 01..111 | 01..6F |
| 4 (08) | Hot Spot | 01..99 | 01..63 |
| 5 (09) | Resonance | 00..99 | 00..63 |
| 6 (10) | Out Level | 01..99 | 01..63 |

Type 46:Delay/Phaser

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Hi Damp | 0~99[%] | 00..63 |
| 4 (08) | Mod Depth | 00..99 | 00..63 |
| 5 (09) | Mod Speed | *1 | 00..D8 |
| 7 (11) | FeedBack | -99..+99 | 9D..63 |

*1 See *Type32:Phaser 1*.

Type 47:Delay/Rotary Spk.

| Offset(ParaNo.LSB) | name | value | data(Hex) |
|---|---|---|---|
| 0 (04) | DelayTime (Lo) | 000..500 | 00..1F4 |
| 1 (05) | DelayTime (Hi) | | |
| 2 (06) | FeedBack | -99..+99 | 9D..63 |
| 3 (07) | Acceleration | 01..15 | 01..0F |
| 4 (08) | Slow Speed | 01..99 | 01..63 |
| 5 (09) | Fast Speed | 01..99 | 01..63 |

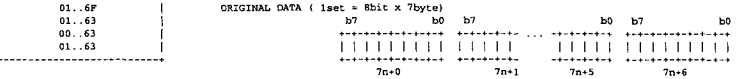
**********

*  Dump Data Format ( 7-8 bit Convert Format )  *

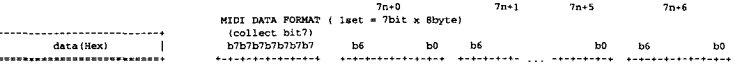
**********

[Dump Data Format]  n = 0, 1, 2, 3, ...

ORIGINAL DATA ( 1set = 8bit x 7byte)




MIDI DATA FORMAT ( 1set = 7bit x 8byte)
(collect bit7)




ex1.) Current Program Dump format
158byte = 7*22+4 --> 8*22+(4+1) = 181byte
Format : F0,42,3n,42,31,d1,d2,d3....dn,sum,F7
|--181byte---|

ex2.) Current Combination Dump format
126byte = 7*18 --> 8*18 = 144byte
Format : F0,42,3n,42,32,d1,d2,d3....dn,sum,F7
|--144byte---|

ex3.) Current DrumKit Dump format
1358byte = 7*194 --> 8*194= 1552
Format : F0,42,3n,42,33,d1,d2,d3....dn,sum,F7
|--1552byte--|

ex4.) All Program Dump format
20224 = 7*2889+1 --> 8*2889+(1+1) = 23114byte
Format : F0,42,3n,42,36,d1,d2,d3....dn,sum,F7
|--23114byte-|

ex5.) All Multi Part Dump format
34264 = 7*1223+5 --> 8*1223+(5+1) = 9790byte
Format : F0,42,3n,42,3A,d1,d2,d3....dn,sum,F7
|--9790byte--|

* sum = ((d1+d2+d3+ ... +dn) * (-1)) & 01111111b

**********

*  Table 3: Global Parameters Dump ( total 10 byte )  *

**********

< Table 3-1 : Global Parameters( 10 byte ) >

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| 00 | BPS Switch | 0...1 | 0:31.25Kbps, 1:38.4Kbps |
| 01 | BankMapType | 0...1 | 0:GS/XG MAP, 1:05R/W MAP |
| 02 | ExclChannel | 0...F | Ch.1~Ch.16 |
| 03 | MemProtect | 00...3F | bit0~3:Memory Protect<br>bit0:Prog( 0=OFF, 1=ON )<br>bit1:Combi( 0=OFF, 1=ON )<br>bit2:Rtt( 0=OFF, 1=ON )<br>bit3:Eff( 0=OFF, 1=ON ) |
| | | (0000 0000b ... 0011 1111b) | |
| | | | bit4:BootOption Sw<br>( 0=None, 1=Load Multi1 ) |
| | | | bit5:Prog to Port Sw<br>( 0=Native, 1=Emulate ) |

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| 04 | BackLight | 0...7 | bit0:GM Mode On Color<br>bit1:GS Reset Color<br>bit2:XG System On Color |
| | | (0000 0000b ...0000 0111b) | ( 0=Green, 1=Orange ) |
| 05 | RxSystemON | 0...7 | bit0:Rx.GM Mode On<br>bit1:Rx.GS Reset<br>bit2:Rx.XG System On |
| | | (0000 0000b ...0000 0111b) | ( 0=OFF, 1=ON ) |
| 06 | ToneNote | 0...B | 0-11 = Note 'C'-'B' |
| 07 | ToneVelo | 00...7F | 0-127 |
| 08 | LCD Contrast | 00...1F | 0-31 |
| 09 | FxFollowSW | 0, 01...20 | 0=OFF, 1-32=ON(Part No.) |

Table 4: Multi Parameters Dump

< Table 4-1 : Part Common Parameters( 152 byte ) >

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| 00 | MasterTune | 0000...07FF | -1024-0-+1023 |
| 02 | MasterVolume | 00...7F | 0-127 |
| 03 | MasterKeyShift | 28-40-58 | -24-0-+24 [semitone] |
| 04 | MasterBalance | 01-40-7F | L63-CNT-R63 |
| 05 | MasterFxBankMSB | 00(Only) | -> See Table 6-2. |
| 06 | MasterFxBankLSB | 00...7F | -> See Table 6-2. |
| 07 | MasterEffectProg | 00...7F | 1-128<br>(Effect Set No.) |
| 08 | MIDItoPort 01 | 0...2 | 0:A, 1:B, 2:C(DB) |
| 09 | MIDItoPort 02 | 0...2 | 0:A, 1:B, 2:C(DB) |
| . | . | | . |
| . | . | | . |
| . | . | | . |
| 17 | MIDItoPort 16 | 0...2 | 0:A, 1:B, 2:C(DB) |
| 18 | ProgChgtoPort001 | 0...3 | 0:A, 1:B, 2:C(DB), 3:Ignore |
| 19 | ProgChgtoPort002 | 0...3 | 0:A, 1:B, 2:C(DB), 3:Ignore |
| . | . | | . |
| . | . | | . |
| . | . | | . |
| 97 | ProgChgtoPort128 | 0...3 | 0:A, 1:B, 2:C(DB), 3:Ignore |

< Table 4-2 : Part Parameters( 92 byte/part : total 2,944 byte ) >

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| | Part 01 Parameters | | |
| 00 | BankMSB | 00...7F | -> See ProgName list |
| 01 | BankLSB | 00...7F | -> See ProgName list |
| 02 | ProgNo | 00...7F | -> See ProgName list |
| 03 | RxMIDICh | 00...0F, 10...1F,20 | Ch.A01...16,<br>Ch.B01...16,OFF |
| 04 | RxSwitch (2 byte) | 0...1 | 0:OFF, 1:ON<br>bit0:RxNoteOnOff<br>bit1:RxControlChg<br>bit2:RxPitchBend<br>bit3:RxChanAfter<br>bit4:RxDamper<br>bit5:RxPortamento<br>bit6:RxProgChg<br>bit7:RxPolyAfter |
| 05 | | | bit0:RxRPN<br>bit1:RxNRPN<br>bit2:RxModulation<br>bit3:RxVolume<br>bit4:RxPanpot<br>bit5:RxExpression<br>bit6:RxSostenute<br>bit7:RxSoftPedal |
| 06 | MONOPOLY | 0...1 | 0=Mono, 1=Poly |
| 07 | PartMode | 0...5 | 0=Normal,1=Drum,<br>2..5=MIDImi...4 |
| 08 | CoarseTune | 28..40..58 | -24-0-+24 [semitone] |
| 09 | FineTune | 80..00..7F | -128-0-127<br>( -12.8[Hz]-+12.7[Hz] ) |
| 0A | Volume | 00...7F | 000...127 |
| 0B | Expression | 00...7F | 000...127 |
| 0C | VelDepth | 00...7F | 000...127 |
| 0D | VelOffset | 00...7F | 000...127 |
| 0E | Panpot | 0,1..40..7F | RND,L63-CNT-R63 |
| 0F | NoteBottom | 00...7F | 0-127 = C-1-G9 |
| 10 | NoteTop | 00...7F | 0-127 = C-1-G9 |
| 11 | AC1Number | 00...5F | 0-95: Control No. |
| 12 | AC2Number | 00...5F | 0-95: Control No. |
| 13 | ChoSend | 00...7F | 000...127 |
| 14 | RevSend | 00...7F | 000...127 |
| 15 | RxBankSelect | 0...1 | 0=OFF, 1=ON |
| 16 | VibFrequency | 00..40..7F | -64..00..+63 |
| 17 | VibIntensity | 00..40..7F | -64..00..+63 |
| 18 | VibDelay | 00..40..7F | -64..00..+63 |
| 19 | CutoffFreq | 00..40..7F | -64..00..+63 |
| 1A | Color | 00..40..7F | -64..00..+63 |
| 1B | EGAttackTime | 00..40..7F | -64..00..+63 |
| 1C | EGDecayTime | 00..40..7F | -64..00..+63 |
| 1D | EGReleaseTime | 00..40..7F | -64..00..+63 |
| 1E | Scale C | 00..40..7F | -64..+63[cent] |
| 1F | Scale C♯ | 00..40..7F | -64..+63[cent] |
| 20 | Scale D | 00..40..7F | -64..+63[cent] |
| 21 | Scale D♯ | 00..40..7F | -64..+63[cent] |
| 22 | Scale E | 00..40..7F | -64..+63[cent] |
| 23 | Scale F | 00..40..7F | -64..+63[cent] |
| 24 | Scale F♯ | 00..40..7F | -64..+63[cent] |
| 25 | Scale G | 00..40..7F | -64..+63[cent] |
| 26 | Scale G♯ | 00..40..7F | -64..+63[cent] |
| 27 | Scale A | 00..40..7F | -64..+63[cent] |
| 28 | Scale A♯ | 00..40..7F | -64..+63[cent] |
| 29 | Scale B | 00..40..7F | -64..+63[cent] |
| 2A | MOD Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 2B | MOD VDF | 00..40..7F | -64-0-+63 |
| 2C | MOD VDA | 00..40..7F | -64-0-+63 |
| 2D | MOD LFO Freq | 00..40..7F | -64-0-+63 |
| 2E | MOD LFO Pitch | 00...7F | 000...127 |
| 2F | MOD LFO VDF | 00...7F | 000...127 |
| 30 | MOD LFO VDA | 00...7F | 000...127 |
| 31 | BEND Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 32 | BEND VDF | 00..40..7F | -64-0-+63 |
| 33 | BEND VDA | 00..40..7F | -64-0-+63 |
| 34 | BEND LFO Freq | 00..40..7F | -64-0-+63 |
| 35 | BEND LFO Pitch | 00...7F | 000...127 |
| 36 | BEND LFO VDF | 00...7F | 000...127 |
| 37 | BEND LFO VDA | 00...7F | 000...127 |
| 38 | CAf Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 39 | CAf VDF | 00..40..7F | -64-0-+63 |
| 3A | CAf VDA | 00..40..7F | -64-0-+63 |
| 3B | CAf LFO Freq | 00..40..7F | -64-0-+63 |
| 3C | CAf LFO Pitch | 00...7F | 000...127 |
| 3D | CAf LFO VDF | 00...7F | 000...127 |
| 3E | CAf LFO VDA | 00...7F | 000...127 |
| 3F | PAf Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 40 | PAf VDF | 00..40..7F | -64-0-+63 |
| 41 | PAf VDA | 00..40..7F | -64-0-+63 |
| 42 | PAf LFO Freq | 00..40..7F | -64-0-+63 |
| 43 | PAf LFO Pitch | 00...7F | 000...127 |
| 44 | PAf LFO VDF | 00...7F | 000...127 |
| 45 | PAf LFO VDA | 00...7F | 000...127 |
| 46 | AC1 Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 47 | AC1 VDF | 00..40..7F | -64-0-+63 |
| 48 | AC1 VDA | 00..40..7F | -64-0-+63 |
| 49 | AC1 LFO Freq | 00..40..7F | -64-0-+63 |
| 4A | AC1 LFO Pitch | 00...7F | 000...127 |
| 4B | AC1 LFO VDF | 00...7F | 000...127 |
| 4C | AC1 LFO VDA | 00...7F | 000...127 |
| 4D | AC2 Pitch | 28..40..58 | -24-0-+24 [semitone] |
| 4E | AC2 VDF | 00..40..7F | -64-0-+63 |
| 4F | AC2 VDA | 00..40..7F | -64-0-+63 |
| 50 | AC2 LFO Freq | 00..00..7F | -64-0-+63 |
| 51 | AC2 LFO Pitch | 00...7F | 000...127 |
| 52 | AC2 LFO VDF | 00...7F | 000...127 |
| 53 | AC2 LFO VDA | 00...7F | 000...127 |
| 54 | PortaSw | 0...1 | 0=OFF, 1=ON |
| 55 | PortaTime | 00...7F | 000...127 |
| 56 | PEGStartL | 00..40..7F | -64-+63 |
| 57 | PEGAttackT | 00..40..7F | -64-+63 |
| 58 | PEGReleaseT | 00..40..7F | -64-+63 |
| 59 | PEGReleaseL | 00..40..7F | -64-+63 |
| 5A | VelBottom | 00...7F | 0-127= C-1-G9 |
| 5B | VelTop | 00...7F | 0-127= C-1-G9 |
| | Part 02 Parameters | | |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| | Part 32 Parameters | | |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| 0B7F | | | |

< Table 4-3 : DrumKit Parameters( 1,358 byte ) >

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| | INSTRUMENT 1 | | |
| 00 | Instrument | 000...110 | 0...285 |
| -01 | | | |
| 02 | CoarseTune | 00..40..7F | -64-0-+63[semitone] |
| 03 | FineTune | 00..40..7F | -64-0-+63[cent] |
| 04 | Level | 00...7F | 000...127 |
| 05 | ExclGroup | 00...7F | 0:OFF, 1..127:Group No. |
| 06 | KeyAssign | | |
| | | 0...7 | bit0=RxNoteON ( 0=OFF, 1=ON ) |
| | | (0000 0000 ...0000 0111) | bit1=RxNoteOFF ( 0=OFF, 1=ON ) |
| | | | bit2=KeyAssign ( 0=Single, 1=Multi ) |
| 07 | Cutoff | 00..40..7F | -64-0-+63 |
| 08 | Color | 00..40..7F | -64-0-+63 |
| 09 | AttackTime | 00..40..7F | -64-0-+63 |
| 0A | DecayTime | 00..40..7F | -64-0-+63 |
| 0B | Panpot | 0, 1..40..7F | RND, L63-CNT-R63 |
| 0C | RevSend | 00...7F | 000...127 |
| 0D | ChoSend | 00...7F | 000...127 |
| | INSTRUMENT 2 | | |
| 0E | same as INSTRUMENT 1 Paramters | | |
| . | | | |
| . | | | |
| 1C | | | |
| | INSTRUMENT 3 | | |
| 1D | same as INSTRUMENT 1 Paramters | | |
| . | | | |
| . | | | |
| . | | | |
| | INSTRUMENT 97 | | |
| 0540 | same as INSTRUMENT 1 Paramters | | |
| . | | | |
| . | | | |
| 054D | | | |

Table 5: Program Parameters Dump

< Table 5-1 : Program Parameters( 158 byte ) >

| Ofs (Hex) | Name | Data (Hex) | Description |
|---|---|---|---|
| 00 | Program Name | 20...7F | 32~127 (ASCII Character) |
| . | . | | . |
| . | . | | . |
| . | . | | . |
| 09 | Program Name | 20...7F | 32~127 (ASCII Character) |
| 0A | Program Mode | 0...1 | 0:Single, 1:Double |
| 0B | Fx BankMSB | 00...7F | -> See Table 6~2. |
| 0C | Fx BankLSB | 00...7F | -> See Table 6~2. |
| 0D | Fx Number | 00...7F | 1...128 |
| | OSC 1 Parameters | | |
| 0E | OSC MultiSample | 000...20F | 0...527 MultiSample No. |
| -0F | | | |
| 10 | OSC Octave | E8,F4,00,0C | -24(=32'), -12(=16'), 0(= 8'), +12(= 4') |
| 11 | OSC Level | 00...7F | 0...127 |
| 12 | OSC CoarseTune | F4...0C | -12~+12 [semitone] |
| 13 | OSC FineTune | 9D...63 | -99~+99 |
| 14 | OSC PitchSlope | F6...14 | -1.0..+2.0 (Step 0.1) |
| 15 | OSC VelBotton | 01...7F | 1...127 |
| 16 | OSC VelTop | 01...7F | 1...127 |
| 17 | OSC DelayStart | 00...7F | 0...127 (0:OFF) |
| 18 | PitchLFO WaveForm | | *1 |
| 19 | PitchLFO Frequency | 00...7F | 0...127 |
| 1A | PitchLFO Delay | 00...7F | 0...127 |
| 1B | PitchLFO FadeIn | 00...7F | 0...127 |
| 1C | PitchLFO Intensity | 00...7F | 0...127 |
| 1D | P.EG Intensity | 80..00..7F | -128-0-+127 (-1Oct..+1Oct) |
| 1E | *P.EG IntVelSense* | *80..00..7F* | -128-0-+127 |
| 1F | P.EG TimeVelSense | 80..00..7F | -128-0-+127 |
| 20 | P.EG StartLevel | 80..00..7F | -128-0-+127 (-1Oct..+1Oct) |
| 21 | P.EG AttackTime | 00...7F | 0...127 |
| 22 | P.EG AttackLevel | 80..00..7F | -128-0-+127 (-1Oct..+1Oct) |
| 23 | P.EG DecayTime | 00...7F | 0...127 |
| 24 | P.EG ReleaseTime | 00...7F | 0...127 |
| 25 | P.EG ReleaseLevel | 80..00..7F | -128-0-+127 (-1Oct..+1Oct) |
| 26 | FiltLFO WaveForm | | *1 |
| 27 | FiltLFO Frequency | 00...7F | 0...127 |
| 28 | FiltLFO Delay | 00...7F | 0...127 |
| 29 | FiltLFO FadeIn | 00...7F | 0...127 |
| 2A | FiltLFO Intensity | 00...7F | 0...127 |
| 2B | VDF Cutoff | 00...7F | 0...127 (22Hz..15.625kHz) |
| 2C | VDF KBDTRK Key | 00...7F | 0...127 (C-1..G9) |
| 2D | VDF KBDTRK Mode | | *3 |
| 2E | VDF KBDTRK FcInt | 80..00..7F | -128-0-+127 |
| 2F | VDF KBDTRK EgTime | 00...7F | 0...127 |
| 30 | *VDF K.TRK EgTimeSw* | | *2 |
| 31 | Color Intensity | 00...7F | 0...127 |
| 32 | Color VelSense | 80..00..7F | -128-0-+127 |
| 33 | F.EG Intensity | 00...7F | 0...127 |
| 34 | F.EG IntVelSense | 80..00..7F | -128-0-+127 |
| 35 | F.EG TimeVelSense | 00...7F | 0...127 |
| 36 | F.EG TimeVel Sw | | *2 |
| 37 | F.EG AttackTime | 00...7F | 0...127 |
| 38 | F.EG AttackLevel | 80..00..7F | -128-0-+127 |
| 39 | F.EG DecayTime | 00...7F | 0...127 |
| 3A | F.EG BreakPoint | 80..00..7F | -128-0-+127 |
| 3B | F.EG SlopeTime | 00...7F | 0...127 |
| 3C | F.EG SustainLevel | 80..00..7F | -128-0-+127 |
| 3D | F.EG ReleaseTime | 00...7F | 0...127 |
| 3E | F.EG ReleaseLevel | 80..00..7F | -128-0-+127 |
| 3F | AmpLFO WaveForm | | *1 |
| 40 | *AmpLFO Frequency* | *00...7F* | *0...127* |
| 41 | AmpLFO Delay | 00...7F | 0...127 |
| 42 | AmpLFO FadeIn | 00...7F | 0...127 |
| 43 | AmpLFO Intensity | 00...7F | 0...127 |
| 44 | VDA KBDTRK Key | 00...7F | 0...127 (C-1..G9) |
| 45 | VDA KBDTRK Mode | | *3 |
| 46 | VDA KBDTRK AmpInt | 80..00..7F | -128-0-+127 |
| 47 | VDA KBDTRK EgTime | 00...7F | 0...127 |
| 48 | VDA K.TRK EgTimeSw | | *2 |
| 49 | A.EG LevelVelSense | 80..00..7F | -128-0-+127 |
| 4A | A.EG TimeVelSense | 00...7F | 0...127 |
| 4B | A.EG TimeVel Sw | | *2 |
| 4C | A.EG AttackTime | 00...7F | 0...127 |
| 4D | A.EG AttackLevel | 00...7F | 0...127 |
| 4E | A.EG DecayTime | 00...7F | 0...127 |
| 4F | A.EG BreakPoint | 00...7F | 0...127 |
| 50 | A.EG SlopeTime | 00...7F | 0...127 |
| 51 | A.EG SustainLevel | 00...7F | 0...127 |
| 52 | *A.EG ReleaseTime* | 00...7F | 0...127 |
| 53 | Pan A/B | 00,01..40..7F | 0, 1-64-127 (RND, L63-CNT-R63) |
| 54 | C Send | 00...7F | 0...127 |
| 55 | D Send | 00...7F | 0...127 |
| | OSC 2 Parameters | | |
| 56 | ( same as OSC 1 Parameters ) | | |
| .. | | | |
| . | | | |
| . | | | |
| 9D | | | |

*1 : LFO WaveForm
bit0~bit2 0:TRI, 1:SAW-UP, 2:SAW-DN, 3:SQR1, 4:SQR2, 5:RND

*2 : Keyboard Tracking Switch
bit0:Attack Time SW / 0:OFF, 1:ON
bit1:Decay Time SW / 0:OFF, 1:ON
bit2:Slope Time SW / 0:OFF, 1:ON
bit3:Release Time SW / 0:OFF, 1:ON
bit4:Attack Time Porarity / 0:+, 1:-
bit5:Decay Time Porarity / 0:+, 1:-
bit6:Slope Time Porarity / 0:+, 1:-
bit7:Release Time Porarity / 0:+, 1:-

*3 : Keyboard Tracking Mode Switch
OFF: 0
LOW: 1
HIGH: 2
ALL: 3

## Table 6: Combination Parameters Dump

< Table 6-1 : Combination Parameters( 126 byte ) >

| Offset (Hex.) | Name | value | description |
|---|---|---|---|
| 00 | Combi Name | 32~127 | ASCII character |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| 09 | Combi Name | 32~127 | ASCII character |
| 0A | Own FX BankMSB | 0~127 | -> See Table 6-2. |
| 0B | Own FX BankLSB | 0~127 | |
| 0C | Own FX Number | 0~127 | |
| 0D | (dummy data) | | |
| | TIMBRE 1 | | |
| 0E | Bank No. MSB | 0~127 | -> See ProgName list |
| 0F | Bank No. LSB | 0~127 | -> See ProgName list |
| 10 | Program No. | 0~127 | |
| 11 | Volume | 0~127 | |
| 12 | Panpot | 0,1~64~127 | RND,L63~CNT~R63 |
| 13 | Reverb Send | 0~127 | |
| 14 | Chorus Send | 0~127 | |
| 15 | Note Win Bottom | 0~127 | C-1~G9 |
| 16 | Note Win Top | 0~127 | C-1~G9 |
| 17 | Vel Win Bottom | 1~127 | |
| 18 | Vel Win Top | 1~127 | |
| 19 | Transpose | -24~24(E8h~18h) | [semitone] |
| 1A | Detune | -50~50(CEh~32h) | [cent] |
| 1B(bit 0) | Note ON/OFF SW | 0,1 | 0=OFF 1=ON (Timbre ON/OFF) |
| 1B(bit 1) | ControlChange Sw | 0,1 | 0=OFF 1=ON |
| 1B(bit 2) | Pitch Bend Sw | 0,1 | 0=OFF 1=ON |
| 1B(bit 3) | After Touch Sw | 0,1 | 0=OFF 1=ON (Channel/Poly) |
| 1B(bit 4) | Damper Sw | 0,1 | 0=OFF 1=ON |
| 1B(bit 5) | Portamento Sw | 0,1 | 0=OFF 1=ON |
| | TIMBRE 2 | | |
| 1C | (same as TIMBRE 1) | | |
| . | | | |
| . | | | |
| 29(bit 5) | | | |
| | TIMBRE 3 | | |
| | | | |
| . | . | | |
| . | . | | |
| . | . | | |
| | | | |
| | TIMBRE 8 | | |
| 70 | (same as TIMBRE 1) | | |
| . | | | |
| . | | | |
| . | | | |
| 7D(bit 5) | | | |

< Table 6-2 : Effect Bank >

| Fx Bank Name | Bank | Bank MSB:LSB (HEX) |
|---|---|---|
| B | same as 'PrgA' Bank | 51:** (00:00 by 05R/W MAP) |
| C | same as 'PrgB' Bank | 52:** |
| D | same as 'PrgC' Bank | 53:** |
| E | same as 'CmbA' Bank | 59:** |
| F | same as 'CmbB' Bank | 5A:** |
| G | same as 'CmbC' Bank | 5B:** |
| H | same as 'PrgU' 'CmbU' Bank | 50:**, 58:** |
| A | (Others Bank) | 38:**, ... |

## NS5R MIDI Implementation Chart

| Function... | | Transmitted | Recognized | Remarks |
|---|---|---|---|---|
| Basic channel | Default | 1~16 | 1~16 | Memorized |
| | Changed | 1~16 | 1~16 | |
| Mode | Default | | 3 | |
| | Messages | × | × | |
| | Altered | ******* | | |
| Note Number: True voice | | × | 0~127 | |
| | | ******* | 0~127 | |
| Velocity | Note ON | × | ○ 9n, V=1~127 | |
| | Note OFF | × | ○ | |
| After Touch | Key's | × | ○ | |
| | Ch's | × | ○ | |
| Pitch Bender | | × | ○ | |
| Control Change | 0, 32 | × | ○ | Bank Select |
| | 1 | × | ○ | Mod Wheel |
| | 5 | × | ○ | Portament time |
| | 7 | × | ○ | Volume |
| | 10 | × | ○ | Pan Pot (A:B) |
| | 11 | × | ○ | Expression |
| | 6, 38 | × | ○ | Data Entry |
| | 12, 13 | × | ○ | FX1, 2 Cntrl |
| | 64 | × | ○ | Damper Pedal (Hold1) |
| | 65 | × | ○ | Portament |
| | 66 | × | ○ | Sostenuto |
| | 67 | × | ○ | Soft |
| | 72, 73 | × | ○ | EG Time (Release, Attack) |
| | 74 | × | ○ | Brightness |
| | 91, 93 | × | ○ | FX1, 2 Cntrl |
| | 96, 97 | × | ○ | Data Increment/Decrement |
| | 98, 99 | × | ○ | NRPN LSB, MSB |
| | 100 101 | × | ○ | RPN LSB, MSB |
| | 20 | × | ○ | All Sound Off |
| | 121 | × | ○ | Reset All Cntrls |
| Program Change: True# | | × | ○ 0~127 | |
| | | ******* | 0~127 | |
| System Exclusive | | ○ | ○ | |
| System Common | : Song Pos | × | × | |
| | : Song Sel | × | × | |
| | : Tune | × | × | |
| System Real Time | : Clock | × | × | |
| | : Commands | × | × | |
| Aux Messages | : Local ON/OFF | × | × | |
| | : All Notes OFF | × | ○ 123~127 | |
| | : Active Sense | × | ○ | |
| | : Reset | × | × | |

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

○ : Yes
× : No

# PC Interface Technical Infomation Chart

PC Interface Technical Notes

PC IF Clock Description

31.25 KBPS Asynchronous 31.25KBPS
8bit, 1stop bit, No parity bit
38.4 KBPS Asynchronous 38.4KBPS
8bit, 1stop bit, No parity bit

All MIDI messages described in the MIDI Inplementaion are also received from PC Interface. In addition, line controlcommands listed below are recognized.

| Data | Description |
|---|---|
| B0 7A 00 | Disable MIDI IN to TG connection |
| B0 7A 7F | Enable MIDI IN to TG connection |

F5 00(When PC IF connection set to 'Emulate')
Enable PC IF to TG connection and
Enable PC IF to MIDI OUT connection

F5 00(When PC IF connection set to 'Native')
PC IF connection is depends on the
setting of Part Common Parameter,
'MIDI ch to Port'.

'MIDI ch To Port' Parameters
'A' : Enable PC IF to TG(Ch.A01 to A16)
disable PC IF to MIDI OUT connection
'B' : Enable PC IF to TG(Ch.B01 to B16)
disable PC IF to MIDI OUT connection
'C' : Enable PC IF to MIDI OUT
disable PC IF to TG connection

| | |
|---|---|
| F5 01 | Enable PC IF to MIDI OUT and<br>disable PC IF to TG conection |
| F5 02 | Enable PC IF to TG(Ch.A01 to A16) and<br>disable PC IF to MIDI OUT conneciton |
| F5 03 | Enable PC IF to TG(Ch.B01 to B16) and<br>disable PC IF to MIDI OUT conneciton |
| F5 F5 | Transmit one F5 from MIDI OUT |
| F5 FF | Transmit one FF from MIDI OUT |
| FF | *No operation* |

All messages from MIDI IN are always sent to host via PC IF.
On default, all messages from MIDI IN are recognized by the TG as well. After the reception of B0 7A 00 from PC IF,all
following messages will be ignored by the TG. B0 7A 7F will reset to normal operation.

Notes:

1. No handshake means are provided between NS5R and the host PC. It is host's responsibility to receive data from the PC IF
without overrun.

2. In case 38.4KBPS is used, since NS5R has limited amount of MIDI OUT buffer,buffer overrrun will occur if data stream to
be MIDI OUT is sent via PC IF full in bandwidth.
To avoid this,host may insert dummy FF messages every 4th bytes,which will not be transmitted from MIDI OUT.

3. If Line Control is used in an application program,it should be reset to normal state with F5 00 / B0 7A 7F messages after
its execution.

4. The F5 xx messages should never be placed in portable sequence files, since they are not legal MIDI messages.

5. Korg MIDI Drivers insert all required messages described above.

# Appendix

## Multi Sample

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | A.Piano 1 | 42 | VoxOrgan 1 | 84 | DistGuitrV | 126 | E.Bass2 LP | 168 | M.Bell LP |
| 1 | A.Piano 1w | 43 | VoxOrgan 2 | 85 | Over Drive | 127 | PickBass 1 | 169 | Gamelan |
| 2 | A.Piano1LP | 44 | VoxOrgan 3 | 86 | OverDrv LP | 128 | PicBass1LP | 170 | Pole |
| 3 | A.Piano 2 | 45 | RotaryOrg1 | 87 | OverDrv F4 | 129 | PickBass 2 | 171 | Pole LP |
| 4 | A.Piano 2w | 46 | Rotary1 LP | 88 | MuteDstGtr | 130 | PickBass 3 | 172 | Tubular |
| 5 | M1 Piano | 47 | RotaryOrg2 | 89 | MtDstGtr V | 131 | Fretless | 173 | ChurchBell |
| 6 | M1 Piano w | 48 | Super BX-3 | 90 | DstGtrHarm | 132 | FretlessLP | 174 | FingCymbal |
| 7 | Grand EP | 49 | SuperBX3LP | 91 | PowerChord | 133 | SlapBass 1 | 175 | FingCymbNT |
| 8 | E.Piano 1 | 50 | Dist.Organ | 92 | PowerChd V | 134 | SlapBass 2 | 176 | Gong |
| 9 | E.Piano 1w | 51 | Dist.OrgLP | 93 | OverDvChrd | 135 | SlpBass2LP | 177 | Gong LP |
| 10 | E.Piano1LP | 52 | PipeOrgan1 | 94 | Power Gtr | 136 | SlapBass 3 | 178 | Split Drum |
| 11 | E.Piano 2 | 53 | PipeOrg1LP | 95 | PowerGtr V | 137 | SynthBass1 | 179 | Split Bell |
| 12 | E.Piano 2w | 54 | PipeOrgan2 | 96 | Gt Scratch | 138 | SynBass1LP | 180 | Flute |
| 13 | E.Piano2LP | 55 | PipeOrg2LP | 97 | Gtr Slide | 139 | SynthBass2 | 181 | Tin Flute |
| 14 | Soft EP | 56 | PipeOrgan3 | 98 | GtCutNois1 | 140 | SynBass2LP | 182 | TinFluteLP |
| 15 | Soft EP LP | 57 | PipeOrg3LP | 99 | GtCutNois2 | 141 | SynthBass3 | 183 | Pan Flute |
| 16 | Hard EP | 58 | Cheese Org | 100 | Chic 1 | 142 | RezBass 1 | 184 | PanFluteLP |
| 17 | Hard EP w | 59 | Musette | 101 | Chic 2 | 143 | RezBass 2 | 185 | Shakuhachi |
| 18 | Hard EP LP | 60 | Musette V | 102 | Stick | 144 | RezBass 3 | 186 | ShakhachiV |
| 19 | Stage EP | 61 | Bandneon | 103 | Sitar 1 | 145 | RezBass3LP | 187 | ShakhachLP |
| 20 | Stage EP w | 62 | BandneonLP | 104 | Sitar 2 | 146 | MiniBass | 188 | Bottle |
| 21 | PianoPad 1 | 63 | Accordion | 105 | Sitar 2 LP | 147 | House Bass | 189 | Recorder |
| 22 | PianoPad 2 | 64 | AcordionLP | 106 | Tambura | 148 | FM Bass | 190 | Ocarina |
| 23 | Clav | 65 | Harmonica | 107 | Tambura LP | 149 | FM Bass LP | 191 | Oboe |
| 24 | Clav w | 66 | G.Guitar | 108 | Santur | 150 | Bass Slide | 192 | EnglishHrn |
| 25 | Clav LP | 67 | G.GuitarLP | 109 | Bouzouki | 151 | StringSlap | 193 | Eng.HornLP |
| 26 | Harpsicord | 68 | F.Guitar 1 | 110 | BouzoukiLP | 152 | Kalimba | 194 | BasoonOboe |
| 27 | Harpsicd w | 69 | F.Gtr 1 LP | 111 | Mandolin | 153 | Music Box | 195 | BsonOboeLP |
| 28 | HarpsicdLP | 70 | F.Guitar1V | 112 | Banjo | 154 | MusicBoxLP | 196 | Clarinet |
| 29 | PercOrgan1 | 71 | F.Guitar 2 | 113 | Shamisen | 155 | Log Drum | 197 | ClarinetLP |
| 30 | PercOrg1LP | 72 | A.Gtr Harm | 114 | Koto | 156 | Marimba | 198 | Bari.Sax |
| 31 | PercOrgan2 | 73 | E.Guitar 1 | 115 | Uood | 157 | Marimba w | 199 | Bari.SaxLP |
| 32 | PercOrg2LP | 74 | E.Guitr1 V | 116 | Harp | 158 | Xylophone | 200 | Tenor Sax |
| 33 | Organ 1 | 75 | E.Guitar 2 | 117 | Ukulele | 159 | SynMallet | 201 | T.Sax LP |
| 34 | Organ 1 LP | 76 | E.Guitar 3 | 118 | MandlinTrm | 160 | Vibe | 202 | Alto Sax |
| 35 | Organ 2 | 77 | MuteGuitar | 119 | A.Bass 1 | 161 | Vibe w | 203 | A.Sax LP |
| 36 | Organ 2 LP | 78 | Funky Gtr | 120 | A.Bass1 LP | 162 | Celesta | 204 | SopranoSax |
| 37 | Organ 3 | 79 | FunkyGtr V | 121 | A.Bass 2 | 163 | Glocken 1 | 205 | S.Sax LP |
| 38 | Organ 4 | 80 | E.Gtr Harm | 122 | A.Bass2 LP | 164 | Glocken 2 | 206 | Bag Pipe |
| 39 | Organ 5 | 81 | E.GtrHramV | 123 | E.Bass 1 | 165 | BrightBell | 207 | Tuba |
| 40 | Organ 6 | 82 | DistGuitar | 124 | E.Bass1 LP | 166 | B.Bell LP | 208 | Tuba LP |
| 41 | Organ 6 LP | 83 | Dist GtrLP | 125 | E.Bass 2 | 167 | Metal Bell | 209 | Horn |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 210 | BrightHorn | 260 | MouthHrp1A | 310 | Harp Up LP | 360 | Rave Hit L | 410 | Slap Conga |
| 211 | FlugelHorn | 261 | MouthHarp2 | 311 | Jung Gliss | 361 | Rave Hit R | 411 | Palm Conga |
| 212 | Trombone 1 | 262 | MouthHrp2A | 312 | JungGlisLP | 362 | Philly Hit | 412 | Mute Conga |
| 213 | Trombone 2 | 263 | MouthHarps | 313 | MalletLoop | 363 | PowerSnare | 413 | Baya |
| 214 | Trumpet | 264 | ChromRes | 314 | MalletLpNT | 364 | Syn Snare | 414 | Tabla 1 |
| 215 | Trumpet LP | 265 | WahFuzz | 315 | Boogeta | 365 | SnareRl/Ht | 415 | Tabla 2 |
| 216 | Mute TP | 266 | Applause | 316 | Sporing | 366 | Fist | 416 | Djembe |
| 217 | Mute TP LP | 267 | Stadium | 317 | Rattle | 367 | Stick Hit | 417 | Maracas |
| 218 | Brass 1 | 268 | BrushNoise | 318 | Kava | 368 | Side Stick | 418 | SynMaracas |
| 219 | Brass 1 LP | 269 | BruNoiseNT | 319 | Fever 1 | 369 | SideStikNT | 419 | SynMarcsNT |
| 220 | Brass 2 | 270 | WhiteNoise | 320 | Fever 2 | 370 | TimbleSide | 420 | Cabasa |
| 221 | Brass 2 LP | 271 | WhiteNoiNT | 321 | Scratchar | 371 | TimblSidNT | 421 | Cabasa NT |
| 222 | Brass Fall | 272 | Jetstar | 322 | Zappers 1 | 372 | Indust | 422 | Sagat |
| 223 | StringEns. | 273 | Jetstar LP | 323 | Zappers 2 | 373 | Taiko Hit | 423 | Sagat NT |
| 224 | StrEns. V1 | 274 | JetstrLPNT | 324 | Bugs | 374 | Syn Rim | 424 | Tambourine |
| 225 | StrEns. V2 | 275 | BrushSwirl | 325 | Surfy | 375 | Syn Rim NT | 425 | JingleBell |
| 226 | StrEns. V3 | 276 | Thing | 326 | SleighBell | 376 | Click | 426 | MuteTriang |
| 227 | AnaStrings | 277 | Thing NT | 327 | Sagatty | 377 | Crash Cym | 427 | OpenTriang |
| 228 | AnaStr. V1 | 278 | MarcTree 1 | 328 | Sagatty NT | 378 | CrashCymLP | 428 | Agogo |
| 229 | AnaStr. V2 | 279 | MrcTree1NT | 329 | Elec Beat | 379 | CrashLP NT | 429 | Cow Bell |
| 230 | AnaStr. V3 | 280 | MarcTree1V | 330 | Idling | 380 | China Cym | 430 | Timbale |
| 231 | PWM | 281 | MrcTre1VNT | 331 | EthnicBeat | 381 | ChinaCymLP | 431 | WoodBlock1 |
| 232 | Violin | 282 | MarcTree 2 | 332 | Tap-A | 382 | Splash Cym | 432 | WoodBlock2 |
| 233 | Viola | 283 | MrcTree2NT | 333 | Tap-B | 383 | Orch Crash | 433 | WoodBlock3 |
| 234 | Cello | 284 | MarcTree2V | 334 | Tap-C | 384 | Tite HH | 434 | Claves |
| 235 | Cello LP | 285 | MrcTre2VNT | 335 | Mini 1a | 385 | Tite HH NT | 435 | Syn Claves |
| 236 | CBs.&Cello | 286 | Tri Roll | 336 | Digital 1 | 386 | Open HH | 436 | Castanet |
| 237 | Pizzicato | 287 | TriRoll NT | 337 | VS 102 | 387 | CloseSynHH | 437 | CastanetNT |
| 238 | Voice | 288 | Tri Roll V | 338 | VS 48 | 388 | OpenSyn HH | 438 | Castanet V |
| 239 | Choir | 289 | TriRollVNT | 339 | VS 52 | 389 | Bell Ride | 439 | FingerSnap |
| 240 | Soft Choir | 290 | Clicker | 340 | VS 58 | 390 | Ping Ride | 440 | FingSnapNT |
| 241 | Air Vox | 291 | Clicker NT | 341 | VS 71 | 391 | Orch B.Drm | 441 | Snap |
| 242 | Doo Voice | 292 | Cast Roll | 342 | VS 72 | 392 | Tom 1 | 442 | Snap NT |
| 243 | DooVoiceLP | 293 | CastRollNT | 343 | VS 88 | 393 | Tom 2 Hi | 443 | Drop |
| 244 | Syn Vox | 294 | Lore | 344 | VS 89 | 394 | Tom 2 Lo | 444 | CorkPop |
| 245 | Syn Vox LP | 295 | Lore NT | 345 | 13-35 | 395 | ProccesTom | 445 | Vibraslap |
| 246 | Glass Vox | 296 | Waterphone | 346 | DWGSOrgan1 | 396 | OilDrum | 446 | Guiro |
| 247 | White Pad | 297 | Crickets 1 | 347 | DWGSOrgan2 | 397 | Syn Tom 1 | 447 | Guiro LP |
| 248 | Ether Bell | 298 | Crickts1NT | 348 | DWGS E.P. | 398 | Syn Tom 2 | 448 | Hand Clap |
| 249 | E.Bell LP | 299 | Crickets 2 | 349 | Saw | 399 | VocalSnare | 449 | HandClapNT |
| 250 | Ghostly | 300 | Crickts2NT | 350 | Square | 400 | SolidHit | 450 | Gun Shot 1 |
| 251 | Mega Pad | 301 | Magic Bell | 351 | Ramp | 401 | Steel Drum | 451 | GlassBreak |
| 252 | Synth Pad | 302 | Tron Up | 352 | Pulse 25% | 402 | SteelDrmLP | 452 | Metal Hit |
| 253 | Synth PadA | 303 | Tron Up LP | 353 | Pulse 8% | 403 | Timapni | 453 | Pull 1 |
| 254 | Spectrum 1 | 304 | Tron Up NT | 354 | Pulse 4% | 404 | Timpani LP | 454 | Pull 1 NT |
| 255 | Spectrum 2 | 305 | Flute FX | 355 | Syn Sine | 405 | Taiko | 455 | Pull 2 |
| 256 | WaveSweep | 306 | FluteFX LP | 356 | Sine | 406 | Tsuzumi | 456 | Pull 2 NT |
| 257 | WaveSweepA | 307 | Flutter | 357 | Orch Hit | 407 | Low Bongo | 457 | HandDrill |
| 258 | WaveSweepB | 308 | Flutter LP | 358 | ImpactHitL | 408 | Slap Bongo | 458 | HandDrilNT |
| 259 | MouthHarp1 | 309 | Harp Up | 359 | ImpactHitR | 409 | Open Conga | 459 | Zap 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 460 | Zap 2 | 474 | Rev.Snare3 | 488 | Stream | 502 | Footstep 2 | 516 | MachineGun |
| 461 | Fret Zap 1 | 475 | Rev.Cymbal | 489 | Bubble | 503 | Telephone1 | 517 | Laser Gun |
| 462 | Fret Zap 2 | 476 | Rev.Tom 1 | 490 | Bird 1 | 504 | Telephone2 | 518 | Explosion |
| 463 | Scratch Hi | 477 | Rev.Tom 2 | 491 | Bird 2 | 505 | Door Creak | 519 | DJ Kit 1 |
| 464 | ScratcHiNT | 478 | Samurai! | 492 | Kitty | 506 | Door Slam | 520 | DJ Kit 2 |
| 465 | Scratch Lo | 479 | Growl 1 | 493 | Dog | 507 | Car Engine | 521 | Scratches |
| 466 | ScratcLoNT | 480 | Growl 1 NT | 494 | Growl 2 | 508 | CarEnginLP | 522 | Orch Perc |
| 467 | ScratchDbl | 481 | Monkey 1 | 495 | Gallop | 509 | Car Stop | 523 | Loopey |
| 468 | ScratDblNT | 482 | Monkey 2 | 496 | Laughing | 510 | Car Pass | 524 | ClockWorks |
| 469 | Scratch a | 483 | Rain | 497 | Laughing V | 511 | Car Crash | 525 | MusicaLoop |
| 470 | Rev.Kick | 484 | Thunder | 498 | Scream | 512 | Siren | 526 | Manimals |
| 471 | Rev.ConBD | 485 | Wind | 499 | Punch | 513 | Train | 527 | Down Lo |
| 472 | Rev Snare1 | 486 | Seashore | 500 | Hart Beat | 514 | Helicopter | | |
| 473 | Rev.Snare2 | 487 | Seashore V | 501 | Footstep 1 | 515 | Gun Shot 2 | | |

# Drum Sample

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | Fat Kick | 31 | SynSnare 1 | 62 | Tom 1 Lo | 93 | CorkPop | 124 | Guiro S |
| 1 | Rock Kick | 32 | SynSnare 2 | 63 | Tom 2 Hi | 94 | Mute Cuica | 125 | Guiro L |
| 2 | Ambi.Kick | 33 | VocalSnr 1 | 64 | Tom 2 Hi V | 95 | Open Cuica | 126 | Pull 1 |
| 3 | Crisp Kick | 34 | VocalSnr 2 | 65 | Tom 2 Lo | 96 | Maracas | 127 | Pull 2 |
| 4 | Punch Kick | 35 | Fist | 66 | Tom 2 Lo V | 97 | Cabasa | 128 | Whistle S |
| 5 | Dry Kick | 36 | Brush Slap | 67 | ProcessTom | 98 | SynMaracas | 129 | Whistle L |
| 6 | Real Kick | 37 | Brush Tap | 68 | OilDrum | 99 | Sagat | 130 | Hand Claps |
| 7 | Gated Kick | 38 | BrushSwish | 69 | Syn Tom 1 | 100 | Tambourine | 131 | Syn Claps |
| 8 | ProcesKick | 39 | BrushSwirl | 70 | SynTom2 Hi | 101 | JingleBell | 132 | MetalHitHi |
| 9 | Metal Kick | 40 | Stick Hit | 71 | SynTom2 Lo | 102 | MarcTree 1 | 133 | MetalHitLo |
| 10 | Dance Kick | 41 | Side Stick | 72 | SolidHit | 103 | MarcTree 2 | 134 | Gt Scratch |
| 11 | Syn Kick 1 | 42 | Syn Rim | 73 | Brush Tom | 104 | MuteTriang | 135 | Gtr Slide |
| 12 | Syn Kick 2 | 43 | Crash Cym | 74 | BrushTom V | 105 | OpenTriang | 136 | GtCutNois1 |
| 13 | Syn Kick 3 | 44 | Crash LP | 75 | Timpani | 106 | Flexatone | 137 | GtCutNois2 |
| 14 | Syn Kick 4 | 45 | China Cym | 76 | Taiko Hi | 107 | Agogo | 138 | Chic 1 |
| 15 | Orch B.Drm | 46 | China LP | 77 | Taiko Lo | 108 | Cowbell | 139 | Chic 2 |
| 16 | Snare 1 | 47 | Splash Cym | 78 | Lo Bongo | 109 | SynCowbell | 140 | Bass Slide |
| 17 | Snare 2 | 48 | Splash LP | 79 | Hi Bongo | 110 | R-Timbal | 141 | StringSlap |
| 18 | Snare 3 | 49 | Orch Cym | 80 | Slap Bongo | 111 | Hi Timbal | 142 | Orch Hit |
| 19 | Snare 4 | 50 | OrchCym LP | 81 | Tsuzumi | 112 | Lo Timbal | 143 | ImpactHitL |
| 20 | PicloSnare | 51 | Tite HH | 82 | Open Conga | 113 | Timbales | 144 | ImpactHitR |
| 21 | Soft Snare | 52 | Close HH | 83 | Slap Conga | 114 | WoodBlockH | 145 | Rave Hit L |
| 22 | LightSnare | 53 | Open HH | 84 | Palm Conga | 115 | WoodBlockM | 146 | Rave Hit R |
| 23 | Dry Snare | 54 | Pedal HH | 85 | Mute Conga | 116 | WoodBlockL | 147 | Philly Hit |
| 24 | TightSnare | 55 | CloseSynHH | 86 | Baya 1 | 117 | Claves | 148 | BrassFall1 |
| 25 | Ambi.Snare | 56 | OpenSyn HH | 87 | Baya 2 | 118 | Syn Claves | 149 | BrassFall2 |
| 26 | Rock Snare | 57 | Ride Edge | 88 | Tabla 1 | 119 | Castanet | 150 | BrassFall3 |
| 27 | GatedSnare | 58 | Ride Cup | 89 | Tabla 2 | 120 | Castanet V | 151 | BrassFall4 |
| 28 | PowerSnare | 59 | Ride Cym 1 | 90 | Tabla 3 | 121 | FingerSnap | 152 | Zap 1 |
| 29 | RollSnare1 | 60 | Ride Cym 2 | 91 | Udu | 122 | Snap | 153 | Zap 2 |
| 30 | RollSnare2 | 61 | Tom 1 Hi | 92 | Djembe | 123 | Viblaslap | 154 | Scratch Hi |

155 Scratch Lo
156 ScratchDbl
157 Scratch a
158 Scratch b
159 Scratch c
160 Sword
161 Drop
162 BISS
163 BOOFN
164 BOOGETA
165 CHLACK
166 COOSH
167 COUGH
168 ISSH
169 POOM
170 Uhhh!
171 Samurai!
172 Growl 1 ---
173 Monkey 1
174 Monkey 2
175 Rev.Kick
176 Rev.ConBD
177 Rev.Snare1
178 Rev.Snare2
179 Rev.Snare3
180 Rev.Cymbal
181 Rev.Tom 1
182 Rev.Tom 2
183 Kalimba 1
184 Kalimba 2
185 MusicBox 1
186 MusicBox 2
187 Log Drum 1
188 Log Drum 2
189 Log Drum 3
190 Log Drum 4
191 Log Drum 5
192 Marimba 1
193 Marimba 2
194 Marimba 3
195 Marimba 4
196 Xylofon 1
197 Xylofon 2
198 Xylofon 3
199 Vibe 1
200 Vibe 2
201 Vibe 3
202 Vibe 4
203 Celeste
204 Glocken 1
205 Glocken 2
206 Glocken 3
207 BrightBell
208 Metal Bell
209 Gamelan 1
210 Gamelan 2
211 Pole
212 FingCymbal
213 Tubular 1
214 Tubular 2
215 Tubular 3
216 ChurchBell
217 Gong Hi
218 Gong Lo
219 MouthHarp1
220 MouthHrp1A
221 MouthHarp2
222 MouthHrp2A
223 Spectrum 1
224 Spectrum 2
225 Stadium
226 BrushNoise
227 WhiteNoise
228 Jetstar
229 Thing
230 Tri Roll
231 Clicker 1
232 Clicker 2
233 Clicker 3
234 Cast Roll
235 Lore
236 Waterphone
237 Crickets
238 Tron Up
239 Flute FX
240 Flutter
241 Harp Up
242 Jung Gliss
243 MalletLoop
244 Rain
245 Thunder
246 Wind
247 Seashore
248 Seashore V
249 Stream
250 Bubble
251 Bird 1
252 Bird 2
253 Kitty
254 Dog
255 Growl 2
256 Gallop
257 Laughing
258 Laughing V
259 Scream
260 Punch
261 Hart Beat
262 Footstep 1
263 Footstep 2
264 Applause 1
265 Applause 2
266 Telephone1
267 Telephone2
268 Door Creak
269 Door Slam
270 Car Engine
271 Car Stop
272 Car Pass
273 Car Crash
274 GlassBreak
275 Siren
276 Train
277 Helicopter
278 Gun Shot 1
279 Gun Shot 2
280 MachineGun
281 Laser Gun
282 Explosion
283 HandDrill
284 Metronome1
285 Metronome2

***The sounds processed by INFINITY™.**

INFINITY
LOOPS BY JUPITER SYSTEMS

# Program

| MSB | LSB | PC | Name |
|---|---|---|---|
| 0 | 0 | 1 | Piano 1 |
| 0 | 0 | 2 | Piano 2 |
| 0 | 0 | 3 | Piano 3 |
| 0 | 0 | 4 | HonkeyTonk |
| 0 | 0 | 5 | E.Piano 1 |
| 0 | 0 | 6 | E.Piano 2 |
| 0 | 0 | 7 | Harpsicord |
| 0 | 0 | 8 | Clav. |
| 0 | 0 | 9 | Celesta |
| 0 | 0 | 10 | Glocken |
| 0 | 0 | 11 | Music Box |
| 0 | 0 | 12 | Vibraphone |
| 0 | 0 | 13 | Marimba |
| 0 | 0 | 14 | Xylophone |
| 0 | 0 | 15 | Tubular |
| 0 | 0 | 16 | Santur 1 |
| 0 | 0 | 17 | Organ 1 |
| 0 | 0 | 18 | Organ 2 |
| 0 | 0 | 19 | Organ 3 |
| 0 | 0 | 20 | ChurchOrg1 |
| 0 | 0 | 21 | Reed Org.1 |
| 0 | 0 | 22 | AccordionF |
| 0 | 0 | 23 | Harmonica1 |
| 0 | 0 | 24 | Bandneon1 |
| 0 | 0 | 25 | NylonGtr.1 |
| 0 | 0 | 26 | SteelGtr.1 |
| 0 | 0 | 27 | Jazz Gtr. |
| 0 | 0 | 28 | CleanGtr.1 |
| 0 | 0 | 29 | Muted Gtr. |
| 0 | 0 | 30 | OverDriveGt |
| 0 | 0 | 31 | Dist.Gtr.1 |
| 0 | 0 | 32 | GtHarmonx1 |
| 0 | 0 | 33 | AcousticBs |
| 0 | 0 | 34 | FingerdBs1 |
| 0 | 0 | 35 | PickedBass |
| 0 | 0 | 36 | Fretless 1 |
| 0 | 0 | 37 | SlapBass 1 |
| 0 | 0 | 38 | SlapBass 2 |
| 0 | 0 | 39 | SynthBass1 |
| 0 | 0 | 40 | SynthBass2 |
| 0 | 0 | 41 | Violin |
| 0 | 0 | 42 | Viola |
| 0 | 0 | 43 | Cello |
| 0 | 0 | 44 | Contrabass |
| 0 | 0 | 45 | TremoloStr |
| 0 | 0 | 46 | Pizzicato |
| 0 | 0 | 47 | Harp |
| 0 | 0 | 48 | Timpani |
| 0 | 0 | 49 | Strings 1 |
| 0 | 0 | 50 | Slow Str.1 |
| 0 | 0 | 51 | SynthStr.1 |
| 0 | 0 | 52 | SynthStr.2 |
| 0 | 0 | 53 | ChoirAahs1 |
| 0 | 0 | 54 | Voice Oohs |
| 0 | 0 | 55 | SynVox |
| 0 | 0 | 56 | Orch.Hit 1 |
| 0 | 0 | 57 | Trumpet 1 |
| 0 | 0 | 58 | Trombone 1 |
| 0 | 0 | 59 | Tuba 1 |
| 0 | 0 | 60 | Muted Tp.1 |
| 0 | 0 | 61 | Fr.Horn 1 |
| 0 | 0 | 62 | Brass 1 |
| 0 | 0 | 63 | Syn.Brass1 |
| 0 | 0 | 64 | Syn.Brass2 |
| 0 | 0 | 65 | SopranoSax |
| 0 | 0 | 66 | Alto Sax |
| 0 | 0 | 67 | TenorSax 1 |
| 0 | 0 | 68 | Bari.Sax |
| 0 | 0 | 69 | Oboe |
| 0 | 0 | 70 | EnglishHrn |
| 0 | 0 | 71 | Bassoon |
| 0 | 0 | 72 | Clarinet |
| 0 | 0 | 73 | Piccolo |
| 0 | 0 | 74 | Flute |
| 0 | 0 | 75 | Recorder |
| 0 | 0 | 76 | PanFlute 1 |
| 0 | 0 | 77 | BottleBlow |
| 0 | 0 | 78 | Shakuhachi |
| 0 | 0 | 79 | Whistle |
| 0 | 0 | 80 | Ocarina |
| 0 | 0 | 81 | SquareWave |
| 0 | 0 | 82 | Saw Wave |
| 0 | 0 | 83 | SynCaliope |
| 0 | 0 | 84 | Chiffer Ld |
| 0 | 0 | 85 | Charang |
| 0 | 0 | 86 | Solo Vox |
| 0 | 0 | 87 | 5th Saw |
| 0 | 0 | 88 | Bass&Lead |
| 0 | 0 | 89 | Fantasia 1 |
| 0 | 0 | 90 | Warm Pad |
| 0 | 0 | 91 | PolySynth |
| 0 | 0 | 92 | SpaceVoice |
| 0 | 0 | 93 | Bowed Glass |
| 0 | 0 | 94 | Metal Pad |
| 0 | 0 | 95 | Halo Pad |
| 0 | 0 | 96 | Sweep Pad |
| 0 | 0 | 97 | Ice Rain |
| 0 | 0 | 98 | Soundtrack |
| 0 | 0 | 99 | Crystal |
| 0 | 0 | 100 | Atmosphere |
| 0 | 0 | 101 | Brightness |
| 0 | 0 | 102 | Goblin |
| 0 | 0 | 103 | Echo Drops |
| 0 | 0 | 104 | StarTheme1 |
| 0 | 0 | 105 | Sitar 1 |
| 0 | 0 | 106 | Banjo |
| 0 | 0 | 107 | Shamisen |
| 0 | 0 | 108 | Koto |
| 0 | 0 | 109 | Kalimba |
| 0 | 0 | 110 | Bagpipe |
| 0 | 0 | 111 | Fiddle |
| 0 | 0 | 112 | Shanai 1 |
| 0 | 0 | 113 | TinkleBell |
| 0 | 0 | 114 | Agogo |
| 0 | 0 | 115 | SteelDrums |
| 0 | 0 | 116 | Woodblock |
| 0 | 0 | 117 | Taiko |
| 0 | 0 | 118 | Melo.Tom 1 |
| 0 | 0 | 119 | Synth Drum |
| 0 | 0 | 120 | RevCymbal1 |
| 0 | 0 | 121 | FretNoise |
| 0 | 0 | 122 | BreathNoiz |
| 0 | 0 | 123 | Seashore |
| 0 | 0 | 124 | Bird 1 |
| 0 | 0 | 125 | Telephone1 |
| 0 | 0 | 126 | Helicopter |
| 0 | 0 | 127 | Applause 1 |
| 0 | 0 | 128 | Gun Shot |

# r:bank

| MSB | LSB | PC | Name | MSB | LSB | PC | Name | MSB | LSB | PC | Name |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | x | 3 | ElGrPiano1 | 2 | x | 34 | Jazz Bass | 5 | x | 103 | ResoPanner |
| 1 | x | 12 | Hard Vibe | 2 | x | 36 | Fretless 3 | 5 | x | 121 | Bass Slide |
| 1 | x | 16 | Santur 2 | 2 | x | 40 | Modular Bs | 5 | x | 123 | Bubble |
| 1 | x | 17 | Organ 101 | 2 | x | 81 | HollowMini | 5 | x | 124 | Growl |
| 1 | x | 18 | Organ 201 | 2 | x | 82 | Pulse Saw | 5 | x | 125 | WindChimes |
| 1 | x | 23 | Harmonica2 | 2 | x | 83 | PurePanLd. | 5 | x | 126 | Siren |
| 1 | x | 27 | Mellow Gtr | 2 | x | 88 | Fat&Perky | 5 | x | 127 | Footsteps |
| 1 | x | 29 | MuteDstGtr | 2 | x | 90 | Horn Pad | 6 | x | 81 | LM Square |
| 1 | x | 31 | Dist.Gtr.2 | 2 | x | 94 | Panner Pad | 6 | x | 82 | HeavySynth |
| 1 | x | 34 | FingerdBs2 | 2 | x | 97 | AfricaWood | 6 | x | 99 | ClearBells |
| 1 | x | 36 | Fretless 2 | 2 | x | 98 | Prologue | 6 | x | 100 | AmbientPad |
| 1 | x | 39 | SynthBs101 | 2 | x | 99 | SftCrystal | 6 | x | 103 | WaterPiano |
| 1 | x | 40 | SynthBs201 | 2 | x | 100 | Nylon Harp | 6 | x | 121 | PickScrape |
| 1 | x | 49 | Strings 2 | 2 | x | 102 | 50s Sci-Fi | 6 | x | 126 | Train |
| 1 | x | 50 | Slow Str.2 | 2 | x | 103 | Echo Pan 1 | 6 | x | 127 | Applause 2 |
| 1 | x | 51 | OB Strings | 2 | x | 105 | Det.Sitar | 7 | x | 82 | LA Saw |
| 1 | x | 57 | Trumpet 2 | 2 | x | 121 | StringSlap | 7 | x | 99 | Xmas Bell |
| 1 | x | 58 | Trombone 2 | 2 | x | 123 | Thunder | 7 | x | 125 | Scratch 2 |
| 1 | x | 59 | Tuba 2 | 2 | x | 124 | Gallop | 7 | x | 126 | Jetplane |
| 1 | x | 61 | Fr.Horn 2 | 2 | x | 125 | Door-Creak | 8 | x | 1 | Piano 1w |
| 1 | x | 63 | Poly Brass | 2 | x | 126 | Car-Stop | 8 | x | 2 | Piano 2w |
| 1 | x | 64 | Soft Brass | 2 | x | 127 | Screaming | 8 | x | 3 | Piano 3w |
| 1 | x | 81 | Square | 2 | x | 128 | Laser Gun | 8 | x | 4 | OldUpright |
| 1 | x | 82 | Saw | 3 | x | 36 | Fretless 4 | 8 | x | 5 | Soft EP |
| 1 | x | 83 | Vent Synth | 3 | x | 40 | Seq Bass | 8 | x | 6 | Detune EP2 |
| 1 | x | 87 | Big Fives | 3 | x | 81 | Mellow FM | 8 | x | 7 | CoupleHps. |
| 1 | x | 88 | Big & Raw | 3 | x | 82 | Thick Saw | 8 | x | 12 | Vibe.w |
| 1 | x | 89 | Fantasia 2 | 3 | x | 90 | Rotary Str | 8 | x | 13 | Marimba w |
| 1 | x | 90 | Thick Pad | 3 | x | 99 | RoundGlock | 8 | x | 15 | ChurchBell |
| 1 | x | 91 | 80sPolySyn | 3 | x | 100 | Harpvox | 8 | x | 16 | Cimbalom |
| 1 | x | 92 | Heaven | 3 | x | 103 | Echo Pan 2 | 8 | x | 17 | DetuneOrg1 |
| 1 | x | 94 | Tine Pad | 3 | x | 121 | CutNoise 2 | 8 | x | 18 | DetuneOrg2 |
| 1 | x | 96 | Polar Pad | 3 | x | 123 | Wind | 8 | x | 19 | RotaryOrg |
| 1 | x | 97 | Harmo Rain | 3 | x | 124 | Bird 2 | 8 | x | 20 | ChurchOrg2 |
| 1 | x | 98 | Ancestral | 3 | x | 125 | Door-Slam | 8 | x | 22 | AccordionI |
| 1 | x | 99 | Syn.Mallet | 3 | x | 126 | Car-Pass | 8 | x | 25 | Ukulele |
| 1 | x | 100 | Warm Atmos | 3 | x | 127 | Punch | 8 | x | 26 | 12-str.Gtr |
| 1 | x | 102 | Goblinson | 3 | x | 128 | Explosion | 8 | x | 27 | PedalSteel |
| 1 | x | 103 | Echo Bell | 4 | x | 36 | SynFretles | 8 | x | 28 | Chorus Gtr |
| 1 | x | 104 | StarTheme2 | 4 | x | 81 | Soft Solo | 8 | x | 29 | Funk Gtr.1 |
| 1 | x | 105 | Sitar 2 | 4 | x | 82 | Big Lead | 8 | x | 31 | FeedbackG1 |
| 1 | x | 106 | MutedBonjo | 4 | x | 90 | Soft Pad | 8 | x | 32 | GtFeedback |
| 1 | x | 107 | Tsugaru | 4 | x | 99 | Loud Clock | 8 | x | 35 | MutePickBs |
| 1 | x | 112 | Shanai 2 | 4 | x | 100 | HollowRels | 8 | x | 37 | Reso Slap |
| 1 | x | 118 | Real Tom | 4 | x | 103 | Big Panner | 8 | x | 39 | Acid Bass |
| 1 | x | 120 | RevCymbal2 | 4 | x | 121 | DstCutNoiz | 8 | x | 40 | BeefFMBass |
| 1 | x | 121 | CutNoise 1 | 4 | x | 123 | Stream | 8 | x | 41 | SlowViolin |
| 1 | x | 122 | FlKeyClick | 4 | x | 124 | Kitty | 8 | x | 45 | SlowTrmStr |
| 1 | x | 123 | Rain | 4 | x | 125 | Scratch 1 | 8 | x | 49 | Orchestra1 |
| 1 | x | 124 | Dog | 4 | x | 126 | Car-Crash | 8 | x | 50 | Legato Str |
| 1 | x | 125 | Telephone2 | 4 | x | 127 | Heart Beat | 8 | x | 51 | SynthStr.3 |
| 1 | x | 126 | Car-Engine | 5 | x | 36 | Mr.Smooth | 8 | x | 53 | St.Choir |
| 1 | x | 127 | Laughing | 5 | x | 81 | Shmoog | 8 | x | 55 | Syn.Voice |
| 1 | x | 128 | MachineGun | 5 | x | 82 | Velo Lead | 8 | x | 56 | Impact Hit |
| 2 | x | 3 | ElGrPiano2 | 5 | x | 99 | GlockChime | 8 | x | 57 | FlugelHorn |
| 2 | x | 31 | Dazed Gtr. | 5 | x | 100 | Nylon+EP | 8 | x | 61 | FrHornSolo |

# r:bank / y:bank

| MSB | LSB | PC | Name |
|---|---|---|---|
| 8 | x | 62 | Brass 2 |
| 8 | x | 63 | Syn.Brass3 |
| 8 | x | 64 | Syn.Brass4 |
| 8 | x | 66 | Hyper Alto |
| 8 | x | 67 | BrethTenor |
| 8 | x | 72 | BsClarinet |
| 8 | x | 76 | Kawala |
| 8 | x | 81 | Sine Wave |
| 8 | x | 82 | DoctorSolo |
| 8 | x | 85 | Dist.Lead |
| 8 | x | 96 | Converge |
| 8 | x | 97 | Clavi Pad |
| 8 | x | 98 | Rave |
| 8 | x | 99 | VibraBells |
| 8 | x | 105 | Tambra |
| 8 | x | 106 | Rabab |
| 8 | x | 108 | TaishoKoto |
| 8 | x | 112 | Pungi |
| 8 | x | 113 | Bonang |
| 8 | x | 114 | Atarigane |
| 8 | x | 116 | Castanets |
| 8 | x | 117 | Concert BD |
| 8 | x | 118 | Melo.Tom 2 |
| 8 | x | 119 | Analog Tom |
| 8 | x | 120 | Rev.Snare1 |
| 8 | x | 126 | Starship |
| 9 | x | 15 | Carillon |
| 9 | x | 17 | Organ 109 |
| 9 | x | 26 | Nylon+Stel |
| 9 | x | 31 | FeedbackG2 |
| 9 | x | 39 | FastResoBs |
| 9 | x | 40 | X WireBass |
| 9 | x | 45 | SuspensStr |
| 9 | x | 49 | Orchestra2 |
| 9 | x | 50 | Warm Str. |
| 9 | x | 53 | MelloChoir |
| 9 | x | 56 | Philly Hit |
| 9 | x | 63 | QuackBrass |
| 9 | x | 96 | Shwimmer |
| 9 | x | 99 | Digi Bells |
| 9 | x | 113 | Gender |
| 9 | x | 118 | Rock Tom |
| 9 | x | 119 | Elec Perc |
| 9 | x | 120 | Rev.Snare2 |
| 9 | x | 126 | BurstNoise |
| 10 | x | 39 | Tekno Bass |
| 10 | x | 49 | TremOrch |
| 10 | x | 50 | St.SlowStr |
| 10 | x | 56 | Double Hit |
| 10 | x | 96 | Celestial |
| 10 | x | 113 | GamelaGong |
| 11 | x | 49 | Choir Str. |
| 11 | x | 113 | St.Gamelan |
| 16 | x | 1 | Piano 1d |
| 16 | x | 5 | FM+AI EP |
| 16 | x | 6 | FM EP |

| MSB | LSB | PC | Name |
|---|---|---|---|
| 16 | x | 7 | Harpsi.w |
| 16 | x | 13 | Balaphone1 |
| 16 | x | 17 | 60's Org.1 |
| 16 | x | 19 | RotaryOrgS |
| 16 | x | 20 | ChurchOrg3 |
| 16 | x | 25 | NylonGtr.3 |
| 16 | x | 26 | Mandolin |
| 16 | x | 29 | Funk Gtr.2 |
| 16 | x | 31 | PowerGtr.1 |
| 16 | x | 32 | AcGtHarmnx |
| 16 | x | 39 | SlowResoBs |
| 16 | x | 40 | RubberBass |
| 16 | x | 49 | St.Strings |
| 16 | x | 56 | Lo Fi Rave |
| 16 | x | 61 | Horn Orch |
| 16 | x | 62 | Brass Fall |
| 16 | x | 63 | Octave Brs |
| 16 | x | 64 | VeloBrass1 |
| 16 | x | 82 | WaspySynth |
| 16 | x | 99 | ChoralBell |
| 16 | x | 105 | Tamboura |
| 16 | x | 106 | Gopichant |
| 16 | x | 108 | Kanoon |
| 16 | x | 112 | Hichiriki |
| 16 | x | 113 | RamaCymbal |
| 16 | x | 120 | Rev.Kick 1 |
| 17 | x | 13 | Balaphone2 |
| 17 | x | 17 | 60's Org.2 |
| 17 | x | 31 | PowerGtr.2 |
| 17 | x | 40 | AnaSynBs.1 |
| 17 | x | 64 | VeloBrass2 |
| 17 | x | 99 | Air Bells |
| 17 | x | 120 | Rev.ConBD |
| 18 | x | 17 | 60's Org.3 |
| 18 | x | 31 | 5th Dist. |
| 18 | x | 40 | AnaSynBs.2 |
| 18 | x | 99 | Bell Harp |
| 19 | x | 40 | SmoothBass |
| 19 | x | 99 | Gamelimba |
| 24 | x | 5 | 60's EP |
| 24 | x | 6 | Hard FM EP |
| 24 | x | 7 | Harpsi.o |
| 24 | x | 13 | Log Drum |
| 24 | x | 17 | Cheese Org |
| 24 | x | 19 | RotaryOrgF |
| 24 | x | 20 | OrganFlute |
| 24 | x | 25 | VelHarmnix |
| 24 | x | 31 | RockRythm2 |
| 24 | x | 49 | VeloString |
| 24 | x | 57 | Bright Tp. |
| 24 | x | 106 | Oud |
| 24 | x | 120 | Rev.Tom 1 |
| 25 | x | 5 | Hard EP |
| 25 | x | 31 | RockRythm1 |
| 25 | x | 57 | Warm Tp. |
| 25 | x | 120 | Rev.Tom 2 |

| MSB | LSB | PC | Name |
|---|---|---|---|
| 26 | x | 5 | Mellow EP |
| 32 | x | 17 | Organ 4 |
| 32 | x | 18 | Organ 5 |
| 32 | x | 20 | Trem.Flute |
| 32 | x | 25 | NylonGtr.2 |
| 32 | x | 26 | SteelGtr.2 |
| 32 | x | 53 | ChoirAahs2 |
| 33 | x | 17 | EvnenBar |
| 40 | x | 17 | Organ Bass |
| 40 | x | 25 | LequintGtr |
| 0 | 1 | 1 | Piano 1w |
| 0 | 1 | 2 | Piano 2w |
| 0 | 1 | 3 | Piano 3w |
| 0 | 1 | 4 | OldUpright |
| 0 | 1 | 5 | E.Piano 1w |
| 0 | 1 | 6 | E.Piano 2w |
| 0 | 1 | 7 | Harpsi.w |
| 0 | 1 | 8 | Clav. w |
| 0 | 1 | 12 | Vibe.w |
| 0 | 1 | 13 | Marimba w |
| 0 | 3 | 49 | St.Strings |
| 0 | 3 | 50 | St.SlowStr |
| 0 | 3 | 53 | St.Choir |
| 0 | 6 | 40 | MelloSynBs |
| 0 | 6 | 61 | FrHornSolo |
| 0 | 6 | 81 | Square |
| 0 | 6 | 82 | Saw |
| 0 | 8 | 41 | SlowViolin |
| 0 | 8 | 45 | SlowTrmStr |
| 0 | 8 | 49 | Strings 2 |
| 0 | 8 | 50 | Legato Str |
| 0 | 8 | 81 | LM Square |
| 0 | 8 | 82 | Thick Saw |
| 0 | 8 | 103 | Echo Pan 2 |
| 0 | 12 | 31 | DstRthmGtr |
| 0 | 12 | 40 | Seq Bass |
| 0 | 12 | 63 | QuackBrass |
| 0 | 12 | 99 | SynDrComp |
| 0 | 14 | 62 | SfrzndBrs |
| 0 | 14 | 99 | Popcorn |
| 0 | 14 | 103 | Echo Pan 1 |
| 0 | 16 | 25 | NylonGtr.2 |
| 0 | 16 | 53 | ChoirAahs2 |
| 0 | 16 | 57 | Trumpet 2 |
| 0 | 16 | 59 | Tuba 2 |
| 0 | 16 | 88 | Big & Raw |
| 0 | 16 | 90 | Thick Pad |
| 0 | 17 | 57 | Bright Tp. |
| 0 | 17 | 90 | Soft Pad |
| 0 | 18 | 1 | Piano 1d |
| 0 | 18 | 5 | Mellow EP |
| 0 | 18 | 27 | Mellow Gtr |
| 0 | 18 | 34 | FingerDark |
| 0 | 18 | 39 | SynthBs101 |
| 0 | 18 | 40 | SynthBs201 |
| 0 | 18 | 58 | Trombone 2 |

# y:bank

| MSB | LSB | PC | Name | MSB | LSB | PC | Name | MSB | LSB | PC | Name |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18 | 64 | Soft Brass | 0 | 34 | 17 | 60's Org.2 | 0 | 41 | 29 | MuteStlGtr |
| 0 | 18 | 81 | HollowMini | 0 | 34 | 36 | Fretless 4 | 0 | 41 | 31 | FeedbackG2 |
| 0 | 18 | 82 | LA Saw | 0 | 35 | 7 | CoupleHps. | 0 | 41 | 40 | BeefFMBass |
| 0 | 18 | 90 | Sine Pad | 0 | 35 | 16 | Santur 2 | 0 | 41 | 49 | Orchestra2 |
| 0 | 18 | 99 | Tiny Bell | 0 | 35 | 17 | Organ 101 | 0 | 41 | 50 | Kingdom |
| 0 | 18 | 100 | Warm Atmos | 0 | 35 | 20 | ChurchOrg2 | 0 | 41 | 55 | Choral |
| 0 | 19 | 40 | AnaSynBs.1 | 0 | 35 | 26 | 12-str.Gtr | 0 | 41 | 62 | HiBrass |
| 0 | 19 | 81 | Shmoog | 0 | 35 | 31 | Dazed Gtr. | 0 | 41 | 64 | ChoirBrass |
| 0 | 19 | 82 | Digi.Saw | 0 | 35 | 39 | Clav Bass | 0 | 41 | 67 | Soft Tenor |
| 0 | 19 | 100 | HollowRels | 0 | 35 | 49 | 60sStrings | 0 | 41 | 82 | DoctorSolo |
| 0 | 20 | 39 | FastResoBs | 0 | 35 | 51 | SynthStr.3 | 0 | 41 | 99 | ClearBells |
| 0 | 20 | 63 | RezoSynBrs | 0 | 35 | 56 | Orch.Hit 2 | 0 | 42 | 6 | FM Koto EP |
| 0 | 20 | 82 | Big Lead | 0 | 35 | 62 | Tp&Tb Sec. | 0 | 42 | 49 | TremOrch |
| 0 | 20 | 96 | Shwimmer | 0 | 35 | 87 | Big Fives | 0 | 42 | 62 | Mellow Brs |
| 0 | 24 | 18 | Organ 201 | 0 | 35 | 99 | RoundGlock | 0 | 42 | 99 | ChoralBell |
| 0 | 24 | 31 | Dist.Gtr.2 | 0 | 35 | 105 | Sitar 2 | 0 | 43 | 25 | VelHarmnix |
| 0 | 24 | 39 | Acid Bass | 0 | 36 | 17 | Organ 4 | 0 | 43 | 29 | Funk Gtr.2 |
| 0 | 24 | 49 | ArcoStr | 0 | 36 | 31 | PowerGtr.2 | 0 | 43 | 30 | Gtr.Pinch |
| 0 | 24 | 63 | Poly Brass | 0 | 37 | 17 | 60's Org.3 | 0 | 43 | 31 | RockRythm1 |
| 0 | 24 | 82 | HeavySynth | 0 | 37 | 18 | Organ 5 | 0 | 43 | 34 | FingerSlap |
| 0 | 24 | 86 | Synth.Aahs | 0 | 37 | 31 | PowerGtr.1 | 0 | 43 | 38 | Velo Slap |
| 0 | 25 | 7 | Harpsi.o | 0 | 37 | 61 | Horn Orch | 0 | 43 | 66 | Hyper Alto |
| 0 | 25 | 25 | NylonGtr.3 | 0 | 38 | 17 | EvnenBar | 0 | 45 | 5 | FM+AI EP |
| 0 | 25 | 82 | WaspySynth | 0 | 38 | 31 | 5th Dist. | 0 | 45 | 6 | FM EP |
| 0 | 27 | 8 | Clav.Wah | 0 | 39 | 62 | Brass Fall | 0 | 45 | 12 | Hard Vibe |
| 0 | 27 | 34 | Flanger Bs | 0 | 40 | 1 | Piano Str. | 0 | 45 | 29 | Jazz Man |
| 0 | 27 | 37 | Reso Slap | 0 | 40 | 3 | ElGrPiano1 | 0 | 45 | 31 | RockRythm2 |
| 0 | 27 | 51 | Reso Str. | 0 | 40 | 5 | Hard EP | 0 | 45 | 33 | Uprght Bs. |
| 0 | 27 | 63 | Syn.Brass3 | 0 | 40 | 6 | FM Phase | 0 | 45 | 34 | FingerdBs2 |
| 0 | 27 | 96 | Converge | 0 | 40 | 17 | Organ 6 | 0 | 45 | 49 | VeloString |
| 0 | 27 | 98 | Prologue | 0 | 40 | 20 | NotreDam | 0 | 45 | 53 | AnaVeloBrs |
| 0 | 28 | 35 | MutePickBs | 0 | 40 | 21 | Puff Org. | 0 | 45 | 54 | VeloBrass2 |
| 0 | 28 | 106 | MutedBonjo | 0 | 40 | 26 | Nylon+Stel | 0 | 45 | 82 | Velo Lead |
| 0 | 32 | 3 | DetElGrPno | 0 | 40 | 29 | Funk Gtr.1 | 0 | 45 | 97 | Clavi Pad |
| 0 | 32 | 5 | Soft EP | 0 | 40 | 31 | FeedbackG1 | 0 | 64 | 5 | 60's EP |
| 0 | 32 | 6 | Detune EP2 | 0 | 40 | 33 | JazzRhythm | 0 | 64 | 8 | Pulse Clav |
| 0 | 32 | 17 | DetuneOrg1 | 0 | 40 | 34 | Bs&DstEGtr | 0 | 64 | 11 | Orgel |
| 0 | 32 | 18 | DetuneOrg2 | 0 | 40 | 39 | Tekno Bass | 0 | 64 | 13 | SineMarimb |
| 0 | 32 | 20 | ChurchOrg3 | 0 | 40 | 40 | Modular Bs | 0 | 64 | 17 | Organ Bass |
| 0 | 32 | 22 | Accordion1 | 0 | 40 | 45 | SuspensStr | 0 | 64 | 19 | RotaryOrg |
| 0 | 32 | 23 | Harmonica2 | 0 | 40 | 47 | YangChin | 0 | 64 | 20 | OrganFlute |
| 0 | 32 | 27 | JazzAmp | 0 | 40 | 49 | Orchestra1 | 0 | 64 | 24 | Bandneon2 |
| 0 | 32 | 28 | Chorus Gtr | 0 | 40 | 50 | Warm Str. | 0 | 64 | 28 | CleanGtr.2 |
| 0 | 32 | 36 | Fretless 2 | 0 | 40 | 53 | Choir Str. | 0 | 64 | 32 | AcGtHarmnx |
| 0 | 32 | 37 | PunchThum | 0 | 40 | 55 | Syn.Voice | 0 | 64 | 34 | Jazz Bass |
| 0 | 32 | 40 | SmoothBass | 0 | 40 | 62 | Brass 2 | 0 | 64 | 39 | Oscar |
| 0 | 32 | 53 | MelloChoir | 0 | 40 | 64 | Syn.Brass4 | 0 | 64 | 40 | X WireBass |
| 0 | 32 | 57 | Warm Tp. | 0 | 40 | 66 | Sax Sect. | 0 | 64 | 50 | Slow Str.2 |
| 0 | 32 | 61 | Fr.Horn 2 | 0 | 40 | 67 | BrethTenor | 0 | 64 | 51 | OB Strings |
| 0 | 32 | 63 | Jump Brass | 0 | 40 | 82 | Pulse Saw | 0 | 64 | 53 | StringAahs |
| 0 | 32 | 105 | Det.Sitar | 0 | 40 | 99 | GlockChime | 0 | 64 | 54 | Voice Doo |
| 0 | 33 | 6 | Hard FM EP | 0 | 40 | 100 | Nylon+EP | 0 | 64 | 55 | AnaVoice |
| 0 | 33 | 17 | 60's Org.1 | 0 | 41 | 1 | Dream | 0 | 64 | 56 | Impact Hit |
| 0 | 33 | 18 | Lite Organ | 0 | 41 | 3 | ElGrPiano2 | 0 | 64 | 60 | Muted Tp.2 |
| 0 | 33 | 36 | Fretless 3 | 0 | 41 | 6 | FM+Analog | 0 | 64 | 63 | Octave Brs |
| 0 | 34 | 6 | FM Legend | 0 | 41 | 26 | Steel&Body | 0 | 64 | 64 | VeloBrass1 |

# y:bank

| MSB | LSB | PC | Name | MSB | LSB | PC | Name | MSB | LSB | PC | Name |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 64 | 67 | TenorSax 2 | 0 | 65 | 118 | Real Tom | 0 | 96 | 108 | TaishoKoto |
| 0 | 64 | 76 | PanFlute 2 | 0 | 65 | 119 | Elec Perc | 0 | 96 | 112 | Pungi |
| 0 | 64 | 81 | Mellow FM | 0 | 66 | 17 | Cheese Org | 0 | 96 | 113 | Bonang |
| 0 | 64 | 83 | Vent Synth | 0 | 66 | 19 | RotaryOrgF | 0 | 96 | 114 | Atarigane |
| 0 | 64 | 84 | Rubby | 0 | 66 | 32 | GtHarmonx2 | 0 | 96 | 115 | Tablas |
| 0 | 64 | 85 | Dist.Lead | 0 | 66 | 39 | RubberBass | 0 | 96 | 116 | Castanets |
| 0 | 64 | 86 | Vox Lead | 0 | 66 | 56 | Double Hit | 0 | 96 | 117 | Concert BD |
| 0 | 64 | 88 | Fat&Perky | 0 | 66 | 81 | Sine Wave | 0 | 96 | 120 | Rev.Snare1 |
| 0 | 64 | 89 | Fantasia 2 | 0 | 66 | 91 | Analog Pad | 0 | 97 | 13 | Balaphone2 |
| 0 | 64 | 90 | Horn Pad | 0 | 66 | 92 | Itopia | 0 | 97 | 15 | Carillon |
| 0 | 64 | 91 | 80sPolySyn | 0 | 66 | 96 | Celestial | 0 | 97 | 16 | Santur 3 |
| 0 | 64 | 92 | Heaven | 0 | 66 | 97 | Caribean | 0 | 97 | 36 | Mr.Smooth |
| 0 | 64 | 93 | Glacier | 0 | 66 | 99 | Loud Clock | 0 | 97 | 105 | Tamboura |
| 0 | 64 | 94 | Tine Pad | 0 | 66 | 100 | AmbientPad | 0 | 97 | 106 | Gopichant |
| 0 | 64 | 96 | Polar Pad | 0 | 66 | 102 | Ring Pad | 0 | 97 | 108 | Kanoon |
| 0 | 64 | 97 | Harmo Rain | 0 | 66 | 103 | WaterPiano | 0 | 97 | 112 | Hichiriki |
| 0 | 64 | 98 | Ancestral | 0 | 66 | 118 | Rock Tom | 0 | 97 | 113 | Gender |
| 0 | 64 | 99 | Syn.Mallet | 0 | 67 | 17 | Organ 7 | 0 | 97 | 115 | Glass Perc |
| 0 | 64 | 100 | Nylon Harp | 0 | 67 | 56 | BrassStab | 0 | 97 | 120 | Rev.Snare2 |
| 0 | 64 | 101 | Fanta Bell | 0 | 67 | 91 | Squre Pad | 0 | 98 | 13 | Log Drum |
| 0 | 64 | 102 | Goblinson | 0 | 67 | 92 | Cycle Pad | 0 | 98 | 106 | Oud |
| 0 | 64 | 103 | Echo Bell | 0 | 67 | 99 | Xmas Bell | 0 | 98 | 113 | GamelaGong |
| 0 | 64 | 104 | StarTheme2 | 0 | 67 | 100 | Planet | 0 | 98 | 115 | Thai Bell |
| 0 | 64 | 109 | BigKalimba | 0 | 67 | 102 | Ritual | 0 | 98 | 120 | Rev.Kick 1 |
| 0 | 64 | 112 | Shanai 2 | 0 | 67 | 103 | Creation | 0 | 99 | 113 | St.Gamelan |
| 0 | 64 | 118 | Melo.Tom 2 | 0 | 68 | 99 | VibraBells | 0 | 99 | 120 | Rev.ConBD |
| 0 | 64 | 119 | Analog Tom | 0 | 68 | 102 | ToHeaven | 0 | 100 | 113 | RamaCymbal |
| 0 | 64 | 120 | RevCymbal2 | 0 | 68 | 103 | Stardust | 0 | 100 | 120 | Rev.Tom 1 |
| 0 | 65 | 8 | PierceClav | 0 | 69 | 99 | Digi Bells | 0 | 101 | 113 | Asian Bell |
| 0 | 65 | 17 | Organ 109 | 0 | 69 | 102 | Milky Way | 0 | 101 | 120 | Rev.Tom 2 |
| 0 | 65 | 19 | RotaryOrgS | 0 | 69 | 103 | ResoPanner | 64 | x | 1 | CutNoise 1 |
| 0 | 65 | 20 | Trem.Flute | 0 | 70 | 99 | Air Bells | 64 | x | 2 | CutNoise 2 |
| 0 | 65 | 32 | GtFeedback | 0 | 70 | 102 | Night | 64 | x | 3 | DstCutNoiz |
| 0 | 65 | 34 | ModAlem | 0 | 71 | 99 | Bell Harp | 64 | x | 4 | StringSlap |
| 0 | 65 | 39 | SqrBass | 0 | 71 | 102 | Glisten | 64 | x | 5 | Bass Slide |
| 0 | 65 | 50 | Slow Str.3 | 0 | 72 | 99 | Gamelimba | 64 | x | 6 | PickScrape |
| 0 | 65 | 51 | SS Str. | 0 | 72 | 102 | Puffy | 64 | x | 17 | FlKeyClick |
| 0 | 65 | 53 | Male Aahs | 0 | 96 | 13 | Balaphone1 | 64 | x | 33 | Rain |
| 0 | 65 | 56 | Philly Hit | 0 | 96 | 15 | ChurchBell | 64 | x | 34 | Thunder |
| 0 | 65 | 81 | Soft Solo | 0 | 96 | 16 | Cimbalom | 64 | x | 35 | Wind |
| 0 | 65 | 83 | PurePanLd. | 0 | 96 | 25 | Ukulele | 64 | x | 36 | Stream |
| 0 | 65 | 85 | Wire Lead | 0 | 96 | 26 | Mandolin | 64 | x | 37 | Bubble |
| 0 | 65 | 88 | SoftWurl | 0 | 96 | 27 | PedalSteel | 64 | x | 38 | Feed |
| 0 | 65 | 90 | Rotary Str | 0 | 96 | 29 | MuteDstGtr | 64 | x | 49 | Dog |
| 0 | 65 | 91 | Click Pad | 0 | 96 | 36 | SynFretles | 64 | x | 50 | Gallop |
| 0 | 65 | 92 | Lite Pad | 0 | 96 | 39 | Hammer | 64 | x | 51 | Bird 2 |
| 0 | 65 | 93 | Glass Pad | 0 | 96 | 54 | Voice Hmn | 64 | x | 52 | Kitty |
| 0 | 65 | 94 | Panner Pad | 0 | 96 | 57 | FlugelHorn | 64 | x | 53 | Growl |
| 0 | 65 | 96 | Sweepy | 0 | 96 | 72 | BsClarinet | 64 | x | 54 | Haunted |
| 0 | 65 | 97 | AfricaWood | 0 | 96 | 76 | Kawala | 64 | x | 55 | Ghost |
| 0 | 65 | 98 | Rave | 0 | 96 | 82 | Seq.Analog | 64 | x | 56 | Maou |
| 0 | 65 | 99 | SftCrystal | 0 | 96 | 101 | Smokey | 64 | x | 65 | Telephone1 |
| 0 | 65 | 100 | Harpvox | 0 | 96 | 102 | Bell Choir | 64 | x | 66 | Door-Creak |
| 0 | 65 | 102 | 50s Sci-Fi | 0 | 96 | 105 | Tambra | 64 | x | 67 | Door-Slam |
| 0 | 65 | 103 | Big Panner | 0 | 96 | 106 | Rabab | 64 | x | 68 | Scratch 1 |
| 0 | 65 | 104 | Odyssey | 0 | 96 | 107 | Tsugaru | 64 | x | 69 | Scratch 2 |

# y:bank

| MSB | LSB | PC | Name |
|---|---|---|---|
| 64 | x | 70 | WindChimes |
| 64 | x | 71 | Telephone2 |
| 64 | x | 81 | Car-Engine |
| 64 | x | 82 | Car-Stop |
| 64 | x | 83 | Car-Pass |
| 64 | x | 84 | Car-Crash |
| 64 | x | 85 | Siren |
| 64 | x | 86 | Train |
| 64 | x | 87 | Jetplane |
| 64 | x | 88 | Starship |
| 64 | x | 89 | BurstNoise |
| 64 | x | 90 | Coaster |
| 64 | x | 91 | Submarine |
| 64 | x | 97 | Laughing |
| 64 | x | 98 | Screaming |
| 64 | x | 99 | Punch |
| 64 | x | 100 | Heart Beat |
| 64 | x | 101 | FootSteps |
| 64 | x | 102 | Applause 2 |
| 64 | x | 113 | MachineGun |
| 64 | x | 114 | Lasergun |
| 64 | x | 115 | Explosion |
| 64 | x | 116 | Firework |

# GM-b

| MSB | LSB | PC | Name |
|---|---|---|---|
| 56 | x | 1 | Piano |
| 56 | x | 2 | BritePiano |
| 56 | x | 3 | HammerPno |
| 56 | x | 4 | HonkeyTonk |
| 56 | x | 5 | New Tines |
| 56 | x | 6 | Digi Piano |
| 56 | x | 7 | Harpsicord |
| 56 | x | 8 | Clav |
| 56 | x | 9 | Celesta |
| 56 | x | 10 | Glocken |
| 56 | x | 11 | Music Box |
| 56 | x | 12 | Vibes |
| 56 | x | 13 | Marimba |
| 56 | x | 14 | Xylophon |
| 56 | x | 15 | Tubular |
| 56 | x | 16 | Santur |
| 56 | x | 17 | Full Organ |
| 56 | x | 18 | Perc Organ |
| 56 | x | 19 | BX-3 Organ |
| 56 | x | 20 | ChurchPipe |
| 56 | x | 21 | Positive |
| 56 | x | 22 | Musette |
| 56 | x | 23 | Harmonica |
| 56 | x | 24 | Tango |
| 56 | x | 25 | ClassicGtr |
| 56 | x | 26 | A.Guitar |
| 56 | x | 27 | JazzGuitar |
| 56 | x | 28 | Clean Gtr |
| 56 | x | 29 | MuteGuitar |
| 56 | x | 30 | Over Drive |
| 56 | x | 31 | DistGuitar |
| 56 | x | 32 | RockMonics |
| 56 | x | 33 | Jazz Bass |
| 56 | x | 34 | Deep Bass |
| 56 | x | 35 | Pick Bass |
| 56 | x | 36 | Fretless |
| 56 | x | 37 | SlapBass 1 |
| 56 | x | 38 | SlapBass 2 |
| 56 | x | 39 | SynthBass1 |
| 56 | x | 40 | SynthBass2 |
| 56 | x | 41 | Violin |
| 56 | x | 42 | Viola |
| 56 | x | 43 | Cello |
| 56 | x | 44 | ContraBass |
| 56 | x | 45 | TremoloStr |
| 56 | x | 46 | Pizzicato |
| 56 | x | 47 | Harp |
| 56 | x | 48 | Timpani |
| 56 | x | 49 | Marcato |
| 56 | x | 50 | SlowString |
| 56 | x | 51 | Analog Pad |
| 56 | x | 52 | String Pad |
| 56 | x | 53 | Choir |
| 56 | x | 54 | Doo Voice |
| 56 | x | 55 | Voices |
| 56 | x | 56 | Orch Hit |
| 56 | x | 57 | Trumpet |
| 56 | x | 58 | Trombone |
| 56 | x | 59 | Tuba |
| 56 | x | 60 | Muted Trpt |
| 56 | x | 61 | FrenchHorn |
| 56 | x | 62 | Brass |
| 56 | x | 63 | SynBrass 1 |
| 56 | x | 64 | SynBrass 2 |
| 56 | x | 65 | SopranoSax |
| 56 | x | 66 | Alto Sax |
| 56 | x | 67 | Tenor Sax |
| 56 | x | 68 | Bari Sax |
| 56 | x | 69 | Sweet Oboe |
| 56 | x | 70 | EnglishHrn |
| 56 | x | 71 | BasoonOboe |
| 56 | x | 72 | Clarinet |
| 56 | x | 73 | Piccolo |
| 56 | x | 74 | Flute |
| 56 | x | 75 | Recorder |
| 56 | x | 76 | Pan Flute |
| 56 | x | 77 | Bottle |
| 56 | x | 78 | Shakuhachi |
| 56 | x | 79 | Whistle |
| 56 | x | 80 | Ocarina |
| 56 | x | 81 | SquareWave |
| 56 | x | 82 | Saw Wave |
| 56 | x | 83 | SynCaliope |
| 56 | x | 84 | Syn Chiff |
| 56 | x | 85 | Charang |
| 56 | x | 86 | AirChorus |
| 56 | x | 87 | Rezzo4ths |
| 56 | x | 88 | Bass&Lead |
| 56 | x | 89 | Fantasia |
| 56 | x | 90 | Warm Pad |
| 56 | x | 91 | Poly Pad |
| 56 | x | 92 | Ghost Pad |
| 56 | x | 93 | BowedGlass |
| 56 | x | 94 | Metal Pad |
| 56 | x | 95 | Halo Pad |
| 56 | x | 96 | Sweep |
| 56 | x | 97 | Ice Rain |
| 56 | x | 98 | SoundTrack |
| 56 | x | 99 | Crystal |
| 56 | x | 100 | Atmosphere |
| 56 | x | 101 | Brightness |
| 56 | x | 102 | Goblin |
| 56 | x | 103 | Echo Drop |
| 56 | x | 104 | Star Theme |
| 56 | x | 105 | Sitar |
| 56 | x | 106 | Banjo |
| 56 | x | 107 | Shamisen |
| 56 | x | 108 | Koto |
| 56 | x | 109 | Kalimba |
| 56 | x | 110 | Scotland |
| 56 | x | 111 | Fiddle |
| 56 | x | 112 | Shanai |
| 56 | x | 113 | Metal Bell |
| 56 | x | 114 | Agogo |
| 56 | x | 115 | SteelDrums |
| 56 | x | 116 | Woodblock |
| 56 | x | 117 | Taiko |
| 56 | x | 118 | Tom |
| 56 | x | 119 | Synth Tom |
| 56 | x | 120 | Rev Cymbal |
| 56 | x | 121 | Fret Noise |
| 56 | x | 122 | NoiseChiff |
| 56 | x | 123 | Seashore |
| 56 | x | 124 | Birds |
| 56 | x | 125 | Telephone |
| 56 | x | 126 | Helicopter |
| 56 | x | 127 | Stadium!! |
| 56 | x | 128 | GunShot |

# ProgA

| MSB | LSB | PC | Name | MSB | LSB | PC | Name | MSB | LSB | PC | Name |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 81 | x | 1 | Sunrise | 81 | x | 52 | HarpsiFunk | 81 | x | 103 | PerkySaxes |
| 81 | x | 2 | Piano 16' | 81 | x | 53 | FlugelHorn | 81 | x | 104 | XFade EP |
| 81 | x | 3 | AltoBreath | 81 | x | 54 | Elec. Tap | 81 | x | 105 | Nylon Gtr |
| 81 | x | 4 | TinyDancer | 81 | x | 55 | Harmonics | 81 | x | 106 | JewelryBox |
| 81 | x | 5 | Spruce Gtr | 81 | x | 56 | Africana | 81 | x | 107 | WoodenYou? |
| 81 | x | 6 | Vibra Bell | 81 | x | 57 | TechnoBass | 81 | x | 108 | Symphonic |
| 81 | x | 7 | XFade Bass | 81 | x | 58 | Airways | 81 | x | 109 | Lead Stab |
| 81 | x | 8 | TheStrings | 81 | x | 59 | Busy Boy | 81 | x | 110 | Space Pets |
| 81 | x | 9 | PowerSynth | 81 | x | 60 | Heartbeat | 81 | x | 111 | VS Organ |
| 81 | x | 10 | Total Kit | 81 | x | 61 | Spectrum | 81 | x | 112 | Brasstereo |
| 81 | x | 11 | MachineAge | 81 | x | 62 | Full Pipes | 81 | x | 113 | Methane EP |
| 81 | x | 12 | Hot Keys | 81 | x | 63 | Woodwinds | 81 | x | 114 | ShamiMalet |
| 81 | x | 13 | Brass Band | 81 | x | 64 | Whirly | 81 | x | 115 | Ice Flakes |
| 81 | x | 14 | Maxi Tine | 81 | x | 65 | LeadGuitar | 81 | x | 116 | Chester |
| 81 | x | 15 | Power Rock | 81 | x | 66 | Isabelle | 81 | x | 117 | RhythmJunk |
| 81 | x | 16 | Tabla Talk | 81 | x | 67 | Fat Fretty | 81 | x | 118 | BellShower |
| 81 | x | 17 | FingerBass | 81 | x | 68 | Poppin'Pad | 81 | x | 119 | Fisa 8' |
| 81 | x | 18 | LiteVoices | 81 | x | 69 | Soft Horns | 81 | x | 120 | TamboFlute |
| 81 | x | 19 | Color Pad | 81 | x | 70 | ProducrKit | 81 | x | 121 | Strummers |
| 81 | x | 20 | Festival! | 81 | x | 71 | InTheTrees | 81 | x | 122 | SweepBass |
| 81 | x | 21 | GlideSweep | 81 | x | 72 | SantaClav | 81 | x | 123 | Pan Mallet |
| 81 | x | 22 | Last Tango | 81 | x | 73 | Sfz< Brass | 81 | x | 124 | SteamBrass |
| 81 | x | 23 | MagicFlute | 81 | x | 74 | Tine Pad | 81 | x | 125 | PrarieDawn |
| 81 | x | 24 | Operators | 81 | x | 75 | PedalSteel | 81 | x | 126 | Rotary Org |
| 81 | x | 25 | E.Guitars | 81 | x | 76 | Log Drums | 81 | x | 127 | Horn Ens |
| 81 | x | 26 | Gamelan | 81 | x | 77 | HouseBass1 | 81 | x | 128 | Super Tine |
| 81 | x | 27 | Zap Bass | 81 | x | 78 | Ambi.Voice | | | | |
| 81 | x | 28 | DigitalAir | 81 | x | 79 | MonoLead | | | | |
| 81 | x | 29 | Analogist | 81 | x | 80 | Hackbrett | | | | |
| 81 | x | 30 | MandoTrem | 81 | x | 81 | Halifax NS | | | | |
| 81 | x | 31 | Space Wing | 81 | x | 82 | Drawbars | | | | |
| 81 | x | 32 | Gospel Org | 81 | x | 83 | Fanfare | | | | |
| 81 | x | 33 | Trumpets | 81 | x | 84 | Hard Tines | | | | |
| 81 | x | 34 | Fresh Air | 81 | x | 85 | Dr.Guitar | | | | |
| 81 | x | 35 | Rock Mutes | 81 | x | 86 | EtherBells | | | | |
| 81 | x | 36 | Dustette | 81 | x | 87 | Bass/Harm | | | | |
| 81 | x | 37 | PickedBass | 81 | x | 88 | Air Vox | | | | |
| 81 | x | 38 | ChamberEns | 81 | x | 89 | Drum Hit | | | | |
| 81 | x | 39 | Wire Pad | 81 | x | 90 | 50's SciFi | | | | |
| 81 | x | 40 | Industrial | 81 | x | 91 | SteamCloud | | | | |
| 81 | x | 41 | Neutron | 81 | x | 92 | Bouzouki | | | | |
| 81 | x | 42 | PianoHaven | 81 | x | 93 | BriteBrass | | | | |
| 81 | x | 43 | Shaku Bend | 81 | x | 94 | DWGS EP | | | | |
| 81 | x | 44 | BowenWave | 81 | x | 95 | JoyStickUp | | | | |
| 81 | x | 45 | Clean Funk | 81 | x | 96 | WaveCycles | | | | |
| 81 | x | 46 | SplitBell | 81 | x | 97 | Rap Bass | | | | |
| 81 | x | 47 | Slap It | 81 | x | 98 | OoooohPad | | | | |
| 81 | x | 48 | AnalogPad | 81 | x | 99 | Bright Pad | | | | |
| 81 | x | 49 | Residue | 81 | x | 100 | HarpPluck | | | | |
| 81 | x | 50 | Orch Perc | 81 | x | 101 | ElastikPad | | | | |
| 81 | x | 51 | DreamWorld | 81 | x | 102 | ExpressoPF | | | | |

# ProgB

| MSB | LSB | PC | Name |
|---|---|---|---|
| 82 | x | 1 | PipeDreams |
| 82 | x | 2 | X Piano |
| 82 | x | 3 | BigStrings |
| 82 | x | 4 | Asian Jung |
| 82 | x | 5 | Rock On!!! |
| 82 | x | 6 | GlockBells |
| 82 | x | 7 | FatRezBass |
| 82 | x | 8 | BreathyVox |
| 82 | x | 9 | Xanalog |
| 82 | x | 10 | [KrazyKit] |
| 82 | x | 11 | Transforms |
| 82 | x | 12 | Killer B |
| 82 | x | 13 | Pop Brass |
| 82 | x | 14 | Harp Gliss |
| 82 | x | 15 | BriteSteel |
| 82 | x | 16 | PingMallet |
| 82 | x | 17 | Upright |
| 82 | x | 18 | Velo Flute |
| 82 | x | 19 | LA Synth |
| 82 | x | 20 | [ComboKit] |
| 82 | x | 21 | Wave Sweep |
| 82 | x | 22 | FunkyRoads |
| 82 | x | 23 | AnaStrings |
| 82 | x | 24 | Euro Pipe |
| 82 | x | 25 | Stratified |
| 82 | x | 26 | CrystalIce |
| 82 | x | 27 | Dance Bass |
| 82 | x | 28 | Ghost Vox |
| 82 | x | 29 | FatFilterz |
| 82 | x | 30 | [Down Low] |
| 82 | x | 31 | Sputnik |
| 82 | x | 32 | Super Perc |
| 82 | x | 33 | BrassSwell |
| 82 | x | 34 | Lore |
| 82 | x | 35 | Follow Me |
| 82 | x | 36 | Logs&Bells |
| 82 | x | 37 | 90's Bass |
| 82 | x | 38 | FreshWaves |
| 82 | x | 39 | MIDI Grand |
| 82 | x | 40 | [Mr. Gong] |
| 82 | x | 41 | LandingPad |
| 82 | x | 42 | M1 Piano |
| 82 | x | 43 | DynoString |
| 82 | x | 44 | Tamboura |
| 82 | x | 45 | Chruncher |
| 82 | x | 46 | Star Fire |
| 82 | x | 47 | SynthBass3 |
| 82 | x | 48 | Woodwinds |
| 82 | x | 49 | Reso Waves |
| 82 | x | 50 | [Manimals] |
| 82 | x | 51 | Vortex |
| 82 | x | 52 | ClickOrgan |
| 82 | x | 53 | StereoHorn |
| 82 | x | 54 | MalletLoop |
| 82 | x | 55 | Flamenco |
| 82 | x | 56 | MetalGhost |
| 82 | x | 57 | Velo Pick |
| 82 | x | 58 | ooooooooze |
| 82 | x | 59 | Dr. Tapp |
| 82 | x | 60 | [Loop SFX] |
| 82 | x | 61 | TimeClocks |
| 82 | x | 62 | Classic EP |
| 82 | x | 63 | Cello Ens. |
| 82 | x | 64 | Godfather |
| 82 | x | 65 | Funk Guitr |
| 82 | x | 66 | RealGamlon |
| 82 | x | 67 | ChromeBass |
| 82 | x | 68 | Real Shaku |
| 82 | x | 69 | Split Sync |
| 82 | x | 70 | [ Nature ] |
| 82 | x | 71 | SynTronic |
| 82 | x | 72 | Super BX-3 |
| 82 | x | 73 | Trump Ens. |
| 82 | x | 74 | Jaw Harp |
| 82 | x | 75 | Rock Chuga |
| 82 | x | 76 | ThelceMan |
| 82 | x | 77 | Velo Slap |
| 82 | x | 78 | Flutter |
| 82 | x | 79 | Swell Pad |
| 82 | x | 80 | [Natives!] |
| 82 | x | 81 | Quarks |
| 82 | x | 82 | Dyno Tines |
| 82 | x | 83 | VeloFlugel |
| 82 | x | 84 | Polka Box |
| 82 | x | 85 | FeedbackGt |
| 82 | x | 86 | Swiss Box |
| 82 | x | 87 | Big Mini |
| 82 | x | 88 | Arabesque |
| 82 | x | 89 | Syn Brass |
| 82 | x | 90 | [DrillMe!] |
| 82 | x | 91 | Universe X |
| 82 | x | 92 | Big Organ |
| 82 | x | 93 | EthnoVioln |
| 82 | x | 94 | Real Sitar |
| 82 | x | 95 | Greek Gtr. |
| 82 | x | 96 | Midi Bells |
| 82 | x | 97 | Stick Bass |
| 82 | x | 98 | SopranoVox |
| 82 | x | 99 | Solo Synth |
| 82 | x | 100 | [Jet Star] |
| 82 | x | 101 | ChunkaPick |
| 82 | x | 102 | ArcoAttack |
| 82 | x | 103 | High Wire |
| 82 | x | 104 | Stab Pad |
| 82 | x | 105 | CicadaBugs |
| 82 | x | 106 | Piano&Str |
| 82 | x | 107 | Traverso |
| 82 | x | 108 | SpectrumEP |
| 82 | x | 109 | Mr. Clean |
| 82 | x | 110 | Fat Slap |
| 82 | x | 111 | Choir L+R |
| 82 | x | 112 | CompThing! |
| 82 | x | 113 | TunedDrums |
| 82 | x | 114 | TibetBells |
| 82 | x | 115 | DoubleStop |
| 82 | x | 116 | Warm Tromb |
| 82 | x | 117 | HollowBody |
| 82 | x | 118 | HardBamboo |
| 82 | x | 119 | Tech Bass |
| 82 | x | 120 | Composure |
| 82 | x | 121 | BrassSynth |
| 82 | x | 122 | EchoTabla |
| 82 | x | 123 | Organ 1 |
| 82 | x | 124 | SweetReeds |
| 82 | x | 125 | Mallet EP |
| 82 | x | 126 | ElectricAc |
| 82 | x | 127 | VS Bells |
| 82 | x | 128 | SFX Kit 1 |

# ProgC

| MSB | LSB | PC | Name |
|---|---|---|---|
| 83 | x | 1 | Hyper:Wave |
| 83 | x | 2 | N264 Piano |
| 83 | x | 3 | Ultra Rez |
| 83 | x | 4 | MusicaLoop |
| 83 | x | 5 | MonsterWah |
| 83 | x | 6 | N-Strings |
| 83 | x | 7 | NuFretless |
| 83 | x | 8 | RockSteady |
| 83 | x | 9 | TotalSynth |
| 83 | x | 10 | Zulu Kit |
| 83 | x | 11 | Ravel Pad |
| 83 | x | 12 | PianoMagic |
| 83 | x | 13 | Arpeggiate |
| 83 | x | 14 | VoodooSong |
| 83 | x | 15 | MiniODLead |
| 83 | x | 16 | SlowSunset |
| 83 | x | 17 | SuperRound |
| 83 | x | 18 | RealVoices |
| 83 | x | 19 | DanceReMix |
| 83 | x | 20 | CyberTrash |
| 83 | x | 21 | RunawayPad |
| 83 | x | 22 | MutronClav |
| 83 | x | 23 | DoubleMini |
| 83 | x | 24 | ClockWorks |
| 83 | x | 25 | Rick&aPick |
| 83 | x | 26 | Fragments |
| 83 | x | 27 | Dyno-Bass |
| 83 | x | 28 | Jazz Organ |
| 83 | x | 29 | AnalogSync |
| 83 | x | 30 | Power Play |
| 83 | x | 31 | Tekno:Sync |
| 83 | x | 32 | TXPianoTap |
| 83 | x | 33 | Stick-2-It |
| 83 | x | 34 | WhiteNoise |
| 83 | x | 35 | R&R Guitar |
| 83 | x | 36 | Antartica |
| 83 | x | 37 | Thumb Slap |
| 83 | x | 38 | "Velo ""B"" " |
| 83 | x | 39 | Alaska |
| 83 | x | 40 | Lazer Toms |
| 83 | x | 41 | In The Pad |
| 83 | x | 42 | StereoClav |
| 83 | x | 43 | SquareBass |
| 83 | x | 44 | DreamBells |
| 83 | x | 45 | Metal King |
| 83 | x | 46 | Underscore |
| 83 | x | 47 | Big Bottom |
| 83 | x | 48 | Small^Orch |
| 83 | x | 49 | Film Cue |
| 83 | x | 50 | Cyber Hit |
| 83 | x | 51 | Wavetables |
| 83 | x | 52 | Dyno Roads |
| 83 | x | 53 | Chrome Rez |
| 83 | x | 54 | TheSunrise |
| 83 | x | 55 | Guitarist |
| 83 | x | 56 | VeloVoxPad |
| 83 | x | 57 | Clean Bass |
| 83 | x | 58 | "Classic""B""" |
| 83 | x | 59 | Super~Stab |
| 83 | x | 60 | Modern Kit |
| 83 | x | 61 | Mod:Matrix |
| 83 | x | 62 | Syn Piano |
| 83 | x | 63 | LowEndBass |
| 83 | x | 64 | JackSlide |
| 83 | x | 65 | Mandolin |
| 83 | x | 66 | Padanomic |
| 83 | x | 67 | Rock Bass |
| 83 | x | 68 | VocalChoir |
| 83 | x | 69 | Ghost Stab |
| 83 | x | 70 | ThunderTom |
| 83 | x | 71 | Labyrinth |
| 83 | x | 72 | Wire Clav |
| 83 | x | 73 | Lo-End-Rez |
| 83 | x | 74 | Waterphone |
| 83 | x | 75 | Electric12 |
| 83 | x | 76 | AirFantasy |
| 83 | x | 77 | Thumb&Slap |
| | | 78 | Green Eyes |
| | | 79 | PowerLayer |
| | | 80 | GiantDrums |
| | | 81 | Wave World |
| | | 82 | SynVoxKeys |
| | | 83 | Cyber Bass |
| | | 84 | TheHeavens |
| | | 85 | Light Pizz |
| | | 86 | Synth Fife |
| | | 87 | Super Bass |
| | | 88 | Vox Voice |
| | | 89 | SyncNoEvil |
| | | 90 | Mark Trees |
| | | 91 | The7thWave |
| | | 92 | DW-8000EP |
| | | 93 | Vibra Harp |
| | | 94 | Toy Bellz |
| | | 95 | M1TenorSax |
| | | 96 | TheSandman |
| | | 97 | Deep House |
| | | 98 | BX3 Medium |
| | | 99 | Mega Synth |
| | | 100 | OldKalimba |
| | | 101 | Dr.Octave |
| | | 102 | Pitzpan |
| 83 | x | 103 | Leeeed |
| 83 | x | 104 | Wind Storm |
| 83 | x | 105 | War Pipes |
| 83 | x | 106 | 12StringGt |
| 83 | x | 107 | AfricanJam |
| 83 | x | 108 | HouseBass2 |
| 83 | x | 109 | SynBrass 4 |
| 83 | x | 110 | SitarSitar |
| 83 | x | 111 | FlyingToys |
| 83 | x | 112 | Tone Wheel |
| 83 | x | 113 | BasoonOboe |
| 83 | x | 114 | Emmalisha |
| 83 | x | 115 | Organ 2 |
| 83 | x | 116 | SolarBells |
| 83 | x | 117 | Funk Bass |
| 83 | x | 118 | Heavenly |
| 83 | x | 119 | Soft Pad |
| 83 | x | 120 | Last Dream |
| 83 | x | 121 | OrganTouch |
| 83 | x | 122 | Mute Ens. |
| 83 | x | 123 | Siesta EP |
| 83 | x | 124 | FunkGuitar |
| 83 | x | 125 | Ice Bell |
| 83 | x | 126 | Thumb Bass |
| 83 | x | 127 | VeloSweep |
| 83 | x | 128 | SFX Kit 2 |

# Combination

| MSB | LSB | PC | Name | Type | MSB | LSB | PC | Name | Type |
|---|---|---|---|---|---|---|---|---|---|
| 89 | x | 1 | Star*Burst | Split/VSw | 89 | x | 56 | SugarBells | Split/VSw |
| 89 | x | 2 | LayerPiano | Layer | 89 | x | 57 | Blues Harp | Layer |
| 89 | x | 3 | Synth Fat | Layer | 89 | x | 58 | Grandioso | Split |
| 89 | x | 4 | Satellite | Layer | 89 | x | 59 | Osaka Jazz | Split |
| 89 | x | 5 | Mr. Tone | Split | 89 | x | 60 | MasterFisa | Layer |
| 89 | x | 6 | Calcutta | Split/VSw | 89 | x | 61 | Autumn | Layer |
| 89 | x | 7 | FunkySpice | Layer | 89 | x | 62 | ElecPno&Bs | Split/VSw |
| 89 | x | 8 | Layer Str | Layer | 89 | x | 63 | MasterFunk | Split/VSw |
| 89 | x | 9 | Sax Heaven | Split | 89 | x | 64 | VeloVoices | Layer/VSw |
| 89 | x | 10 | Celebrate! | Split/VSw | 89 | x | 65 | Split Bass | Split/VSw |
| 89 | x | 11 | First*Snow | Split | 89 | x | 66 | Ethno Geo | Split |
| 89 | x | 12 | Bass&Piano | Split/VSw | 89 | x | 67 | Ruff&Ready | Layer |
| 89 | x | 13 | Full Brass | Split/VSw | 89 | x | 68 | Madrigal | Layer |
| 89 | x | 14 | Sing To Me | Split | 89 | x | 69 | ChiffSplit | Split |
| 89 | x | 15 | Mr.Chorus | Split/VSw | 89 | x | 70 | Dagobar | Layer |
| 89 | x | 16 | Javanese | Layer | 89 | x | 71 | Child Song | Split |
| 89 | x | 17 | L'ilBit O' | Layer | 89 | x | 72 | Pontette | Layer |
| 89 | x | 18 | Philarmony | Split/VSw | 89 | x | 73 | GoToSweep | Layer |
| 89 | x | 19 | Half Moons | Layer | 89 | x | 74 | SilkRoad33 | Split |
| 89 | x | 20 | HereItComz | Split/VSw | 89 | x | 75 | Nashville | Split |
| 89 | x | 21 | Rezolution | Layer | 89 | x | 76 | Bolshoi | Layer |
| 89 | x | 22 | The Gospel | Layer/VSw | 89 | x | 77 | Wasp Sting | Layer |
| 89 | x | 23 | New Rave | Split/VSw | 89 | x | 78 | AnaStrings | Layer |
| 89 | x | 24 | FlutterPad | Layer | 89 | x | 79 | ChrisTall | Split/VSw |
| 89 | x | 25 | ShoeString | Split | 89 | x | 80 | Rave Hits | Layer |
| 89 | x | 26 | Tethnical | Split/VSw | 89 | x | 81 | SunOfTron | Split/VSw |
| 89 | x | 27 | Full Pipe | Layer | 89 | x | 82 | SamAntic | Split/VSw |
| 89 | x | 28 | Overture | Split/VSw | 89 | x | 83 | SweetMutes | Layer |
| 89 | x | 29 | Lead &Pad | Split | 89 | x | 84 | Nebulae | Layer |
| 89 | x | 30 | Dulcimer | Layer | 89 | x | 85 | Dole Bee | Split/VSw |
| 89 | x | 31 | StormOf'93 | Layer | 89 | x | 86 | The Sphinx | Split/VSw |
| 89 | x | 32 | Stak'oMidi | Layer | 89 | x | 87 | Deep Organ | Layer |
| 89 | x | 33 | SmokyHorn | Split | 89 | x | 88 | StringsAtk | Layer |
| 89 | x | 34 | VeloVoxBel | Layer/VSw | 89 | x | 89 | Lassie&Tim | Split |
| 89 | x | 35 | Slap & Pop | Layer/VSw | 89 | x | 90 | DeathStars | Split/VSw |
| 89 | x | 36 | Bass&Vibes | Split/VSw | 89 | x | 91 | FreeTime | Split |
| 89 | x | 37 | Super Perc | Layer | 89 | x | 92 | PianoSings | Split |
| 89 | x | 38 | Pizz & Bow | Layer | 89 | x | 93 | BiggerIdea | Split |
| 89 | x | 39 | Aquarium | Split | 89 | x | 94 | Safari | Split |
| 89 | x | 40 | HouseParty | Split/VSw | 89 | x | 95 | Guitar&Pad | Split |
| 89 | x | 41 | Bell Come! | Layer | 89 | x | 96 | ChinaBell | Split/VSw |
| 89 | x | 42 | EP&String | Layer | 89 | x | 97 | Sky Ca t | Layer |
| 89 | x | 43 | Latin Band | Split/VSw | 89 | x | 98 | HarpString | Layer |
| 89 | x | 44 | HumanBeam | Split/VSw | 89 | x | 99 | Night Taps | Layer |
| 89 | x | 45 | 12 Stereo | Split/VSw | 89 | x | 100 | Slammin' | Split/VSw |
| 89 | x | 46 | Instanbul | Split/VSw | 89 | x | 101 | Sea Horses | Split/VSw |
| 89 | x | 47 | Busy Split | Split VSw | 89 | x | 102 | Power Comp | Layer |
| 89 | x | 48 | Orchestral | Split | 89 | x | 103 | Midi Winds | Layer |
| 89 | x | 49 | CymbalLife | Layer | 89 | x | 104 | ProxiMidi | Layer |
| 89 | x | 50 | Space Port | Split | 89 | x | 105 | Oh-La-La ! | Split |
| 89 | x | 51 | Beach Walk | Layer | 89 | x | 106 | IndianOrch | Split/VSw |
| 89 | x | 52 | DynoPiano | Split | 89 | x | 107 | Double Bow | Layer |
| 89 | x | 53 | Centrefold | Layer | 89 | x | 108 | Backyard | Layer |
| 89 | x | 54 | InTheLight | Split | 89 | x | 109 | CountOnMe | Split |
| 89 | x | 55 | Velo Chord | Split/VSw | 89 | x | 110 | Trpt.Brass | Layer |

| MSB | LSB | PC | Name | Type |
|---|---|---|---|---|
| 89 | x | 111 | Acappella | Layer |
| 89 | x | 112 | AndyPlayIt | Layer/VSw |
| 89 | x | 113 | Fairy Bell | Layer |
| 89 | x | 114 | Leti Theme | Split/VSw |
| 89 | x | 115 | Canyon | Layer |
| 89 | x | 116 | StealDrums | Split |
| 89 | x | 117 | Right&Left | Layer |
| 89 | x | 118 | Two In One | Split/VSw |
| 89 | x | 119 | ODriveLead | Layer |
| 89 | x | 120 | TheRedSun | Layer |
| 89 | x | 121 | Ethnetic | Split |
| 89 | x | 122 | WeddingDay | Split |
| 89 | x | 123 | Concerto | Split |
| 89 | x | 124 | LegatoReed | Split |
| 89 | x | 125 | Bavaria | Split |
| 89 | x | 126 | Rain Chime | Split |
| 89 | x | 127 | VoxGamelan | Layer |
| 89 | x | 128 | DynamoBass | Layer/VSw |

# CmbB

| MSB | LSB | PC | Name | Type |
|---|---|---|---|---|
| 90 | x | 1 | SolarFlare | Layer/VSw |
| 90 | x | 2 | StereoKeys | Layer/VSw |
| 90 | x | 3 | X Strings | Layer |
| 90 | x | 4 | AnalogKing | Layer |
| 90 | x | 5 | CrankItUp! | Layer/VSw |
| 90 | x | 6 | HeadHunter | Layer/VSw |
| 90 | x | 7 | Rock Organ | Layer |
| 90 | x | 8 | X Brass | Layer |
| 90 | x | 9 | TheSingers | Layer |
| 90 | x | 10 | Wild Drums | Layer |
| 90 | x | 11 | <The West> | Layer/VSw |
| 90 | x | 12 | Super EP | Layer |
| 90 | x | 13 | Wind->Orch | Layer/VSw |
| 90 | x | 14 | Maxi Stab | Layer |
| 90 | x | 15 | 12 String | Layer |
| 90 | x | 16 | <The East> | Layer/VSw |
| 90 | x | 17 | ChorusClav | Layer/VSw |
| 90 | x | 18 | Bass/Horn | Split/VSw |
| 90 | x | 19 | Ice Bells | Layer |
| 90 | x | 20 | Wild Split | Layer |
| 90 | x | 21 | Warriors | Layer |
| 90 | x | 22 | Fat Pianos | Layer |
| 90 | x | 23 | Sonata | Layer |
| 90 | x | 24 | LayerSynth | Layer |
| 90 | x | 25 | WaveGuitar | Layer |
| 90 | x | 26 | EthnicOrch | Layer/VSw |
| 90 | x | 27 | Cathedral | Layer |
| 90 | x | 28 | BrassSwell | Layer |
| 90 | x | 29 | Java Bells | Layer |
| 90 | x | 30 | PhantomSax | Layer/VSw |
| 90 | x | 31 | AncientSun | Layer |
| 90 | x | 32 | Velo Roads | Layer/VSw |
| 90 | x | 33 | Symphony | Layer |
| 90 | x | 34 | NeuroFunk | Layer/VSw |
| 90 | x | 35 | Slappin' | Layer/VSw |
| 90 | x | 36 | EastAfrica | Layer/VSw |
| 90 | x | 37 | Ultra Perc | Layer |
| 90 | x | 38 | TheSaxMen | Layer |
| 90 | x | 39 | LunarBells | Layer |
| 90 | x | 40 | <<<Hell>>> | Layer |
| 90 | x | 41 | <<Heaven>> | Layer/VSw |
| 90 | x | 42 | Rock Piano | Layer |
| 90 | x | 43 | ChamberOrc | Layer |
| 90 | x | 44 | Multi Rez | Layer |
| 90 | x | 45 | Chorus Gtr | Layer/VSw |
| 90 | x | 46 | Zen Garden | Layer/VSw |
| 90 | x | 47 | Accordion | Layer |
| 90 | x | 48 | MutedHorns | Layer |
| 90 | x | 49 | PizzoSynth | Layer |
| 90 | x | 50 | RapToolKit | Layer/VSw |
| 90 | x | 51 | Megatron | Layer/VSw |
| 90 | x | 52 | Bs/EP&Str | Split |
| 90 | x | 53 | Fanfare | Layer |
| 90 | x | 54 | Big Swell | Layer |
| 90 | x | 55 | StickSplit | Split |
| 90 | x | 56 | Indian Jam | Layer/VSw |
| 90 | x | 57 | Harpsicord | Layer |
| 90 | x | 58 | Bass/Brass | Layer/VSw |

| MSB | LSB | PC | Name | Type |
|---|---|---|---|---|
| 90 | x | 59 | Moon Stone | Layer |
| 90 | x | 60 | Torquemada | Layer |
| 90 | x | 61 | Crossfades | Layer |
| 90 | x | 62 | SuperKeys | Layer |
| 90 | x | 63 | WoodWinds | Layer/VSw |
| 90 | x | 64 | OctaveLead | Layer |
| 90 | x | 65 | Malaguena | Split |
| 90 | x | 66 | RhythmPipe | Layer/VSw |
| 90 | x | 67 | FullManual | Layer |
| 90 | x | 68 | Bows/Trpt | Split |
| 90 | x | 69 | Airiana | Layer |
| 90 | x | 70 | SpaceZones | Split |
| 90 | x | 71 | New Worlds | Layer |
| 90 | x | 72 | Digi Piano | Layer |
| 90 | x | 73 | FullString | Layer |
| 90 | x | 74 | Rezzo Funk | Layer |
| 90 | x | 75 | Guitar Man | Layer/VSw |
| 90 | x | 76 | Warm Koto | Layer |
| 90 | x | 77 | Rock Show! | Layer |
| 90 | x | 78 | Big Band | Layer |
| 90 | x | 79 | Vox Bells | Layer |
| 90 | x | 80 | MenAtWork | Layer |
| 90 | x | 81 | Galaxia | Layer/VSw |
| 90 | x | 82 | Bass/Piano | Split |
| 90 | x | 83 | Str/Oboe | Split |
| 90 | x | 84 | RezzoSplit | Split |
| 90 | x | 85 | TheOldWest | Split |
| 90 | x | 86 | Lost Tribe | Layer/VSw |
| 90 | x | 87 | DualManual | Split |
| 90 | x | 88 | Trpt&Bones | Layer |
| 90 | x | 89 | Bellendra | Layer/VSw |
| 90 | x | 90 | Star Lense | Layer |
| 90 | x | 91 | The Abyss | Layer |
| 90 | x | 92 | Piano&Str | Layer |
| 90 | x | 93 | ChamberStr | Layer |
| 90 | x | 94 | Hard Sync | Layer/VSw |
| 90 | x | 95 | Gtr/Flute | Split |
| 90 | x | 96 | RainForest | Layer/VSw |
| 90 | x | 97 | PipeOrgan | Layer |
| 90 | x | 98 | Hot Salsa | Layer/VSw |
| 90 | x | 99 | Prisms | Layer |
| 90 | x | 100 | TheDentist | Layer |
| 90 | x | 101 | VibeRation | Layer |
| 90 | x | 102 | SplitOrgan | Split |
| 90 | x | 103 | Pizz A Pie | Layer |
| 90 | x | 104 | TechnoPres | Layer |
| 90 | x | 105 | Witch Hunt | Split/VSw |
| 90 | x | 106 | Blade Runs | Split/VSw |
| 90 | x | 107 | Piano Pad | Layer |
| 90 | x | 108 | MillerTime | Split/VSw |
| 90 | x | 109 | Wood Vox | Layer |
| 90 | x | 110 | Folk Picks | Split/VSw |
| 90 | x | 111 | Sting&Wind | Split |
| 90 | x | 112 | Delicato | Layer |
| 90 | x | 113 | Sophism | Layer |
| 90 | x | 114 | PowderSnow | Layer |
| 90 | x | 115 | Tiny&Tiny | Split/VSw |
| 90 | x | 116 | Emmalog | Layer |
| 90 | x | 117 | Dreamy P | Layer |
| 90 | x | 118 | RockShow! | Split |
| 90 | x | 119 | BigStrings | Split |
| 90 | x | 120 | Cool Duet | Split |
| 90 | x | 121 | Mazurca | Split |
| 90 | x | 122 | Pollenesk | Layer |
| 90 | x | 123 | Bass&EP | Split/VSw |
| 90 | x | 124 | BadScream | Layer/VSw |
| 90 | x | 125 | AlienSings | Layer |
| 90 | x | 126 | Milagro | Layer/VSw |
| 90 | x | 127 | Fusionist | Layer |
| 90 | x | 128 | WoodSector | Split/VSw |

# CmbC

| MSB | LSB | PC | Name | Type |
|---|---|---|---|---|
| 91 | x | 1 | FirstLight | Layer |
| 91 | x | 2 | Grinding B | Layer |
| 91 | x | 3 | Shangri-La | Layer |
| 91 | x | 4 | Mast World | Layer |
| 91 | x | 5 | World Bass | Layer |
| 91 | x | 6 | Max Impact | Split/VSw |
| 91 | x | 7 | Rave Vox | Split/VSw |
| 91 | x | 8 | OrchDivisi | Layer |
| 91 | x | 9 | SongOfLife | Split/VSw |
| 91 | x | 10 | Dance Trak | Split |
| 91 | x | 11 | InTheMaze | Layer/VSw |
| 91 | x | 12 | Power Keys | Layer |
| 91 | x | 13 | Horn Stabs | Layer |
| 91 | x | 14 | Goldmine | Layer/VSw |
| 91 | x | 15 | Maya Dance | Layer |
| 91 | x | 16 | Melotronic | Layer |
| 91 | x | 17 | House Mix | Split |
| 91 | x | 18 | Orch Split | Split/VSw |
| 91 | x | 19 | Morocco | Split/VSw |
| 91 | x | 20 | Didjeridoo | Layer/VSw |
| 91 | x | 21 | XYjoystick | Layer |
| 91 | x | 22 | Super Jazz | Layer |
| 91 | x | 23 | OB-Analog | Layer |
| 91 | x | 24 | String Cue | Layer/VSw |
| 91 | x | 25 | RhythmnGtr | Layer |
| 91 | x | 26 | EasternSun | Layer/VSw |
| 91 | x | 27 | GiantSplit | Split |
| 91 | x | 28 | Allegro | Layer/VSw |
| 91 | x | 29 | PolyChords | Split/VSw |
| 91 | x | 30 | PowerHouse | Split |
| 91 | x | 31 | L.F.O.City | Split |
| 91 | x | 32 | MIDIEP-Pad | Layer/VSw |
| 91 | x | 33 | Square Rez | Split |
| 91 | x | 34 | SkyCatLead | Layer |
| 91 | x | 35 | Fade Away | Layer |
| 91 | x | 36 | 9 Inchers | Split |
| 91 | x | 37 | PhaseTwins | Split |
| 91 | x | 38 | Velo-Pizz | Layer/VSw |
| 91 | x | 39 | TheGamelan | Layer/VSw |
| 91 | x | 40 | UnderWorld | Layer |
| 91 | x | 41 | Vaporizer | Layer |
| 91 | x | 42 | BigDrawbar | Layer |
| 91 | x | 43 | Sax Band | Layer |
| 91 | x | 44 | Boys Choir | Layer |
| 91 | x | 45 | HeartBreak | Split |
| 91 | x | 46 | Wet Lands | Split/VSw |
| 91 | x | 47 | HouseOfSki | Split/VSw |
| 91 | x | 48 | NightMusic | Layer/VSw |
| 91 | x | 49 | NeverLand | Split |
| 91 | x | 50 | DJ*ToolBox | Layer/VSw |
| 91 | x | 51 | QuarkSpark | Split |
| 91 | x | 52 | M-1LayerEP | Layer |
| 91 | x | 53 | PowerStack | Layer |
| 91 | x | 54 | HitTheDust | Layer/VSw |
| 91 | x | 55 | Power Band | Split |
| 91 | x | 56 | WaveJammer | Split |
| 91 | x | 57 | Green Rave | Split |
| 91 | x | 58 | Nutcracker | Layer |
| 91 | x | 59 | NightTrain | Split |
| 91 | x | 60 | Worm Hole | Layer |
| 91 | x | 61 | VirtualsSplit | |
| 91 | x | 62 | Stax Organ | Layer |
| 91 | x | 63 | Anna Split | Split |
| 91 | x | 64 | ArcoString | Layer |
| 91 | x | 65 | Slap Stick | Layer/VSw |
| 91 | x | 66 | Botswana | Split/VSw |
| 91 | x | 67 | Asidic Split | |
| 91 | x | 68 | DelayedHit | Layer/VSw |
| 91 | x | 69 | Sir Robin | Split |
| 91 | x | 70 | EtherScape | Split |
| 91 | x | 71 | Gyroscope | Layer |
| 91 | x | 72 | Whirly Pad | Layer |
| 91 | x | 73 | Rezzo Comp | Layer |
| 91 | x | 74 | Voices2Men | Layer/VSw |
| 91 | x | 75 | Fret-Not! | Layer |
| 91 | x | 76 | RagaTrance | Split/VSw |
| 91 | x | 77 | X-Voxsplit | Split |
| 91 | x | 78 | Serenade | Layer/VSw |
| 91 | x | 79 | Jazz Duet | Split |
| 91 | x | 80 | AlienProbe | Split/VSw |
| 91 | x | 81 | Alienesque | Split |
| 91 | x | 82 | The Legend | Layer |
| 91 | x | 83 | Real Horns | Split |
| 91 | x | 84 | Eternal Layer | |
| 91 | x | 85 | InTheArena | Layer |
| 91 | x | 86 | N:Wave:Seq | Layer |
| 91 | x | 87 | Euroman | Split/VSw |
| 91 | x | 88 | Orch Winds | Layer |
| 91 | x | 89 | PacificaSplit | |
| 91 | x | 90 | TheBigBang | Split |
| 91 | x | 91 | Uni Verse | Layer |
| 91 | x | 92 | O.D. Organ | Layer |
| 91 | x | 93 | Sync Home | Split |
| 91 | x | 94 | AngelChoir | Layer |
| 91 | x | 95 | Prog Split | Split |
| 91 | x | 96 | Trinidad | Layer |
| 91 | x | 97 | Enose Horn | Layer |
| 91 | x | 98 | Ensembled | Layer/VSw |
| 91 | x | 99 | There&Back | Split |
| 91 | x | 100 | Sea Storm | Layer |
| 91 | x | 101 | TypeALine | Split |
| 91 | x | 102 | Bug Forest | Split/VSw |
| 91 | x | 103 | TheyAppear | Split |
| 91 | x | 104 | Emmabama | Layer/VSw |
| 91 | x | 105 | TheSweeper | Split |
| 91 | x | 106 | Dreaming | Layer |
| 91 | x | 107 | Fat Pluck | Layer |
| 91 | x | 108 | 12ToneBelz | Split |
| 91 | x | 109 | Have Fun | Split |
| 91 | x | 110 | Bows&Brass | Split |
| 91 | x | 111 | Echo Suite | Split |
| 91 | x | 112 | Percolator | Split |
| 91 | x | 113 | Vectoring | Layer |
| 91 | x | 114 | Hard&Sweet | Split |
| 91 | x | 115 | Trombhorns | Split |
| 91 | x | 116 | Synmonics | Layer/VSw |

| MSB | LSB | PC | Name | Type |
|---|---|---|---|---|
| 91 | x | 117 | Mixture | Split |
| 91 | x | 118 | The Finale | Split/VSw |
| 91 | x | 119 | AfricaMood | Split |
| 91 | x | 120 | Encounters | Layer |
| 91 | x | 121 | Layer Cake | Layer |
| 91 | x | 122 | Puffalog | Layer |
| 91 | x | 123 | Pad+Alpha | Layer |
| 91 | x | 124 | BreakADish | Split/VSw |
| 91 | x | 125 | Randomizer | Layer/VSw |
| 91 | x | 126 | HornMelody | Split |
| 91 | x | 127 | Acid Tools | Layer |
| 91 | x | 128 | TimeTunnel | Layer |

# Drumkit

## 0 STANDARD

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 154 | Scratch Hi | 7 |
| F#1 | 155 | Scratch Lo | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 4 | Punch Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 16 | Snare 1 | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 20 | PicloSnare | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 1 ROOM

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 154 | Scratch Hi | 7 |
| F#1 | 155 | Scratch Lo | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 2 | Ambi.Kick | OFF |
| C 2 | 2 | Ambi.Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 27 | GatedSnare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 25 | Ambi.Snare | OFF |
| F 2 | 65 | Tom 2 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 65 | Tom 2 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 65 | Tom 2 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 63 | Tom 2 Hi | OFF |
| C 3 | 63 | Tom 2 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 63 | Tom 2 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 2 POWER

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 154 | Scratch Hi | 7 |
| F#1 | 155 | Scratch Lo | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 9 | Metal Kick | OFF |
| C 2 | 7 | Gated Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 27 | GatedSnare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 26 | Rock Snare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 3 ELECTRONIC

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 155 | Scratch Lo | 7 |
| F#1 | 154 | Scratch Hi | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 10 | Dance Kick | OFF |
| C 2 | 14 | Syn Kick 4 | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 68 | OilDrum | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 27 | GatedSnare | OFF |
| F 2 | 69 | Syn Tom 1 | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 69 | Syn Tom 1 | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 69 | Syn Tom 1 | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 69 | Syn Tom 1 | OFF |
| C 3 | 69 | Syn Tom 1 | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 69 | Syn Tom 1 | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 180 | Rev.Cymbal | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 4 ANALOG

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 155 | Scratch Lo | 7 |
| F#1 | 154 | Scratch Hi | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 13 | Syn Kick 3 | OFF |
| C 2 | 13 | Syn Kick 3 | OFF |
| C#2 | 42 | Syn Rim | OFF |
| D 2 | 31 | SynSnare 1 | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 32 | SynSnare 2 | OFF |
| F 2 | 71 | SynTom2 Lo | OFF |
| F#2 | 55 | CloseSynHH | 1 |
| G 2 | 71 | SynTom2 Lo | OFF |
| G#2 | 55 | CloseSynHH | 1 |
| A 2 | 71 | SynTom2 Lo | OFF |
| A#2 | 56 | OpenSyn HH | 1 |
| B 2 | 70 | SynTom2 Hi | OFF |
| C 3 | 70 | SynTom2 Hi | OFF |
| C#3 | 56 | OpenSyn HH | OFF |
| D 3 | 70 | SynTom2 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 109 | SynCowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 70 | SynTom2 Hi | OFF |
| D#4 | 70 | SynTom2 Hi | OFF |
| E 4 | 70 | SynTom2 Hi | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 98 | SynMaracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 118 | Syn Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 5 DANCE

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 155 | Scratch Lo | 7 |
| F#1 | 154 | Scratch Hi | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 11 | Syn Kick 1 | OFF |
| C 2 | 10 | Dance Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 27 | GatedSnare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 25 | Ambi.Snare | OFF |
| F 2 | 69 | Syn Tom 1 | OFF |
| F#2 | 55 | CloseSynHH | 1 |
| G 2 | 69 | Syn Tom 1 | OFF |
| G#2 | 55 | CloseSynHH | 1 |
| A 2 | 69 | Syn Tom 1 | OFF |
| A#2 | 56 | OpenSyn HH | 1 |
| B 2 | 69 | Syn Tom 1 | OFF |
| C 3 | 69 | Syn Tom 1 | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 69 | Syn Tom 1 | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 180 | Rev.Cymbal | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 94 | Mute Cuica | 4 |
| G#5 | 207 | BrightBell | 5 |
| A 5 | 207 | BrightBell | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 6 JAZZ

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 29 | RollSnare1 | OFF |
| D 1 | 121 | FingerSnap | OFF |
| D#1 | 152 | Zap 1 | OFF |
| E 1 | 278 | Gun Shot 1 | OFF |
| F 1 | 154 | Scratch Hi | 7 |
| F#1 | 155 | Scratch Lo | 7 |
| G 1 | 40 | Stick Hit | OFF |
| G#1 | 122 | Snap | OFF |
| A 1 | 284 | Metronome1 | OFF |
| A#1 | 215 | Tubular 3 | OFF |
| B 1 | 5 | Dry Kick | OFF |
| C 2 | 6 | Real Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 23 | Dry Snare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 22 | LightSnare | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 116 | WoodBlockL | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 77 | Taiko Lo | 6 |
| D#6 | 77 | Taiko Lo | 6 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 7 BRUSH

| Key No | Sample No | Sample Name |
|---|---|---|
| C 0 | | ------ |
| C#0 | | ------ |
| D 0 | | ------ |
| D#0 | | ------ |
| E 0 | | ------ |
| F 0 | | ------ |
| F#0 | | ------ |
| G 0 | | ------ |
| G#0 | | ------ |
| A 0 | | ------ |
| A#0 | | ------ |
| B 0 | | ------ |
| C 1 | | ------ |
| C#1 | 29 | RollSnare1 |
| D 1 | 121 | FingerSnap |
| D#1 | 152 | Zap 1 |
| E 1 | 278 | Gun Shot 1 |
| F 1 | 154 | Scratch Hi |
| F#1 | 155 | Scratch Lo |
| G 1 | 40 | Stick Hit |
| G#1 | 122 | Snap |
| A 1 | 284 | Metronome1 |
| A#1 | 215 | Tubular 3 |
| B 1 | 5 | Dry Kick |
| C 2 | 6 | Real Kick |
| C#2 | 41 | Side Stick |
| D 2 | 37 | Brush Tap |
| D#2 | 36 | Brush Slap |
| E 2 | 38 | BrushSwish |
| F 2 | 73 | Brush Tom |
| F#2 | 52 | Close HH |
| G 2 | 73 | Brush Tom |
| G#2 | 54 | Pedal HH |
| A 2 | 73 | Brush Tom |
| A#2 | 53 | Open HH |
| B 2 | 73 | Brush Tom |
| C 3 | 73 | Brush Tom |
| C#3 | 43 | Crash Cym |
| D 3 | 73 | Brush Tom |
| D#3 | 57 | Ride Edge |
| E 3 | 45 | China Cym |
| F 3 | 58 | Ride Cup |
| F#3 | 100 | Tambourine |
| G 3 | 47 | Splash Cym |
| G#3 | 108 | Cowbell |
| A 3 | 43 | Crash Cym |
| A#3 | 123 | Viblaslap |
| B 3 | 57 | Ride Edge |
| C 4 | 79 | Hi Bongo |
| C#4 | 78 | Lo Bongo |
| D 4 | 84 | Palm Conga |
| D#4 | 82 | Open Conga |
| E 4 | 82 | Open Conga |
| F 4 | 111 | Hi Timbal |
| F#4 | 112 | Lo Timbal |
| G 4 | 107 | Agogo |
| G#4 | 107 | Agogo |
| A 4 | 97 | Cabasa |
| A#4 | 96 | Maracas |
| B 4 | 128 | Whistle S |
| C 5 | 129 | Whistle L |
| C#5 | 124 | Guiro S |
| D 5 | 125 | Guiro L |
| D#5 | 117 | Claves |
| E 5 | 116 | WoodBlockL |
| F 5 | 116 | WoodBlockL |
| F#5 | 94 | Mute Cuica |
| G 5 | 95 | Open Cuica |
| G#5 | 104 | MuteTriang |
| A 5 | 105 | OpenTriang |
| A#5 | 97 | Cabasa |
| B 5 | 101 | JingleBell |
| C 6 | 102 | MarcTree 1 |
| C#6 | 119 | Castanet |
| D 6 | 77 | Taiko Lo |
| D#6 | 77 | Taiko Lo |
| E 6 | | ------ |
| F 6 | | ------ |
| F#6 | | ------ |
| G 6 | | ------ |
| G#6 | | ------ |
| A 6 | | ------ |
| A#6 | | ------ |
| B 6 | | ------ |
| C 7 | | ------ |
| C#7 | | ------ |
| D 7 | | ------ |
| D#7 | | ------ |
| E 7 | | ------ |
| F 7 | | ------ |
| F#7 | | ------ |
| G 7 | | ------ |
| G#7 | | ------ |
| A 7 | | ------ |
| A#7 | | ------ |
| B 7 | | ------ |
| C 8 | | ------ |

## 8 ORCHESTRA

| Excl Group | Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|---|
| OFF | C 0 | | ------ | OFF |
| OFF | C#0 | | ------ | OFF |
| OFF | D 0 | | ------ | OFF |
| OFF | D#0 | | ------ | OFF |
| OFF | E 0 | | ------ | OFF |
| OFF | F 0 | | ------ | OFF |
| OFF | F#0 | | ------ | OFF |
| OFF | G 0 | | ------ | OFF |
| OFF | G#0 | | ------ | OFF |
| OFF | A 0 | | ------ | OFF |
| OFF | A#0 | | ------ | OFF |
| OFF | B 0 | | ------ | OFF |
| OFF | C 1 | | ------ | OFF |
| OFF | C#1 | 29 | RollSnare1 | OFF |
| OFF | D 1 | 121 | FingerSnap | OFF |
| OFF | D#1 | 52 | Close HH | 1 |
| OFF | E 1 | 54 | Pedal HH | 1 |
| 7 | F 1 | 53 | Open HH | 1 |
| 7 | F#1 | 57 | Ride Edge | OFF |
| OFF | G 1 | 40 | Stick Hit | OFF |
| OFF | G#1 | 122 | Snap | OFF |
| OFF | A 1 | 284 | Metronome1 | OFF |
| OFF | A#1 | 215 | Tubular 3 | OFF |
| OFF | B 1 | 6 | Real Kick | OFF |
| OFF | C 2 | 15 | Orch B.Drm | OFF |
| OFF | C#2 | 41 | Side Stick | OFF |
| OFF | D 2 | 21 | Soft Snare | OFF |
| OFF | D#2 | 119 | Castanet | OFF |
| OFF | E 2 | 21 | Soft Snare | OFF |
| OFF | F 2 | 75 | Timpani | OFF |
| 1 | F#2 | 75 | Timpani | OFF |
| OFF | G 2 | 75 | Timpani | OFF |
| 1 | G#2 | 75 | Timpani | OFF |
| OFF | A 2 | 75 | Timpani | OFF |
| 1 | A#2 | 75 | Timpani | OFF |
| OFF | B 2 | 75 | Timpani | OFF |
| OFF | C 3 | 75 | Timpani | OFF |
| OFF | C#3 | 75 | Timpani | OFF |
| OFF | D 3 | 75 | Timpani | OFF |
| OFF | D#3 | 75 | Timpani | OFF |
| OFF | E 3 | 75 | Timpani | OFF |
| OFF | F 3 | 75 | Timpani | OFF |
| OFF | F#3 | 100 | Tambourine | OFF |
| OFF | G 3 | 47 | Splash Cym | OFF |
| OFF | G#3 | 108 | Cowbell | OFF |
| OFF | A 3 | 43 | Crash Cym | OFF |
| OFF | A#3 | 123 | Viblaslap | OFF |
| OFF | B 3 | 49 | Orch Cym | OFF |
| OFF | C 4 | 79 | Hi Bongo | OFF |
| OFF | C#4 | 78 | Lo Bongo | OFF |
| OFF | D 4 | 84 | Palm Conga | OFF |
| OFF | D#4 | 82 | Open Conga | OFF |
| OFF | E 4 | 82 | Open Conga | OFF |
| OFF | F 4 | 111 | Hi Timbal | OFF |
| OFF | F#4 | 112 | Lo Timbal | OFF |
| OFF | G 4 | 107 | Agogo | OFF |
| OFF | G#4 | 107 | Agogo | OFF |
| OFF | A 4 | 97 | Cabasa | OFF |
| OFF | A#4 | 96 | Maracas | OFF |
| 2 | B 4 | 128 | Whistle S | 2 |
| 2 | C 5 | 129 | Whistle L | 2 |
| 3 | C#5 | 124 | Guiro S | 3 |
| 3 | D 5 | 125 | Guiro L | 3 |
| OFF | D#5 | 117 | Claves | OFF |
| OFF | E 5 | 116 | WoodBlockL | OFF |
| OFF | F 5 | 116 | WoodBlockL | OFF |
| 4 | F#5 | 94 | Mute Cuica | 4 |
| 4 | G 5 | 95 | Open Cuica | 4 |
| 5 | G#5 | 104 | MuteTriang | 5 |
| 5 | A 5 | 105 | OpenTriang | 5 |
| OFF | A#5 | 97 | Cabasa | OFF |
| OFF | B 5 | 101 | JingleBell | OFF |
| OFF | C 6 | 102 | MarcTree 1 | OFF |
| OFF | C#6 | 119 | Castanet | OFF |
| 6 | D 6 | 77 | Taiko Lo | 6 |
| 6 | D#6 | 77 | Taiko Lo | 6 |
| OFF | E 6 | 264 | Applause 1 | OFF |
| OFF | F 6 | | ------ | OFF |
| OFF | F#6 | | ------ | OFF |
| OFF | G 6 | | ------ | OFF |
| OFF | G#6 | | ------ | OFF |
| OFF | A 6 | | ------ | OFF |
| OFF | A#6 | | ------ | OFF |
| OFF | B 6 | | ------ | OFF |
| OFF | C 7 | | ------ | OFF |
| OFF | C#7 | | ------ | OFF |
| OFF | D 7 | | ------ | OFF |
| OFF | D#7 | | ------ | OFF |
| OFF | E 7 | | ------ | OFF |
| OFF | F 7 | | ------ | OFF |
| OFF | F#7 | | ------ | OFF |
| OFF | G 7 | | ------ | OFF |
| OFF | G#7 | | ------ | OFF |
| OFF | A 7 | | ------ | OFF |
| OFF | A#7 | | ------ | OFF |
| OFF | B 7 | | ------ | OFF |
| OFF | C 8 | | ------ | OFF |

## 9 ETHNIC

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | 121 | FingerSnap | OFF |
| D 1 | 100 | Tambourine | OFF |
| D#1 | 119 | Castanet | OFF |
| E 1 | 43 | Crash Cym | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 21 | Soft Snare | OFF |
| G 1 | 49 | Orch Cym | OFF |
| G#1 | 15 | Orch B.Drm | OFF |
| A 1 | 101 | JingleBell | OFF |
| A#1 | 102 | MarcTree 1 | OFF |
| B 1 | 103 | MarcTree 2 | OFF |
| C 2 | 77 | Taiko Lo | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 81 | Tsuzumi | OFF |
| D#2 | 214 | Tubular 2 | OFF |
| E 2 | 117 | Claves | OFF |
| F 2 | 40 | Stick Hit | OFF |
| F#2 | 81 | Tsuzumi | OFF |
| G 2 | 61 | Tom 1 Hi | OFF |
| G#2 | 41 | Side Stick | OFF |
| A 2 | 218 | Gong Lo | OFF |
| A#2 | 218 | Gong Lo | OFF |
| B 2 | 217 | Gong Hi | OFF |
| C 3 | 209 | Gamelan 1 | OFF |
| C#3 | 208 | Metal Bell | OFF |
| D 3 | 209 | Gamelan 1 | OFF |
| D#3 | 91 | Udu | 1 |
| E 3 | 91 | Udu | 1 |
| F 3 | 110 | R-Timbal | OFF |
| F#3 | 112 | Lo Timbal | OFF |
| G 3 | 112 | Lo Timbal | OFF |
| G#3 | 100 | Tambourine | OFF |
| A 3 | 89 | Tabla 2 | 7 |
| A#3 | 88 | Tabla 1 | 7 |
| B 3 | 90 | Tabla 3 | 7 |
| C 4 | 87 | Baya 2 | 8 |
| C#4 | 86 | Baya 1 | 8 |
| D 4 | 61 | Tom 1 Hi | OFF |
| D#4 | 61 | Tom 1 Hi | OFF |
| E 4 | 96 | Maracas | OFF |
| F 4 | 92 | Djembe | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 112 | Lo Timbal | OFF |
| G#4 | 113 | Timbales | OFF |
| A 4 | 111 | Hi Timbal | OFF |
| A#4 | 108 | Cowbell | OFF |
| B 4 | 79 | Hi Bongo | OFF |
| C 5 | 78 | Lo Bongo | OFF |
| C#5 | 84 | Palm Conga | OFF |
| D 5 | 82 | Open Conga | OFF |
| D#5 | 85 | Mute Conga | OFF |
| E 5 | 83 | Slap Conga | OFF |
| F 5 | 82 | Open Conga | OFF |
| F#5 | 82 | Open Conga | OFF |
| G 5 | 100 | Tambourine | OFF |
| G#5 | 82 | Open Conga | OFF |
| A 5 | 77 | Taiko Lo | 2 |
| A#5 | 77 | Taiko Lo | 2 |
| B 5 | 79 | Hi Bongo | OFF |
| C 6 | 107 | Agogo | OFF |
| C#6 | 107 | Agogo | OFF |
| D 6 | 98 | SynMaracas | OFF |
| D#6 | 129 | Whistle L | 3 |
| E 6 | 129 | Whistle L | 3 |
| F 6 | 94 | Mute Cuica | 4 |
| F#6 | 95 | Open Cuica | 4 |
| G 6 | 104 | MuteTriang | 5 |
| G#6 | 105 | OpenTriang | 5 |
| A 6 | 124 | Guiro S | 6 |
| A#6 | 125 | Guiro L | 6 |
| B 6 | 97 | Cabasa | OFF |
| C 7 | 97 | Cabasa | OFF |
| C#7 | 117 | Claves | OFF |
| D 7 | 116 | WoodBlockL | OFF |
| D#7 | 116 | WoodBlockL | OFF |
| E 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 10 KICK&SNARE

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | | ------ | OFF |
| D 1 | | ------ | OFF |
| D#1 | | ------ | OFF |
| E 1 | | ------ | OFF |
| F 1 | | ------ | OFF |
| F#1 | | ------ | OFF |
| G 1 | | ------ | OFF |
| G#1 | | ------ | OFF |
| A 1 | | ------ | OFF |
| A#1 | | ------ | OFF |
| B 1 | | ------ | OFF |
| C 2 | | ------ | OFF |
| C#2 | | ------ | OFF |
| D 2 | | ------ | OFF |
| D#2 | | ------ | OFF |
| E 2 | 4 | Punch Kick | OFF |
| F 2 | 6 | Real Kick | OFF |
| F#2 | 0 | Fat Kick | OFF |
| G 2 | 0 | Fat Kick | OFF |
| G#2 | 3 | Crisp Kick | OFF |
| A 2 | 6 | Real Kick | OFF |
| A#2 | 4 | Punch Kick | OFF |
| B 2 | 6 | Real Kick | OFF |
| C 3 | 5 | Dry Kick | OFF |
| C#3 | 15 | Orch B.Drm | OFF |
| D 3 | 2 | Ambi.Kick | OFF |
| D#3 | 2 | Ambi.Kick | OFF |
| E 3 | 7 | Gated Kick | OFF |
| F 3 | 9 | Metal Kick | OFF |
| F#3 | 14 | Syn Kick 4 | OFF |
| G 3 | 10 | Dance Kick | OFF |
| G#3 | 12 | Syn Kick 2 | OFF |
| A 3 | 13 | Syn Kick 3 | OFF |
| A#3 | 13 | Syn Kick 3 | OFF |
| B 3 | 11 | Syn Kick 1 | OFF |
| C 4 | 16 | Snare 1 | OFF |
| C#4 | 20 | PicloSnare | OFF |
| D 4 | 18 | Snare 3 | OFF |
| D#4 | 24 | TightSnare | OFF |
| E 4 | 16 | Snare 1 | OFF |
| F 4 | 21 | Soft Snare | OFF |
| F#4 | 23 | Dry Snare | OFF |
| G 4 | 22 | LightSnare | OFF |
| G#4 | 27 | GatedSnare | OFF |
| A 4 | 25 | Ambi.Snare | OFF |
| A#4 | 27 | GatedSnare | OFF |
| B 4 | 26 | Rock Snare | OFF |
| C 5 | 27 | GatedSnare | OFF |
| C#5 | 27 | GatedSnare | OFF |
| D 5 | 25 | Ambi.Snare | OFF |
| D#5 | 28 | PowerSnare | OFF |
| E 5 | 27 | GatedSnare | OFF |
| F 5 | 17 | Snare 2 | OFF |
| F#5 | 68 | OilDrum | OFF |
| G 5 | 32 | SynSnare 2 | OFF |
| G#5 | 31 | SynSnare 1 | OFF |
| A 5 | 31 | SynSnare 1 | OFF |
| A#5 | 32 | SynSnare 2 | OFF |
| B 5 | 32 | SynSnare 2 | OFF |
| C 6 | 37 | Brush Tap | OFF |
| C#6 | 37 | Brush Tap | OFF |
| D 6 | 36 | Brush Slap | OFF |
| D#6 | 36 | Brush Slap | OFF |
| E 6 | 36 | Brush Slap | OFF |
| F 6 | 38 | BrushSwish | OFF |
| F#6 | 38 | BrushSwish | OFF |
| G 6 | 39 | BrushSwirl | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 11 SFX

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | | ------ | OFF |
| D 1 | | ------ | OFF |
| D#1 | | ------ | OFF |
| E 1 | | ------ | OFF |
| F 1 | | ------ | OFF |
| F#1 | | ------ | OFF |
| G 1 | 155 | Scratch Lo | 1 |
| G#1 | 154 | Scratch Hi | 1 |
| A 1 | 136 | GtCutNois1 | OFF |
| A#1 | 137 | GtCutNois2 | OFF |
| B 1 | 139 | Chic 2 | OFF |
| C 2 | 138 | Chic 1 | OFF |
| C#2 | 140 | Bass Slide | OFF |
| D 2 | 134 | Gt Scratch | OFF |
| D#2 | 152 | Zap 1 | OFF |
| E 2 | 278 | Gun Shot 1 | OFF |
| F 2 | 154 | Scratch Hi | 7 |
| F#2 | 155 | Scratch Lo | 7 |
| G 2 | 40 | Stick Hit | OFF |
| G#2 | 122 | Snap | OFF |
| A 2 | 284 | Metronome1 | OFF |
| A#2 | 215 | Tubular 3 | OFF |
| B 2 | 135 | Gtr Slide | OFF |
| C 3 | 136 | GtCutNois1 | OFF |
| C#3 | 137 | GtCutNois2 | OFF |
| D 3 | 141 | StringSlap | OFF |
| D#3 | 121 | FingerSnap | OFF |
| E 3 | 258 | Laughing V | OFF |
| F 3 | 259 | Scream | OFF |
| F#3 | 260 | Punch | OFF |
| G 3 | 261 | Hart Beat | OFF |
| G#3 | 263 | Footstep 2 | OFF |
| A 3 | 262 | Footstep 1 | OFF |
| A#3 | 264 | Applause 1 | OFF |
| B 3 | 268 | Door Creak | OFF |
| C 4 | 269 | Door Slam | OFF |
| C#4 | 159 | Scratch c | OFF |
| D 4 | 103 | MarcTree 2 | OFF |
| D#4 | 270 | Car Engine | OFF |
| E 4 | 271 | Car Stop | OFF |
| F 4 | 272 | Car Pass | OFF |
| F#4 | 273 | Car Crash | OFF |
| G 4 | 275 | Siren | OFF |
| G#4 | 276 | Train | OFF |
| A 4 | 227 | WhiteNoise | OFF |
| A#4 | 277 | Helicopter | OFF |
| B 4 | 228 | Jetstar | OFF |
| C 5 | 279 | Gun Shot 2 | OFF |
| C#5 | 280 | MachineGun | OFF |
| D 5 | 281 | Laser Gun | OFF |
| D#5 | 282 | Explosion | OFF |
| E 5 | 254 | Dog | OFF |
| F 5 | 256 | Gallop | OFF |
| F#5 | 251 | Bird 1 | OFF |
| G 5 | 244 | Rain | OFF |
| G#5 | 245 | Thunder | OFF |
| A 5 | 246 | Wind | OFF |
| A#5 | 248 | Seashore V | OFF |
| B 5 | 249 | Stream | OFF |
| C 6 | 250 | Bubble | OFF |
| C#6 | 253 | Kitty | OFF |
| D 6 | 252 | Bird 2 | OFF |
| D#6 | 255 | Growl 2 | OFF |
| E 6 | 225 | Stadium | OFF |
| F 6 | 266 | Telephone1 | OFF |
| F#6 | 267 | Telephone2 | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 12 C/M

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | | ------ | OFF |
| D 1 | | ------ | OFF |
| D#1 | | ------ | OFF |
| E 1 | | ------ | OFF |
| F 1 | | ------ | OFF |
| F#1 | | ------ | OFF |
| G 1 | | ------ | OFF |
| G#1 | | ------ | OFF |
| A 1 | | ------ | OFF |
| A#1 | | ------ | OFF |
| B 1 | | ------ | OFF |
| C 2 | | ------ | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 16 | Snare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 69 | Syn Tom 1 | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 53 | Open HH | OFF |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 62 | Tom 1 Lo | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | | ------ | OFF |
| F 3 | | ------ | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | | ------ | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | | ------ | OFF |
| A#3 | | ------ | OFF |
| B 3 | | ------ | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 84 | Palm Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 123 | Viblaslap | OFF |
| D 5 | 0 | Fat Kick | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 258 | Laughing V | OFF |
| F 5 | 259 | Scream | OFF |
| F#5 | 260 | Punch | OFF |
| G 5 | 261 | Hart Beat | OFF |
| G#5 | 263 | Footstep 2 | OFF |
| A 5 | 262 | Footstep 1 | OFF |
| A#5 | 264 | Applause 1 | OFF |
| B 5 | 268 | Door Creak | OFF |
| C 6 | 269 | Door Slam | OFF |
| C#6 | 155 | Scratch Lo | OFF |
| D 6 | 102 | MarcTree 1 | OFF |
| D#6 | 270 | Car Engine | OFF |
| E 6 | 271 | Car Stop | OFF |
| F 6 | 272 | Car Pass | OFF |
| F#6 | 273 | Car Crash | OFF |
| G 6 | 275 | Siren | OFF |
| G#6 | 276 | Train | OFF |
| A 6 | 227 | WhiteNoise | OFF |
| A#6 | 277 | Helicopter | OFF |
| B 6 | 228 | Jetstar | OFF |
| C 7 | 279 | Gun Shot 2 | OFF |
| C#7 | 280 | MachineGun | OFF |
| D 7 | 281 | Laser Gun | OFF |
| D#7 | 282 | Explosion | OFF |
| E 7 | 254 | Dog | OFF |
| F 7 | 256 | Gallop | OFF |
| F#7 | 251 | Bird 1 | OFF |
| G 7 | 244 | Rain | OFF |
| G#7 | 245 | Thunder | OFF |
| A 7 | 246 | Wind | OFF |
| A#7 | 248 | Seashore V | OFF |
| B 7 | 249 | Stream | OFF |
| C 8 | 250 | Bubble | OFF |

## 13 Standard

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | 0 | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 21 | Soft Snare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 1 | Rock Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 0 | Fat Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 16 | Snare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 22 | LightSnare | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 14 Room

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 21 | Soft Snare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 1 | Rock Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 6 | Real Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 16 | Snare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 22 | LightSnare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 15 Rock

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 28 | PowerSnare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 8 | ProcesKick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 2 | Ambi.Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 26 | Rock Snare | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 27 | GatedSnare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 16 Electro

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 180 | Rev.Cymbal | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 153 | Zap 2 | OFF |
| G 1 | 26 | Rock Snare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 5 | Dry Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 10 | Dance Kick | OFF |
| C 2 | 2 | Ambi.Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 28 | PowerSnare | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 28 | PowerSnare | OFF |
| F 2 | 69 | Syn Tom 1 | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 69 | Syn Tom 1 | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 69 | Syn Tom 1 | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 69 | Syn Tom 1 | OFF |
| C 3 | 69 | Syn Tom 1 | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 69 | Syn Tom 1 | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 158 | Scratch b | OFF |
| G 5 | 158 | Scratch b | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 17 Analog

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 180 | Rev.Cymbal | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 153 | Zap 2 | OFF |
| G 1 | 28 | PowerSnare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 0 | Fat Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 11 | Syn Kick 1 | OFF |
| C 2 | 11 | Syn Kick 1 | OFF |
| C#2 | 42 | Syn Rim | OFF |
| D 2 | 31 | SynSnare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 32 | SynSnare 2 | OFF |
| F 2 | 71 | SynTom2 Lo | OFF |
| F#2 | 55 | CloseSynHH | 1 |
| G 2 | 71 | SynTom2 Lo | OFF |
| G#2 | 55 | CloseSynHH | 1 |
| A 2 | 71 | SynTom2 Lo | OFF |
| A#2 | 56 | OpenSyn HH | 1 |
| B 2 | 71 | SynTom2 Lo | OFF |
| C 3 | 71 | SynTom2 Lo | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 71 | SynTom2 Lo | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 109 | SynCowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 70 | SynTom2 Hi | OFF |
| D#4 | 70 | SynTom2 Hi | OFF |
| E 4 | 70 | SynTom2 Hi | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 98 | SynMaracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 118 | Syn Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 158 | Scratch b | OFF |
| G 5 | 158 | Scratch b | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 18 Jazz

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 21 | Soft Snare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 1 | Rock Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 1 | Rock Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 16 | Snare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 22 | LightSnare | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 19 Brush

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 36 | Brush Slap | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 1 | Rock Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 4 | Punch Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 36 | Brush Slap | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 37 | Brush Tap | OFF |
| F 2 | 73 | Brush Tom | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 73 | Brush Tom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 73 | Brush Tom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 73 | Brush Tom | OFF |
| C 3 | 73 | Brush Tom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 73 | Brush Tom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 20 Classic

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | 77 | Taiko Lo | 3 |
| D 0 | 77 | Taiko Lo | 3 |
| D#0 | 153 | Zap 2 | OFF |
| E 0 | 113 | Timbales | OFF |
| F 0 | 158 | Scratch b | 4 |
| F#0 | 158 | Scratch b | 4 |
| G 0 | 121 | FingerSnap | OFF |
| G#0 | 122 | Snap | OFF |
| A 0 | 285 | Metronome2 | OFF |
| A#0 | 215 | Tubular 3 | OFF |
| B 0 | 108 | Cowbell | OFF |
| C 1 | 108 | Cowbell | OFF |
| C#1 | 37 | Brush Tap | OFF |
| D 1 | 39 | BrushSwirl | OFF |
| D#1 | 36 | Brush Slap | OFF |
| E 1 | 39 | BrushSwirl | OFF |
| F 1 | 29 | RollSnare1 | OFF |
| F#1 | 119 | Castanet | OFF |
| G 1 | 21 | Soft Snare | OFF |
| G#1 | 40 | Stick Hit | OFF |
| A 1 | 1 | Rock Kick | OFF |
| A#1 | 24 | TightSnare | OFF |
| B 1 | 15 | Orch B.Drm | OFF |
| C 2 | 15 | Orch B.Drm | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 21 | Soft Snare | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 21 | Soft Snare | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 52 | Close HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 49 | Orch Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 49 | Orch Cym | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 49 | Orch Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 49 | Orch Cym | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 98 | SynMaracas | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 129 | Whistle L | OFF |
| C 5 | 129 | Whistle L | OFF |
| C#5 | 124 | Guiro S | OFF |
| D 5 | 125 | Guiro L | OFF |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 115 | WoodBlockM | OFF |
| F#5 | 94 | Mute Cuica | OFF |
| G 5 | 95 | Open Cuica | OFF |
| G#5 | 104 | MuteTriang | 2 |
| A 5 | 105 | OpenTriang | 2 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | | ------ | OFF |
| D 6 | | ------ | OFF |
| D#6 | | ------ | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 21 SFX 1

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | | ------ | OFF |
| D 1 | | ------ | OFF |
| D#1 | | ------ | OFF |
| E 1 | | ------ | OFF |
| F 1 | | ------ | OFF |
| F#1 | | ------ | OFF |
| G 1 | | ------ | OFF |
| G#1 | | ------ | OFF |
| A 1 | | ------ | OFF |
| A#1 | | ------ | OFF |
| B 1 | | ------ | OFF |
| C 2 | 137 | GtCutNois2 | OFF |
| C#2 | 136 | GtCutNois1 | OFF |
| D 2 | 138 | Chic 1 | OFF |
| D#2 | 141 | StringSlap | OFF |
| E 2 | 140 | Bass Slide | OFF |
| F 2 | 134 | Gt Scratch | OFF |
| F#2 | | ------ | OFF |
| G 2 | | ------ | OFF |
| G#2 | | ------ | OFF |
| A 2 | | ------ | OFF |
| A#2 | | ------ | OFF |
| B 2 | | ------ | OFF |
| C 3 | | ------ | OFF |
| C#3 | | ------ | OFF |
| D 3 | | ------ | OFF |
| D#3 | | ------ | OFF |
| E 3 | 285 | Metronome2 | OFF |
| F 3 | | ------ | OFF |
| F#3 | | ------ | OFF |
| G 3 | | ------ | OFF |
| G#3 | | ------ | OFF |
| A 3 | | ------ | OFF |
| A#3 | | ------ | OFF |
| B 3 | | ------ | OFF |
| C 4 | | ------ | OFF |
| C#4 | | ------ | OFF |
| D 4 | | ------ | OFF |
| D#4 | | ------ | OFF |
| E 4 | | ------ | OFF |
| F 4 | | ------ | OFF |
| F#4 | | ------ | OFF |
| G 4 | | ------ | OFF |
| G#4 | 244 | Rain | OFF |
| A 4 | 245 | Thunder | OFF |
| A#4 | 246 | Wind | OFF |
| B 4 | 249 | Stream | OFF |
| C 5 | 250 | Bubble | OFF |
| C#5 | 247 | Seashore | OFF |
| D 5 | | ------ | OFF |
| D#5 | | ------ | OFF |
| E 5 | | ------ | OFF |
| F 5 | | ------ | OFF |
| F#5 | | ------ | OFF |
| G 5 | | ------ | OFF |
| G#5 | | ------ | OFF |
| A 5 | | ------ | OFF |
| A#5 | | ------ | OFF |
| B 5 | | ------ | OFF |
| C 6 | 254 | Dog | OFF |
| C#6 | 256 | Gallop | OFF |
| D 6 | 252 | Bird 2 | OFF |
| D#6 | 253 | Kitty | OFF |
| E 6 | 255 | Growl 2 | OFF |
| F 6 | 251 | Bird 1 | OFF |
| F#6 | 174 | Monkey 2 | OFF |
| G 6 | 172 | Growl 1 | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 22 SFX 2

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | | ------ | OFF |
| C#1 | | ------ | OFF |
| D 1 | | ------ | OFF |
| D#1 | | ------ | OFF |
| E 1 | | ------ | OFF |
| F 1 | | ------ | OFF |
| F#1 | | ------ | OFF |
| G 1 | | ------ | OFF |
| G#1 | | ------ | OFF |
| A 1 | | ------ | OFF |
| A#1 | | ------ | OFF |
| B 1 | | ------ | OFF |
| C 2 | 267 | Telephone2 | OFF |
| C#2 | 268 | Door Creak | OFF |
| D 2 | 269 | Door Slam | OFF |
| D#2 | 156 | ScratchDbl | OFF |
| E 2 | 158 | Scratch b | OFF |
| F 2 | 102 | MarcTree 1 | OFF |
| F#2 | 267 | Telephone2 | OFF |
| G 2 | | ------ | OFF |
| G#2 | | ------ | OFF |
| A 2 | | ------ | OFF |
| A#2 | | ------ | OFF |
| B 2 | | ------ | OFF |
| C 3 | | ------ | OFF |
| C#3 | | ------ | OFF |
| D 3 | | ------ | OFF |
| D#3 | | ------ | OFF |
| E 3 | 270 | Car Engine | OFF |
| F 3 | 271 | Car Stop | OFF |
| F#3 | 272 | Car Pass | OFF |
| G 3 | 273 | Car Crash | OFF |
| G#3 | 275 | Siren | OFF |
| A 3 | 276 | Train | OFF |
| A#3 | 228 | Jetstar | OFF |
| B 3 | 277 | Helicopter | OFF |
| C 4 | 283 | HandDrill | OFF |
| C#4 | 133 | MetalHitLo | OFF |
| D 4 | 274 | GlassBreak | OFF |
| D#4 | | ------ | OFF |
| E 4 | | ------ | OFF |
| F 4 | | ------ | OFF |
| F#4 | | ------ | OFF |
| G 4 | | ------ | OFF |
| G#4 | 258 | Laughing V | OFF |
| A 4 | 259 | Scream | OFF |
| A#4 | 260 | Punch | OFF |
| B 4 | 261 | Hart Beat | OFF |
| C 5 | 262 | Footstep 1 | OFF |
| C#5 | 265 | Applause 2 | OFF |
| D 5 | | ------ | OFF |
| D#5 | | ------ | OFF |
| E 5 | | ------ | OFF |
| F 5 | | ------ | OFF |
| F#5 | | ------ | OFF |
| G 5 | | ------ | OFF |
| G#5 | | ------ | OFF |
| A 5 | | ------ | OFF |
| A#5 | | ------ | OFF |
| B 5 | | ------ | OFF |
| C 6 | 280 | MachineGun | OFF |
| C#6 | 281 | Laser Gun | OFF |
| D 6 | 282 | Explosion | OFF |
| D#6 | 279 | Gun Shot 2 | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 23 K-GM Kit

| Excl Group | Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|---|
| OFF | C 0 | | ------ | OFF |
| OFF | C#0 | | ------ | OFF |
| OFF | D 0 | | ------ | OFF |
| OFF | D#0 | | ------ | OFF |
| OFF | E 0 | | ------ | OFF |
| OFF | F 0 | | ------ | OFF |
| OFF | F#0 | | ------ | OFF |
| OFF | G 0 | | ------ | OFF |
| OFF | G#0 | | ------ | OFF |
| OFF | A 0 | | ------ | OFF |
| OFF | A#0 | | ------ | OFF |
| OFF | B 0 | | ------ | OFF |
| OFF | C 1 | 1 | Rock Kick | OFF |
| OFF | C#1 | 1 | Rock Kick | OFF |
| OFF | D 1 | 1 | Rock Kick | OFF |
| OFF | D#1 | 1 | Rock Kick | OFF |
| OFF | E 1 | 1 | Rock Kick | OFF |
| OFF | F 1 | 18 | Snare 3 | OFF |
| OFF | F#1 | 53 | Open HH | 1 |
| OFF | G 1 | 0 | Fat Kick | OFF |
| OFF | G#1 | 113 | Timbales | OFF |
| OFF | A 1 | 16 | Snare 1 | 6 |
| OFF | A#1 | 29 | RollSnare1 | 6 |
| OFF | B 1 | 6 | Real Kick | OFF |
| OFF | C 2 | 8 | ProcesKick | OFF |
| OFF | C#2 | 41 | Side Stick | OFF |
| OFF | D 2 | 26 | Rock Snare | OFF |
| OFF | D#2 | 130 | Hand Claps | OFF |
| OFF | E 2 | 22 | LightSnare | OFF |
| OFF | F 2 | 62 | Tom 1 Lo | OFF |
| OFF | F#2 | 51 | Tite HH | 1 |
| OFF | G 2 | 62 | Tom 1 Lo | OFF |
| OFF | G#2 | 54 | Pedal HH | 1 |
| OFF | A 2 | 62 | Tom 1 Lo | OFF |
| OFF | A#2 | 53 | Open HH | 1 |
| OFF | B 2 | 61 | Tom 1 Hi | OFF |
| OFF | C 3 | 61 | Tom 1 Hi | OFF |
| OFF | C#3 | 43 | Crash Cym | OFF |
| OFF | D 3 | 61 | Tom 1 Hi | OFF |
| OFF | D#3 | 57 | Ride Edge | OFF |
| OFF | E 3 | 45 | China Cym | OFF |
| OFF | F 3 | 58 | Ride Cup | OFF |
| OFF | F#3 | 100 | Tambourine | OFF |
| OFF | G 3 | 47 | Splash Cym | OFF |
| OFF | G#3 | 108 | Cowbell | OFF |
| OFF | A 3 | 43 | Crash Cym | OFF |
| OFF | A#3 | 123 | Viblaslap | OFF |
| OFF | B 3 | 59 | Ride Cym 1 | OFF |
| OFF | C 4 | 79 | Hi Bongo | OFF |
| OFF | C#4 | 78 | Lo Bongo | OFF |
| OFF | D 4 | 85 | Mute Conga | OFF |
| OFF | D#4 | 82 | Open Conga | OFF |
| OFF | E 4 | 82 | Open Conga | OFF |
| OFF | F 4 | 111 | Hi Timbal | OFF |
| OFF | F#4 | 112 | Lo Timbal | OFF |
| OFF | G 4 | 107 | Agogo | OFF |
| OFF | G#4 | 107 | Agogo | OFF |
| OFF | A 4 | 97 | Cabasa | OFF |
| OFF | A#4 | 96 | Maracas | OFF |
| OFF | B 4 | 128 | Whistle S | 2 |
| OFF | C 5 | 129 | Whistle L | 2 |
| OFF | C#5 | 124 | Guiro S | 3 |
| OFF | D 5 | 125 | Guiro L | 3 |
| OFF | D#5 | 117 | Claves | OFF |
| OFF | E 5 | 115 | WoodBlockM | OFF |
| OFF | F 5 | 116 | WoodBlockL | OFF |
| OFF | F#5 | 94 | Mute Cuica | 4 |
| OFF | G 5 | 95 | Open Cuica | 4 |
| OFF | G#5 | 104 | MuteTriang | 5 |
| OFF | A 5 | 105 | OpenTriang | 5 |
| OFF | A#5 | 97 | Cabasa | OFF |
| OFF | B 5 | 101 | JingleBell | OFF |
| OFF | C 6 | 102 | MarcTree 1 | OFF |
| OFF | C#6 | 119 | Castanet | OFF |
| OFF | D 6 | 41 | Side Stick | OFF |
| OFF | D#6 | 77 | Taiko Lo | OFF |
| OFF | E 6 | | ------ | OFF |
| OFF | F 6 | | ------ | OFF |
| OFF | F#6 | | ------ | OFF |
| OFF | G 6 | | ------ | OFF |
| OFF | G#6 | | ------ | OFF |
| OFF | A 6 | | ------ | OFF |
| OFF | A#6 | | ------ | OFF |
| OFF | B 6 | | ------ | OFF |
| OFF | C 7 | | ------ | OFF |
| OFF | C#7 | | ------ | OFF |
| OFF | D 7 | | ------ | OFF |
| OFF | D#7 | | ------ | OFF |
| OFF | E 7 | | ------ | OFF |
| OFF | F 7 | | ------ | OFF |
| OFF | F#7 | | ------ | OFF |
| OFF | G 7 | | ------ | OFF |
| OFF | G#7 | | ------ | OFF |
| OFF | A 7 | | ------ | OFF |
| OFF | A#7 | | ------ | OFF |
| OFF | B 7 | | ------ | OFF |
| OFF | C 8 | | ------ | OFF |

## 24 Power Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 2 | Ambi.Kick | OFF |
| C#1 | 2 | Ambi.Kick | OFF |
| D 1 | 2 | Ambi.Kick | OFF |
| D#1 | 2 | Ambi.Kick | OFF |
| E 1 | 2 | Ambi.Kick | OFF |
| F 1 | 26 | Rock Snare | OFF |
| F#1 | 53 | Open HH | 1 |
| G 1 | 7 | Gated Kick | OFF |
| G#1 | 113 | Timbales | OFF |
| A 1 | 24 | TightSnare | OFF |
| A#1 | 177 | Rev.Snare1 | OFF |
| B 1 | 7 | Gated Kick | OFF |
| C 2 | 9 | Metal Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 28 | PowerSnare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 27 | GatedSnare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 51 | Tite HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTm | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 59 | Ride Cym 1 | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 25 Dance Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 3 | Crisp Kick | OFF |
| C#1 | 3 | Crisp Kick | OFF |
| D 1 | 3 | Crisp Kick | OFF |
| D#1 | 3 | Crisp Kick | OFF |
| E 1 | 3 | Crisp Kick | OFF |
| F 1 | 20 | PicloSnare | OFF |
| F#1 | 53 | Open HH | 1 |
| G 1 | 12 | Syn Kick 2 | OFF |
| G#1 | 41 | Side Stick | OFF |
| A 1 | 24 | TightSnare | OFF |
| A#1 | 177 | Rev.Snare1 | OFF |
| B 1 | 2 | Ambi.Kick | OFF |
| C 2 | 10 | Dance Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 32 | SynSnare 2 | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 25 | Ambi.Snare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 51 | Tite HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 26 Analog Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 13 | Syn Kick 3 | OFF |
| C#1 | 13 | Syn Kick 3 | OFF |
| D 1 | 13 | Syn Kick 3 | OFF |
| D#1 | 13 | Syn Kick 3 | OFF |
| E 1 | 13 | Syn Kick 3 | OFF |
| F 1 | 32 | SynSnare 2 | OFF |
| F#1 | 56 | OpenSyn HH | 1 |
| G 1 | 10 | Dance Kick | OFF |
| G#1 | 113 | Timbales | OFF |
| A 1 | 25 | Ambi.Snare | OFF |
| A#1 | 177 | Rev.Snare1 | OFF |
| B 1 | 3 | Crisp Kick | OFF |
| C 2 | 11 | Syn Kick 1 | OFF |
| C#2 | 42 | Syn Rim | OFF |
| D 2 | 31 | SynSnare 1 | OFF |
| D#2 | 131 | Syn Claps | OFF |
| E 2 | 22 | LightSnare | OFF |
| F 2 | 71 | SynTom2 Lo | OFF |
| F#2 | 55 | CloseSynHH | 1 |
| G 2 | 71 | SynTom2 Lo | OFF |
| G#2 | 55 | CloseSynHH | 1 |
| A 2 | 71 | SynTom2 Lo | OFF |
| A#2 | 56 | OpenSyn HH | 1 |
| B 2 | 71 | SynTom2 Lo | OFF |
| C 3 | 71 | SynTom2 Lo | OFF |
| C#3 | 56 | OpenSyn HH | OFF |
| D 3 | 71 | SynTom2 Lo | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 109 | SynCowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 59 | Ride Cym 1 | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 70 | SynTom2 Hi | OFF |
| D#4 | 70 | SynTom2 Hi | OFF |
| E 4 | 70 | SynTom2 Hi | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 98 | SynMaracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 118 | Syn Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 27 Jazz Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 3 | Crisp Kick | OFF |
| C#1 | 3 | Crisp Kick | OFF |
| D 1 | 3 | Crisp Kick | OFF |
| D#1 | 3 | Crisp Kick | OFF |
| E 1 | 3 | Crisp Kick | OFF |
| F 1 | 19 | Snare 4 | OFF |
| F#1 | 53 | Open HH | 1 |
| G 1 | 2 | Ambi.Kick | OFF |
| G#1 | 113 | Timbales | OFF |
| A 1 | 30 | RollSnare2 | 6 |
| A#1 | 29 | RollSnare1 | 6 |
| B 1 | 4 | Punch Kick | OFF |
| C 2 | 1 | Rock Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 21 | Soft Snare | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 17 | Snare 2 | OFF |
| F 2 | 62 | Tom 1 Lo | OFF |
| F#2 | 51 | Tite HH | 1 |
| G 2 | 62 | Tom 1 Lo | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 62 | Tom 1 Lo | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 61 | Tom 1 Hi | OFF |
| C 3 | 61 | Tom 1 Hi | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 61 | Tom 1 Hi | OFF |
| D#3 | 60 | Ride Cym 2 | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 59 | Ride Cym 1 | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 28 Brush Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 3 | Crisp Kick | OFF |
| C#1 | 3 | Crisp Kick | OFF |
| D 1 | 3 | Crisp Kick | OFF |
| D#1 | 3 | Crisp Kick | OFF |
| E 1 | 3 | Crisp Kick | OFF |
| F 1 | 121 | FingerSnap | OFF |
| F#1 | 53 | Open HH | 1 |
| G 1 | 2 | Ambi.Kick | OFF |
| G#1 | 113 | Timbales | OFF |
| A 1 | 36 | Brush Slap | 6 |
| A#1 | 29 | RollSnare1 | 6 |
| B 1 | 4 | Punch Kick | OFF |
| C 2 | 1 | Rock Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 37 | Brush Tap | OFF |
| D#2 | 36 | Brush Slap | OFF |
| E 2 | 38 | BrushSwish | OFF |
| F 2 | 73 | Brush Tom | OFF |
| F#2 | 51 | Tite HH | 1 |
| G 2 | 73 | Brush Tom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 73 | Brush Tom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 73 | Brush Tom | OFF |
| C 3 | 73 | Brush Tom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 73 | Brush Tom | OFF |
| D#3 | 60 | Ride Cym 2 | OFF |
| E 3 | 45 | China Cym | OFF |
| F 3 | 59 | Ride Cym 1 | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 57 | Ride Edge | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 29 Orch Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | 1 |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 51 | Tite HH | OFF |
| C#1 | 51 | Tite HH | OFF |
| D 1 | 51 | Tite HH | OFF |
| D#1 | 51 | Tite HH | 1 |
| E 1 | 54 | Pedal HH | 1 |
| F 1 | 53 | Open HH | 1 |
| F#1 | 57 | Ride Edge | OFF |
| G 1 | 6 | Real Kick | OFF |
| G#1 | 6 | Real Kick | OFF |
| A 1 | 6 | Real Kick | OFF |
| A#1 | 6 | Real Kick | OFF |
| B 1 | 6 | Real Kick | OFF |
| C 2 | 75 | Timpani | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 30 | RollSnare2 | OFF |
| D#2 | 119 | Castanet | OFF |
| E 2 | 30 | RollSnare2 | OFF |
| F 2 | 75 | Timpani | OFF |
| F#2 | 75 | Timpani | OFF |
| G 2 | 75 | Timpani | OFF |
| G#2 | 75 | Timpani | OFF |
| A 2 | 75 | Timpani | OFF |
| A#2 | 75 | Timpani | OFF |
| B 2 | 75 | Timpani | OFF |
| C 3 | 75 | Timpani | OFF |
| C#3 | 75 | Timpani | OFF |
| D 3 | 75 | Timpani | OFF |
| D#3 | 75 | Timpani | OFF |
| E 3 | 75 | Timpani | OFF |
| F 3 | 75 | Timpani | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 49 | Orch Cym | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 116 | WoodBlockL | OFF |
| F#5 | 94 | Mute Cuica | 4 |
| G 5 | 95 | Open Cuica | 4 |
| G#5 | 104 | MuteTriang | 5 |
| A 5 | 105 | OpenTriang | 5 |
| A#5 | 97 | Cabasa | OFF |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 119 | Castanet | OFF |
| D 6 | 41 | Side Stick | OFF |
| D#6 | 77 | Taiko Lo | OFF |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 30 Perc Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 79 | Hi Bongo | OFF |
| C#1 | 79 | Hi Bongo | OFF |
| D 1 | 79 | Hi Bongo | OFF |
| D#1 | 79 | Hi Bongo | OFF |
| E 1 | 79 | Hi Bongo | OFF |
| F 1 | 78 | Lo Bongo | OFF |
| F#1 | 100 | Tambourine | OFF |
| G 1 | 107 | Agogo | OFF |
| G#1 | 33 | VocalSnr 1 | OFF |
| A 1 | 107 | Agogo | OFF |
| A#1 | 80 | Slap Bongo | OFF |
| B 1 | 116 | WoodBlockL | OFF |
| C 2 | 117 | Claves | OFF |
| C#2 | 115 | WoodBlockM | OFF |
| D 2 | 108 | Cowbell | OFF |
| D#2 | 114 | WoodBlockH | OFF |
| E 2 | 119 | Castanet | OFF |
| F 2 | 87 | Baya 2 | OFF |
| F#2 | 97 | Cabasa | OFF |
| G 2 | 86 | Baya 1 | OFF |
| G#2 | 96 | Maracas | OFF |
| A 2 | 87 | Baya 2 | OFF |
| A#2 | 97 | Cabasa | OFF |
| B 2 | 90 | Tabla 3 | 1 |
| C 3 | 89 | Tabla 2 | 1 |
| C#3 | 123 | Viblaslap | OFF |
| D 3 | 88 | Tabla 1 | 1 |
| D#3 | 104 | MuteTriang | 3 |
| E 3 | 66 | Tom 2 Lo V | OFF |
| F 3 | 105 | OpenTriang | 3 |
| F#3 | 124 | Guiro S | 2 |
| G 3 | 101 | JingleBell | OFF |
| G#3 | 125 | Guiro L | 2 |
| A 3 | 102 | MarcTree 1 | OFF |
| A#3 | 229 | Thing | OFF |
| B 3 | 96 | Maracas | OFF |
| C 4 | 130 | Hand Claps | OFF |
| C#4 | 131 | Syn Claps | OFF |
| D 4 | 155 | Scratch Lo | OFF |
| D#4 | 154 | Scratch Hi | OFF |
| E 4 | 156 | ScratchDbl | OFF |
| F 4 | 128 | Whistle S | 4 |
| F#4 | 129 | Whistle L | 4 |
| G 4 | 83 | Slap Conga | OFF |
| G#4 | 85 | Mute Conga | OFF |
| A 4 | 82 | Open Conga | OFF |
| A#4 | 82 | Open Conga | OFF |
| B 4 | 94 | Mute Cuica | OFF |
| C 5 | 95 | Open Cuica | OFF |
| C#5 | 113 | Timbales | OFF |
| D 5 | 110 | R-Timbal | OFF |
| D#5 | 111 | Hi Timbal | OFF |
| E 5 | 112 | Lo Timbal | OFF |
| F 5 | 118 | Syn Claves | OFF |
| F#5 | 109 | SynCowbell | OFF |
| G 5 | 121 | FingerSnap | OFF |
| G#5 | 76 | Taiko Hi | OFF |
| A 5 | 77 | Taiko Lo | OFF |
| A#5 | 153 | Zap 2 | OFF |
| B 5 | 29 | RollSnare1 | 5 |
| C 6 | 30 | RollSnare2 | 5 |
| C#6 | 49 | Orch Cym | 6 |
| D 6 | 49 | Orch Cym | 6 |
| D#6 | 142 | Orch Hit | OFF |
| E 6 | 142 | Orch Hit | OFF |
| F 6 | 142 | Orch Hit | OFF |
| F#6 | 142 | Orch Hit | OFF |
| G 6 | 142 | Orch Hit | OFF |
| G#6 | 142 | Orch Hit | OFF |
| A 6 | 142 | Orch Hit | OFF |
| A#6 | 142 | Orch Hit | OFF |
| B 6 | 142 | Orch Hit | OFF |
| C 7 | 142 | Orch Hit | OFF |
| C#7 | 142 | Orch Hit | OFF |
| D 7 | 142 | Orch Hit | OFF |
| D#7 | 142 | Orch Hit | OFF |
| E 7 | 142 | Orch Hit | OFF |
| F 7 | 142 | Orch Hit | OFF |
| F#7 | 142 | Orch Hit | OFF |
| G 7 | 142 | Orch Hit | OFF |
| G#7 | 142 | Orch Hit | OFF |
| A 7 | 142 | Orch Hit | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 31 Total Kit

| Key No | Sample No | Sample Name |
|---|---|---|
| C 0 | | ------ |
| C#0 | | ------ |
| D 0 | | ------ |
| D#0 | | ------ |
| E 0 | | ------ |
| F 0 | | ------ |
| F#0 | | ------ |
| G 0 | | ------ |
| G#0 | | ------ |
| A 0 | | ------ |
| A#0 | | ------ |
| B 0 | | ------ |
| C 1 | 49 | Orch Cym |
| C#1 | 49 | Orch Cym |
| D 1 | 49 | Orch Cym |
| D#1 | 49 | Orch Cym |
| E 1 | 49 | Orch Cym |
| F 1 | 49 | Orch Cym |
| F#1 | 49 | Orch Cym |
| G 1 | 49 | Orch Cym |
| G#1 | 49 | Orch Cym |
| A 1 | 49 | Orch Cym |
| A#1 | 49 | Orch Cym |
| B 1 | 49 | Orch Cym |
| C 2 | 0 | Fat Kick |
| C#2 | 6 | Real Kick |
| D 2 | 2 | Ambi.Kick |
| D#2 | 13 | Syn Kick 3 |
| E 2 | 7 | Gated Kick |
| F 2 | 20 | PicloSnare |
| F#2 | 21 | Soft Snare |
| G 2 | 27 | GatedSnare |
| G#2 | 31 | SynSnare 1 |
| A 2 | 16 | Snare 1 |
| A#2 | 41 | Side Stick |
| B 2 | 26 | Rock Snare |
| C 3 | 62 | Tom 1 Lo |
| C#3 | 67 | ProcessTom |
| D 3 | 62 | Tom 1 Lo |
| D#3 | 67 | ProcessTom |
| E 3 | 61 | Tom 1 Hi |
| F 3 | 51 | Tite HH |
| F#3 | 55 | CloseSynHH |
| G 3 | 51 | Tite HH |
| G#3 | 56 | OpenSyn HH |
| A 3 | 53 | Open HH |
| A#3 | 100 | Tambourine |
| B 3 | 54 | Pedal HH |
| C 4 | 43 | Crash Cym |
| C#4 | 43 | Crash Cym |
| D 4 | 57 | Ride Edge |
| D#4 | 58 | Ride Cup |
| E 4 | 98 | SynMaracas |
| F 4 | 97 | Cabasa |
| F#4 | 130 | Hand Claps |
| G 4 | 78 | Lo Bongo |
| G#4 | 80 | Slap Bongo |
| A 4 | 79 | Hi Bongo |
| A#4 | 108 | Cowbell |
| B 4 | 82 | Open Conga |
| C 5 | 82 | Open Conga |
| C#5 | 112 | Lo Timbal |
| D 5 | 104 | MuteTriang |
| D#5 | 111 | Hi Timbal |
| E 5 | 105 | OpenTriang |
| F 5 | 154 | Scratch Hi |
| F#5 | 155 | Scratch Lo |
| G 5 | 156 | ScratchDbl |
| G#5 | 177 | Rev.Snare1 |
| A 5 | 25 | Ambi.Snare |
| A#5 | 29 | RollSnare1 |
| B 5 | 30 | RollSnare2 |
| C 6 | 211 | Pole |
| C#6 | 32 | SynSnare 2 |
| D 6 | 131 | Syn Claps |
| D#6 | 118 | Syn Claves |
| E 6 | 71 | SynTom2 Lo |
| F 6 | 71 | SynTom2 Lo |
| F#6 | 42 | Syn Rim |
| G 6 | 69 | Syn Tom 1 |
| G#6 | 69 | Syn Tom 1 |
| A 6 | 69 | Syn Tom 1 |
| A#6 | 69 | Syn Tom 1 |
| B 6 | 69 | Syn Tom 1 |
| C 7 | 102 | MarcTree 1 |
| C#7 | | ------ |
| D 7 | | ------ |
| D#7 | | ------ |
| E 7 | | ------ |
| F 7 | | ------ |
| G 7 | | ------ |
| F#7 | | ------ |
| G#7 | | ------ |
| A 7 | | ------ |
| A#7 | | ------ |
| B 7 | | ------ |
| C 8 | | ------ |

## 32 ProducrKit

| Excl Group | KeyNo Group | Sample No | Sample Name | Excl- |
|---|---|---|---|---|
| OFF | C 0 | | ------ | OFF |
| OFF | C#0 | | ------ | OFF |
| OFF | D 0 | | ------ | OFF |
| OFF | D#0 | | ------ | OFF |
| OFF | E 0 | | ------ | OFF |
| OFF | F 0 | | ------ | OFF |
| OFF | F#0 | | ------ | OFF |
| OFF | G 0 | | ------ | OFF |
| OFF | G#0 | | ------ | OFF |
| OFF | A 0 | | ------ | OFF |
| OFF | A#0 | | ------ | OFF |
| OFF | B 0 | | ------ | OFF |
| OFF | C 1 | 4 | Punch Kick | OFF |
| OFF | C#1 | 4 | Punch Kick | OFF |
| OFF | D 1 | 4 | Punch Kick | OFF |
| OFF | D#1 | 4 | Punch Kick | OFF |
| OFF | E 1 | 4 | Punch Kick | OFF |
| OFF | F 1 | 4 | Punch Kick | OFF |
| OFF | F#1 | 4 | Punch Kick | OFF |
| OFF | G 1 | 4 | Punch Kick | OFF |
| OFF | G#1 | 4 | Punch Kick | OFF |
| OFF | A 1 | 4 | Punch Kick | OFF |
| OFF | A#1 | 4 | Punch Kick | OFF |
| OFF | B 1 | 4 | Punch Kick | OFF |
| OFF | C 2 | 4 | Punch Kick | OFF |
| OFF | C#2 | 3 | Crisp Kick | OFF |
| OFF | D 2 | 0 | Fat Kick | OFF |
| OFF | D#2 | 6 | Real Kick | OFF |
| OFF | E 2 | 1 | Rock Kick | OFF |
| OFF | F 2 | 2 | Ambi.Kick | OFF |
| OFF | F#2 | 7 | Gated Kick | OFF |
| OFF | G 2 | 9 | Metal Kick | OFF |
| OFF | G#2 | 8 | ProcesKick | OFF |
| OFF | A 2 | 10 | Dance Kick | OFF |
| OFF | A#2 | 13 | Syn Kick 3 | OFF |
| OFF | B 2 | 11 | Syn Kick 1 | OFF |
| OFF | C 3 | 12 | Syn Kick 2 | OFF |
| OFF | C#3 | 66 | Tom 2 Lo V | OFF |
| OFF | D 3 | 16 | Snare 1 | OFF |
| OFF | D#3 | 21 | Soft Snare | OFF |
| OFF | E 3 | 17 | Snare 2 | OFF |
| 1 | F 3 | 20 | PicloSnare | OFF |
| 3 | F#3 | 19 | Snare 4 | OFF |
| 1 | G 3 | 18 | Snare 3 | OFF |
| 3 | G#3 | 22 | LightSnare | OFF |
| 1 | A 3 | 27 | GatedSnare | OFF |
| OFF | A#3 | 24 | TightSnare | OFF |
| 1 | B 3 | 28 | PowerSnare | OFF |
| OFF | C 4 | 25 | Ambi.Snare | OFF |
| OFF | C#4 | 177 | Rev.Snare1 | OFF |
| OFF | D 4 | 26 | Rock Snare | OFF |
| OFF | D#4 | 29 | RollSnare1 | 4 |
| OFF | E 4 | 30 | RollSnare2 | 4 |
| OFF | F 4 | 41 | Side Stick | OFF |
| OFF | F#4 | 31 | SynSnare 1 | OFF |
| OFF | G 4 | 32 | SynSnare 2 | OFF |
| OFF | G#4 | 278 | Gun Shot 1 | OFF |
| OFF | A 4 | 33 | VocalSnr 1 | OFF |
| OFF | A#4 | 38 | BrushSwish | OFF |
| OFF | B 4 | 39 | BrushSwirl | 1 |
| OFF | C 5 | 37 | Brush Tap | 1 |
| OFF | C#5 | 36 | Brush Slap | 1 |
| 4 | D 5 | 51 | Tite HH | 2 |
| OFF | D#5 | 53 | Open HH | 2 |
| 4 | E 5 | 54 | Pedal HH | 2 |
| 2 | F 5 | 55 | CloseSynHH | 3 |
| 2 | F#5 | 56 | OpenSyn HH | 3 |
| 2 | G 5 | 43 | Crash Cym | OFF |
| 5 | G#5 | 47 | Splash Cym | OFF |
| 5 | A 5 | 45 | China Cym | OFF |
| 6 | A#5 | 57 | Ride Edge | OFF |
| 6 | B 5 | 58 | Ride Cup | OFF |
| OFF | C 6 | 59 | Ride Cym 1 | OFF |
| OFF | C#6 | 60 | Ride Cym 2 | OFF |
| OFF | D 6 | 62 | Tom 1 Lo | OFF |
| OFF | D#6 | 62 | Tom 1 Lo | OFF |
| OFF | E 6 | 61 | Tom 1 Hi | OFF |
| OFF | F 6 | 67 | FrocessTom | OFF |
| OFF | F#6 | 67 | FrocessTom | OFF |
| OFF | G 6 | 71 | SynTom2 Lo | OFF |
| OFF | G#6 | 70 | SynTom2 Hi | OFF |
| OFF | A 6 | 69 | Syn Tom 1 | OFF |
| OFF | A#6 | 69 | Syn Tom 1 | OFF |
| OFF | B 6 | 73 | Brush Tom | OFF |
| OFF | C 7 | 73 | Brush Tom | OFF |
| OFF | C#7 | | ------ | OFF |
| OFF | D 7 | | ------ | OFF |
| OFF | D#7 | | ------ | OFF |
| OFF | E 7 | | ------ | OFF |
| OFF | F 7 | | ------ | OFF |
| OFF | F#7 | | ------ | OFF |
| OFF | G 7 | | ------ | OFF |
| OFF | G#7 | | ------ | OFF |
| OFF | A 7 | | ------ | OFF |
| OFF | A#7 | | ------ | OFF |
| OFF | B 7 | | ------ | OFF |
| OFF | C 8 | | ------ | OFF |

## 33 Krazy Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 172 | Growl 1 | OFF |
| C#1 | 172 | Growl 1 | OFF |
| D 1 | 172 | Growl 1 | OFF |
| D#1 | 172 | Growl 1 | OFF |
| E 1 | 172 | Growl 1 | OFF |
| F 1 | 172 | Growl 1 | OFF |
| F#1 | 172 | Growl 1 | OFF |
| G 1 | 172 | Growl 1 | OFF |
| G#1 | 172 | Growl 1 | OFF |
| A 1 | 172 | Growl 1 | OFF |
| A#1 | 172 | Growl 1 | OFF |
| B 1 | 172 | Growl 1 | OFF |
| C 2 | 0 | Fat Kick | OFF |
| C#2 | 163 | BOOFN | 1 |
| D 2 | 17 | Snare 2 | OFF |
| D#2 | 169 | POOM | 1 |
| E 2 | 167 | COUGH | 1 |
| F 2 | 162 | BISS | 1 |
| F#2 | 126 | Pull 1 | OFF |
| G 2 | 168 | ISSH | 1 |
| G#2 | 161 | Drop | OFF |
| A 2 | 166 | COOSH | 1 |
| A#2 | 127 | Pull 2 | OFF |
| B 2 | 165 | CHLACK | 1 |
| C 3 | 164 | BOOGETA | 1 |
| C#3 | 274 | GlassBreak | OFF |
| D 3 | 274 | GlassBreak | OFF |
| D#3 | 274 | GlassBreak | OFF |
| E 3 | 172 | Growl 1 | OFF |
| F 3 | 172 | Growl 1 | OFF |
| F#3 | 160 | Sword | OFF |
| G 3 | 160 | Sword | OFF |
| G#3 | 35 | Fist | 2 |
| A 3 | 35 | Fist | 3 |
| A#3 | 238 | Tron Up | 2 |
| B 3 | 238 | Tron Up | 3 |
| C 4 | 93 | CorkPop | OFF |
| C#4 | 93 | CorkPop | OFF |
| D 4 | 283 | HandDrill | OFF |
| D#4 | 283 | HandDrill | OFF |
| E 4 | 170 | Uhhh! | OFF |
| F 4 | 170 | Uhhh! | OFF |
| F#4 | 171 | Samurai! | OFF |
| G 4 | 171 | Samurai! | OFF |
| G#4 | 228 | Jetstar | OFF |
| A 4 | 228 | Jetstar | OFF |
| A#4 | 219 | MouthHarp1 | 4 |
| B 4 | 221 | MouthHarp2 | 4 |
| C 5 | 220 | MouthHrp1A | 4 |
| C#5 | 227 | WhiteNoise | OFF |
| D 5 | 278 | Gun Shot 1 | OFF |
| D#5 | 152 | Zap 1 | OFF |
| E 5 | 153 | Zap 2 | OFF |
| F 5 | 173 | Monkey 1 | OFF |
| F#5 | 174 | Monkey 2 | OFF |
| G 5 | 133 | MetalHitLo | OFF |
| G#5 | 132 | MetalHitHi | OFF |
| A 5 | 134 | Gt Scratch | OFF |
| A#5 | 218 | Gong Lo | OFF |
| B 5 | 234 | Cast Roll | 5 |
| C 6 | 119 | Castanet | 5 |
| C#6 | 68 | OilDrum | OFF |
| D 6 | 72 | SolidHit | OFF |
| D#6 | 229 | Thing | OFF |
| E 6 | 212 | FingCymbal | OFF |
| F 6 | 159 | Scratch c | 6 |
| F#6 | 157 | Scratch a | 6 |
| G 6 | 158 | Scratch b | 6 |
| G#6 | 154 | Scratch Hi | 6 |
| A 6 | 155 | Scratch Lo | 6 |
| A#6 | 156 | ScratchDbl | 6 |
| B 6 | 142 | Orch Hit | OFF |
| C 7 | 142 | Orch Hit | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 34 Combo Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 49 | Orch Cym | OFF |
| C#1 | 49 | Orch Cym | OFF |
| D 1 | 49 | Orch Cym | OFF |
| D#1 | 49 | Orch Cym | OFF |
| E 1 | 49 | Orch Cym | OFF |
| F 1 | 49 | Orch Cym | OFF |
| F#1 | 49 | Orch Cym | OFF |
| G 1 | 49 | Orch Cym | OFF |
| G#1 | 49 | Orch Cym | OFF |
| A 1 | 49 | Orch Cym | OFF |
| A#1 | 49 | Orch Cym | OFF |
| B 1 | 49 | Orch Cym | OFF |
| C 2 | 0 | Fat Kick | OFF |
| C#2 | 1 | Rock Kick | OFF |
| D 2 | 2 | Ambi.Kick | OFF |
| D#2 | 13 | Syn Kick 3 | OFF |
| E 2 | 7 | Gated Kick | OFF |
| F 2 | 20 | PicloSnare | OFF |
| F#2 | 21 | Soft Snare | OFF |
| G 2 | 27 | GatedSnare | OFF |
| G#2 | 31 | SynSnare 1 | OFF |
| A 2 | 16 | Snare 1 | OFF |
| A#2 | 41 | Side Stick | OFF |
| B 2 | 26 | Rock Snare | OFF |
| C 3 | 62 | Tom 1 Lo | OFF |
| C#3 | 67 | ProcessTom | OFF |
| D 3 | 62 | Tom 1 Lo | OFF |
| D#3 | 67 | ProcessTom | OFF |
| E 3 | 62 | Tom 1 Lo | OFF |
| F 3 | 51 | Tite HH | 1 |
| F#3 | 67 | ProcessTom | OFF |
| G 3 | 52 | Close HH | 1 |
| G#3 | 67 | ProcessTom | OFF |
| A 3 | 53 | Open HH | 1 |
| A#3 | 100 | Tambourine | OFF |
| B 3 | 54 | Pedal HH | 1 |
| C 4 | 43 | Crash Cym | OFF |
| C#4 | 43 | Crash Cym | OFF |
| D 4 | 57 | Ride Edge | OFF |
| D#4 | 58 | Ride Cup | OFF |
| E 4 | 98 | SynMaracas | OFF |
| F 4 | 97 | Cabasa | OFF |
| F#4 | 130 | Hand Claps | OFF |
| G 4 | 78 | Lo Bongo | OFF |
| G#4 | 80 | Slap Bongo | OFF |
| A 4 | 79 | Hi Bongo | OFF |
| A#4 | 108 | Cowbell | OFF |
| B 4 | 82 | Open Conga | OFF |
| C 5 | 82 | Open Conga | OFF |
| C#5 | 112 | Lo Timbal | OFF |
| D 5 | 104 | MuteTriang | 2 |
| D#5 | 111 | Hi Timbal | OFF |
| E 5 | 105 | OpenTriang | 2 |
| F 5 | 59 | Ride Cym 1 | OFF |
| F#5 | 60 | Ride Cym 2 | OFF |
| G 5 | 45 | China Cym | OFF |
| G#5 | 177 | Rev.Snare1 | 3 |
| A 5 | 25 | Ambi.Snare | 3 |
| A#5 | 29 | RollSnare1 | 4 |
| B 5 | 30 | RollSnare2 | 4 |
| C 6 | 47 | Splash Cym | OFF |
| C#6 | 40 | Stick Hit | OFF |
| D 6 | 131 | Syn Claps | OFF |
| D#6 | 118 | Syn Claves | OFF |
| E 6 | 71 | SynTom2 Lo | OFF |
| F 6 | 71 | SynTom2 Lo | OFF |
| F#6 | 42 | Syn Rim | OFF |
| G 6 | 99 | Sagat | OFF |
| G#6 | 229 | Thing | OFF |
| A 6 | 102 | MarcTree 1 | OFF |
| A#6 | 102 | MarcTree 1 | OFF |
| B 6 | 102 | MarcTree 1 | OFF |
| C 7 | 102 | MarcTree 1 | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 35 Zulu Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 3 | Crisp Kick | OFF |
| C#1 | 3 | Crisp Kick | OFF |
| D 1 | 3 | Crisp Kick | OFF |
| D#1 | 3 | Crisp Kick | OFF |
| E 1 | 3 | Crisp Kick | OFF |
| F 1 | 3 | Crisp Kick | OFF |
| F#1 | 3 | Crisp Kick | OFF |
| G 1 | 3 | Crisp Kick | OFF |
| G#1 | 3 | Crisp Kick | OFF |
| A 1 | 3 | Crisp Kick | OFF |
| A#1 | 3 | Crisp Kick | OFF |
| B 1 | 3 | Crisp Kick | OFF |
| C 2 | 3 | Crisp Kick | OFF |
| C#2 | 11 | Syn Kick 1 | OFF |
| D 2 | 2 | Ambi.Kick | OFF |
| D#2 | 7 | Gated Kick | OFF |
| E 2 | 10 | Dance Kick | OFF |
| F 2 | 6 | Real Kick | OFF |
| F#2 | 13 | Syn Kick 3 | OFF |
| G 2 | 32 | SynSnare 2 | OFF |
| G#2 | 28 | PowerSnare | OFF |
| A 2 | 31 | SynSnare 1 | OFF |
| A#2 | 21 | Soft Snare | OFF |
| B 2 | 24 | TightSnare | OFF |
| C 3 | 22 | LightSnare | OFF |
| C#3 | 25 | Ambi.Snare | OFF |
| D 3 | 17 | Snare 2 | OFF |
| D#3 | 278 | Gun Shot 1 | OFF |
| E 3 | 131 | Syn Claps | OFF |
| F 3 | 108 | Cowbell | OFF |
| F#3 | 51 | Tite HH | 1 |
| G 3 | 55 | CloseSynHH | 2 |
| G#3 | 54 | Pedal HH | 1 |
| A 3 | 56 | OpenSyn HH | 2 |
| A#3 | 53 | Open HH | 1 |
| B 3 | 105 | OpenTriang | OFF |
| C 4 | 43 | Crash Cym | OFF |
| C#4 | 47 | Splash Cym | OFF |
| D 4 | 105 | OpenTriang | OFF |
| D#4 | 100 | Tambourine | OFF |
| E 4 | 104 | MuteTriang | OFF |
| F 4 | 82 | Open Conga | OFF |
| F#4 | 82 | Open Conga | OFF |
| G 4 | 83 | Slap Conga | OFF |
| G#4 | 83 | Slap Conga | OFF |
| A 4 | 85 | Mute Conga | OFF |
| A#4 | 85 | Mute Conga | OFF |
| B 4 | 84 | Palm Conga | OFF |
| C 5 | 78 | Lo Bongo | OFF |
| C#5 | 187 | Log Drum 1 | OFF |
| D 5 | 188 | Log Drum 2 | OFF |
| D#5 | 189 | Log Drum 3 | OFF |
| E 5 | 190 | Log Drum 4 | OFF |
| F 5 | 226 | BrushNoise | OFF |
| F#5 | 121 | FingerSnap | OFF |
| G 5 | 162 | BISS | OFF |
| G#5 | 163 | BOOFN | OFF |
| A 5 | 164 | BOOGETA | OFF |
| A#5 | 165 | CHLACK | OFF |
| B 5 | 173 | Monkey 1 | OFF |
| C 6 | 94 | Mute Cuica | OFF |
| C#6 | 95 | Open Cuica | OFF |
| D 6 | 220 | MouthHrp1A | OFF |
| D#6 | 221 | MouthHarp2 | OFF |
| E 6 | 222 | MouthHrp2A | OFF |
| F 6 | 243 | MalletLoop | OFF |
| F#6 | 236 | Waterphone | OFF |
| G 6 | 243 | MalletLoop | OFF |
| G#6 | 102 | MarcTree 1 | OFF |
| A 6 | 221 | MouthHarp2 | OFF |
| A#6 | 135 | Gtr Slide | OFF |
| B 6 | 135 | Gtr Slide | OFF |
| C 7 | 242 | Jung Gliss | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

## 36 Modern Kit

| Key No | Sample No | Sample Name | Excl Group |
|---|---|---|---|
| C 0 | | ------ | OFF |
| C#0 | | ------ | OFF |
| D 0 | | ------ | OFF |
| D#0 | | ------ | OFF |
| E 0 | | ------ | OFF |
| F 0 | | ------ | OFF |
| F#0 | | ------ | OFF |
| G 0 | | ------ | OFF |
| G#0 | | ------ | OFF |
| A 0 | | ------ | OFF |
| A#0 | | ------ | OFF |
| B 0 | | ------ | OFF |
| C 1 | 2 | Ambi.Kick | OFF |
| C#1 | 2 | Ambi.Kick | OFF |
| D 1 | 2 | Ambi.Kick | OFF |
| D#1 | 2 | Ambi.Kick | OFF |
| E 1 | 2 | Ambi.Kick | OFF |
| F 1 | 26 | Rock Snare | OFF |
| F#1 | 0 | Fat Kick | OFF |
| G 1 | 32 | SynSnare 2 | OFF |
| G#1 | 11 | Syn Kick 1 | OFF |
| A 1 | 24 | TightSnare | OFF |
| A#1 | 177 | Rev.Snare1 | OFF |
| B 1 | 12 | Syn Kick 2 | OFF |
| C 2 | 1 | Rock Kick | OFF |
| C#2 | 41 | Side Stick | OFF |
| D 2 | 278 | Gun Shot 1 | OFF |
| D#2 | 130 | Hand Claps | OFF |
| E 2 | 25 | Ambi.Snare | OFF |
| F 2 | 67 | ProcessTom | OFF |
| F#2 | 51 | Tite HH | 1 |
| G 2 | 67 | ProcessTom | OFF |
| G#2 | 54 | Pedal HH | 1 |
| A 2 | 67 | ProcessTom | OFF |
| A#2 | 53 | Open HH | 1 |
| B 2 | 67 | ProcessTom | OFF |
| C 3 | 67 | ProcessTom | OFF |
| C#3 | 43 | Crash Cym | OFF |
| D 3 | 67 | ProcessTom | OFF |
| D#3 | 57 | Ride Edge | OFF |
| E 3 | 43 | Crash Cym | OFF |
| F 3 | 58 | Ride Cup | OFF |
| F#3 | 100 | Tambourine | OFF |
| G 3 | 47 | Splash Cym | OFF |
| G#3 | 108 | Cowbell | OFF |
| A 3 | 43 | Crash Cym | OFF |
| A#3 | 123 | Viblaslap | OFF |
| B 3 | 59 | Ride Cym 1 | OFF |
| C 4 | 79 | Hi Bongo | OFF |
| C#4 | 78 | Lo Bongo | OFF |
| D 4 | 85 | Mute Conga | OFF |
| D#4 | 82 | Open Conga | OFF |
| E 4 | 82 | Open Conga | OFF |
| F 4 | 111 | Hi Timbal | OFF |
| F#4 | 112 | Lo Timbal | OFF |
| G 4 | 107 | Agogo | OFF |
| G#4 | 107 | Agogo | OFF |
| A 4 | 97 | Cabasa | OFF |
| A#4 | 96 | Maracas | OFF |
| B 4 | 128 | Whistle S | 2 |
| C 5 | 129 | Whistle L | 2 |
| C#5 | 124 | Guiro S | 3 |
| D 5 | 125 | Guiro L | 3 |
| D#5 | 117 | Claves | OFF |
| E 5 | 115 | WoodBlockM | OFF |
| F 5 | 62 | Tom 1 Lo | OFF |
| F#5 | 51 | Tite HH | 4 |
| G 5 | 62 | Tom 1 Lo | OFF |
| G#5 | 53 | Open HH | 4 |
| A 5 | 61 | Tom 1 Hi | OFF |
| A#5 | 50 | OrchCym LP | 4 |
| B 5 | 101 | JingleBell | OFF |
| C 6 | 102 | MarcTree 1 | OFF |
| C#6 | 105 | OpenTriang | 5 |
| D 6 | 105 | OpenTriang | 5 |
| D#6 | 104 | MuteTriang | 5 |
| E 6 | | ------ | OFF |
| F 6 | | ------ | OFF |
| F#6 | | ------ | OFF |
| G 6 | | ------ | OFF |
| G#6 | | ------ | OFF |
| A 6 | | ------ | OFF |
| A#6 | | ------ | OFF |
| B 6 | | ------ | OFF |
| C 7 | | ------ | OFF |
| C#7 | | ------ | OFF |
| D 7 | | ------ | OFF |
| D#7 | | ------ | OFF |
| E 7 | | ------ | OFF |
| F 7 | | ------ | OFF |
| F#7 | | ------ | OFF |
| G 7 | | ------ | OFF |
| G#7 | | ------ | OFF |
| A 7 | | ------ | OFF |
| A#7 | | ------ | OFF |
| B 7 | | ------ | OFF |
| C 8 | | ------ | OFF |

# NS5R Bonus Disk Sound Editor

## Floppy disk contents

Windows version SED-02W (NS5R Sound Editor, SMF Format Converter, Korg MIDI Driver)
Macintosh version SED-02M (NS5R Sound Editor, SMF Format Converter, Korg MIDI Driver)

- No responsibility will be accepted by Korg Corporation, by its distributors, or by the copyright holder for any damages etc. which may result from the use of the included software.
- In order to use NS5R Sound Editor you will need a separately sold special cable (AC-001B, AG-002B: Korg MIDI Driver is included). Use the version of Korg MIDI Driver found in the Bonus Disk.

Use the special cable to connect the serial port of your computer to the NS5R, and set the Global mode PCI/FCLK setting to 38.4 kBPS (for IBM and compatible computers) or 31.25 kBPS (for Macintosh computers).

Korg NS5R SoundEditor is an application which allows NS5R parameters to be edited on a personal computer. The edited data is immediately sent to the NS5R which is connected to the computer, allowing you to hear the results of your editing on the spot. The data you create can be saved as a file.

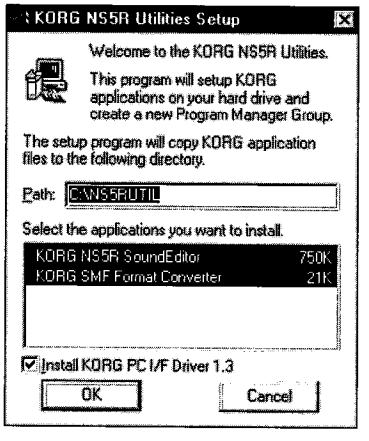
Unless specified otherwise, operation is the same for both the Windows and Macintosh versions. For explanations of the various parameters themselves, refer to the NS5R owner's manual.

## Installation and setup

**Windows version**

### Installation

Insert the NS5R SoundEditor master disk, and execute SETUP.EXE. If you wish to change the installation directory, modify the path name and click the [OK] button. NS5R SoundEditor will be copied to your hard disk and a new group will be created. The Korg PC I/F MIDI Driver will automatically be installed. If you do not wish to install the Korg PC I/F MIDI Driver, un-check the check box for "Install Korg PC I/F Driver" before you click the [OK] button.




### Setup

With the NS5R connected to your computer, start up NS5R SoundEditor. Click the [OK] button in the About box, and then choose "MIDI Setup" from the MIDI menu to access the MIDI Setup dialog box. Here you can make driver settings for MIDI IN and MIDI OUT. Select the desired driver for MIDI IN and MIDI OUT. If you click the [Make Default] button, the program will automatically use these settings when it starts up.

When the connection has been confirmed, the Exclusive Channel will be set automatically. (It is not possible to modify the NS5R's Exclusive Channel setting from NS5R SoundEditor.)

**Macintosh version**

## Installation

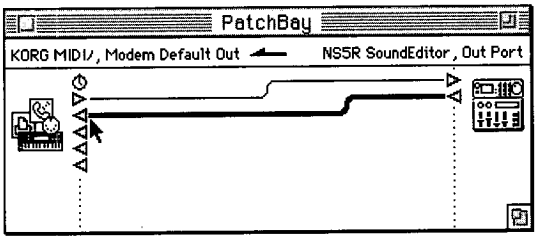
Copy NS5R SoundEditor into the desired location on your hard disk, and copy the Korg MIDI Driver into the system folder of your startup disk. (For installation and setup of the Korg MIDI Driver, refer to the NS5R owner's manual.)

If the Apple MIDI Driver exists in the system folder, either delete it or move it to another folder. Do not delete or move the MIDI Manager.

- Korg MIDI Driver includes the functionality of Apple MIDI Driver.

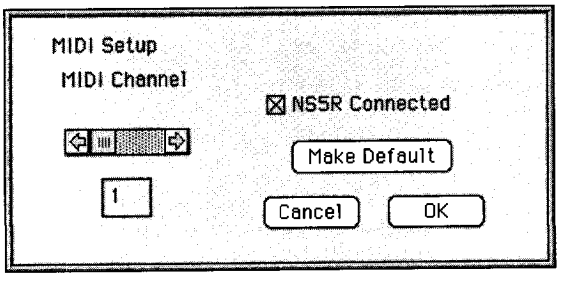
## Setup

1. Start up NS5R SoundEditor.
2. Start up PatchBay, and make Korg MIDI Driver settings. Refer to the NS5R owner's manual section "Setting up the Korg MIDI Driver (Macintosh)," and connect the icons as shown below.




3. Choose MIDI Setup from the MIDI menu of NS5R SoundEditor. Specify the Exclusive Channel (MIDI Channel) of the NS5R, click the NS5R Connected check box, and then click the [OK] button (or alternately, click [Make Default] if you want these settings to be used from the next start-up).

When the connection has been confirmed, the Exclusive Channel will be set automatically. (It is not possible to modify the NS5R's Exclusive Channel setting from NS5R SoundEditor.)




# Usage

## Loading a sound data file

1. From the File menu, choose New and a new blank list will appear. If you started up NS5R SoundEditor without specifying a file, it will start in the same condition as when New is selected. In order to display all the parameters inside the NS5R, all sound data in the NS5R must be transmitted to NS5R SoundEditor.
2. From the MIDI menu, choose Receive..., check All Parameters, and click the [OK] button. System exclusive data transmission from the NS5R will begin.

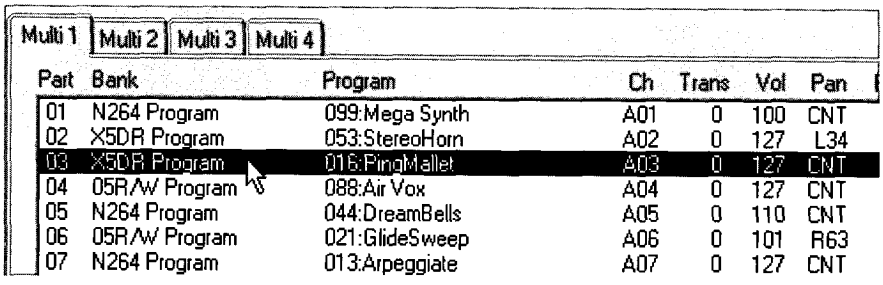
- During transmission, do not touch the panel switches of the NS5R or your computer's mouse.

# Operation

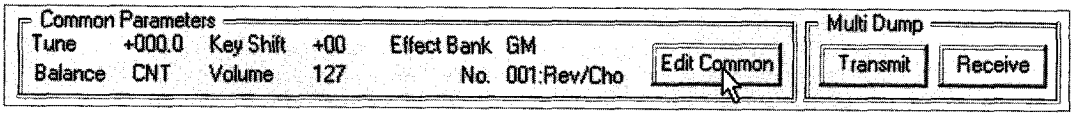
1. Click the tab for the mode that you wish to edit.
   NS5R SoundEditor has five modes: "Multi," "Global," "User Prog," "User Combi" and "User Effect." The NS5R itself is not divided into these modes, but normally operates in what corresponds to "Multi" mode. The condition of the NS5R when its EDIT button is pressed to select "Global" corresponds to NS5R SoundEditor's "Global" mode. The NS5R itself allows you to save 128 different settings for each type of memory "User Prog," "User Combi" and "User Effect." However the NS5R by itself is not able to simultaneously edit these user settings. NS5R SoundEditor's "User Prog," "User Combi" and "User Effect" modes make it possible to easily edit these user settings.

## Multi mode

This is the normal mode of the NS5R. Click the Multi tab (Multi1--Multi4) to select the one you wish to edit, and then double-click the Part that you wish to edit in the list box which shows the settings for each part. A dialog box will appear, allowing you to edit the settings. Click the [OK] button and the settings will be saved in the selected Multi.




- The parameters which can be edited here are only those parameters which appear in the NS5R's LCD when it is started up. It is not possible to edit the "EG," "Fc/Win" and "Others" parameters of the NS5R's "Part Edit" mode.



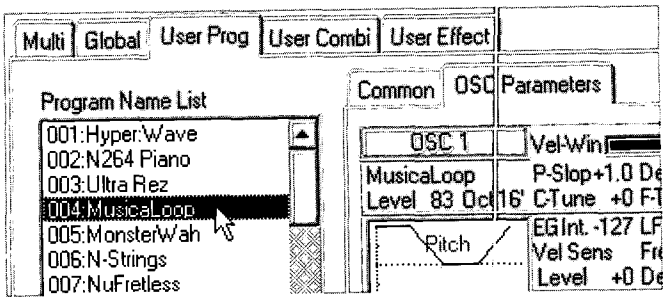

If you click the [Edit] button of the "Common Parameters" group, a dialog box will appear allowing you to edit the Multi Common parameters. Click the [OK] button to save these settings.

If you click the [Transmit] or [Receive] button of the "Multi Dump" group, the current settings will be transmitted or received to/from the NS5R. The transmitted settings will be saved in the NS5R's memory.

## Global mode

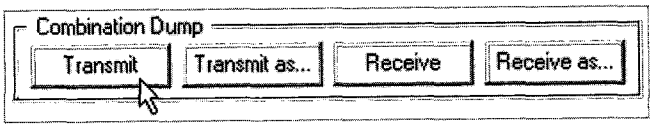
The various parameter settings of Global mode are displayed here. Click the [Edit Global] button to access the dialog box. Click the [OK] button to save the settings.

## User Prog (Program) mode, User Combi (Combination) mode, User Effect mode




These modes allow you to quickly call up and then edit any one of the 128 user settings in each mode. From the name list at the left, select the program/combination/effect that you wish to edit, and click one of the tabs displayed at the right to select the item that you wish to edit (for User Prog select tabs "Common" or "OSC Parameters," for User Combi select tabs "Common" or Timbre 1--8, and User Effect has no tabs). Then click an [Edit] button to access the dialog box. When you are finished editing, click the [OK] button to save the settings. These modes also allow you to copy, cut and paste between the 128 memories of each mode. In the name list shown at the left, select the program/combination/effect that you wish to edit, and choose a command from the Edit menu. You can also drag the mouse (on the Macintosh, [shift]+ drag or [command]+ drag) to select two or more numbers, and copy or cut and past them at once. (Refer to the "Auto Dump" item in "About Preferences.")

By clicking the [Transmit] or [Receive] button in the "Dump" group, you can transmit or receive the current settings to/from the NS5R. The transmitted/received settings will automatically be saved in the NS5R's memory.




# About the editing modes

## Editing in User Prog mode

Click the tab ("Common" or "OSC Parameters") for the section that you wish to edit, and the current settings will be displayed. Click an [Edit] button and a dialog box will appear. Click the [OK] button to save the settings.

## Common tab

In the Common section you can edit parameters such as Program Name and OSC Mode.

The "Remark" in the "Common" section is for reference. You can select from 10 different character strings that have been registered. This can be used to assign a category name etc. to a sound that you create. Remarks can be registered by pressing the [Edit List] button. You can also register them in the "Remark List" of the Options menu. Remarks will appear in the Name List display if the [Display Remark] check box in the "Common" tab is checked.

- The NS5R itself does not have a Remark function. Thus, Remarks cannot be saved in the memory of the NS5R.
- Remarks are saved in the file. The list of Remark character strings that you register is also saved in the file. When you create a new data file, you will have to re-register the Remark character strings.

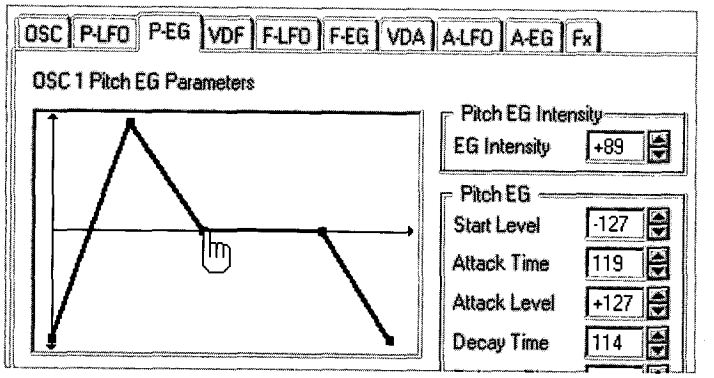
## OSC Parameters tab

In the OSC Parameters section you can perform detailed editing for each of the OSC1 and OSC2 parameters. The dialog box contains 10 tabs. From the left, they are three each for OSC-related, VDF-related, and VDA-related parameters, and finally the Fx tab for effects. If the OSC Mode is "Double," you can use the [OSC1/OSC2] buttons to switch between the OSC1 and OSC2 displays.

If the OSC Mode is "Drum," clicking this button will take you to Drum Kit mode. For details refer to "Editing in Drum Kit mode."

## EG editing (Pitch EG, VDF EG, VDA EG)

The various EG waveforms for Pitch EG (P-EG), VDF EG (F-EG) and VDA EG (A-EG) can be edited by using the mouse to drag the squares that are part of each EG graphic.




## Editing in User Combi mode

Click the tab for the section you wish to edit ("Common" or Timbre 1--8), and the current settings will appear. Click an [Edit] button and a dialog box will appear. Click the [OK] button and the settings will be saved.

## Common tab

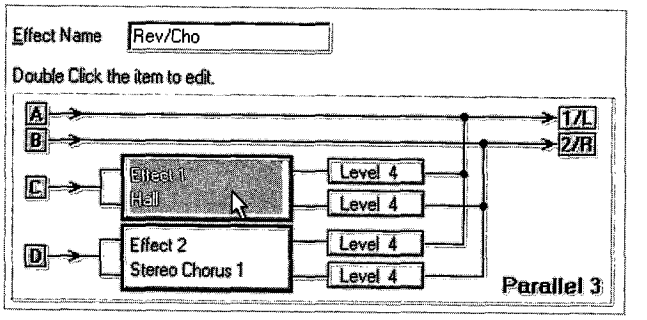
In the Common section you can edit the program names etc. For the Remark, refer to "Editing in User Prog mode."

## T1—T8 tabs

These allow you to edit the parameters of each Timbre. Use the "Timbre No" combo box to select the Timbre that you wish to edit.

## Editing in User Effect mode

Click the [Edit Effect] button and a dialog box will appear. You can input the effect name in the Effect Name box. To edit the effect, double-click the section that you wish to edit. Double-clicking "Effect 1," "Effect 2," "Pan3" or "Pan4" (except for Parallel 3), or "Level" (only for Parallel 3) will access a special dialog box. To change the Placement setting, double-click a location other than the above, and the Placement dialog box will appear.




## Editing in Global mode

Click the [Edit Global] button and a dialog box will appear. Click the [OK] button and the settings will be saved.

If the NS5R is connected to your computer, the current settings of the Global parameters will be transmitted from the NS5R, and NS5R SoundEditor will display these settings. This is to prevent the Global settings of the NS5R itself from being modified accidentally if the [Cancel] button is clicked.

## Editing in Drum Kit mode

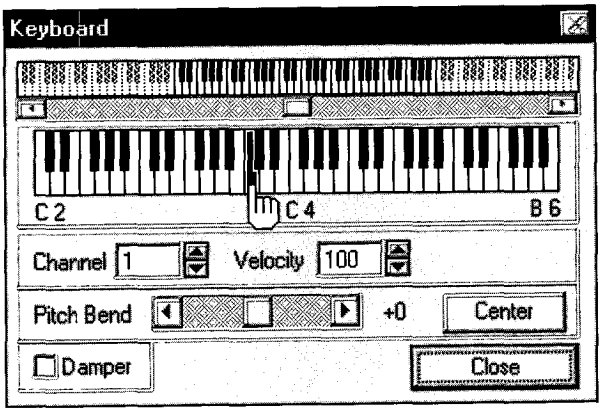
It is possible to enter Drum Kit mode only if the OSC Mode is set to "Drum." To enter Drum Kit mode, click the [Edit Drum Kit] button located in the OSC tab of the "OSC Parameters" dialog box of User Prog mode. (Refer to "Editing in User Prog mode.") In the "Drum Kit Edit" dialog box, double-click to select the kit that you wish to edit from the drum kit parameter list box. A dialog box will appear, allowing you to edit kit parameters. The left side of this dialog box contains a list box that allows you to select the kit that you wish to edit. Click the [OK] button and the settings will be applied. If you click the [Close] button of the "Drum Kit Edit" dialog box, you will be asked whether these drum kit settings should be saved in either User Kit 1 or User Kit 2. Click the [OK] button and the settings will be saved in the selected User Kit. If you click [No], the settings will be discarded. Clicking [Review] will take you back to editing.

| Note | Inst | Coarse | Fine | Level | Ex-Grp | Assign | Cutoff | Color | Attack | Decay | Pan | Rev | Cho |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D#2 | 130 | 0 | 0 | 68 | --- | S | 0 | 0 | -64 | +16 | L11 | 127 | 127 |
| E 2 | 20 | 0 | -40 | 92 | --- | S | 0 | 0 | -64 | +20 | CNT | 127 | 127 |
| F 2 | 62 | -4 | 0 | 97 | --- | M | 0 | 0 | -64 | +30 | L34 | 127 | 127 |
| F#2 | 52 | +2 | -30 | 68 | 1 | S | 0 | 0 | -64 | +20 | R24 | 31 | 31 |
| G 2 | 62 | -1 | -5 | 97 | --- | M | 0 | 0 | -64 | +43 | L22 | 127 | 127 |
| G#2 | 54 | +2 | -40 | 20 | 1 | S | 0 | 0 | -64 | +20 | R24 | 31 | 31 |
| A 2 | 62 | +1 | +6 | 104 | --- | M | 0 | 0 | -64 | +43 | L12 | 127 | 127 |

- If an NS5R is not connected, you will be able to enter Drum Kit edit mode only if User Kit1 or User Kit2 is selected as the Multi Sample.

## About the keyboard window

If you choose Keyboard from the Window menu, the Keyboard window will appear, allowing you to use the mouse to audition the sound.




Specify the MIDI channel that will be used to sound the notes.

# Menus

## File menu

| | |
|---|---|
| New | Open a new sound window. |
| Open | Load data from a file. Up to 5 files can be opened. |
| Close | Close the currently displayed file. |
| Save | Save data to a file. |
| Save as | Save data to a file under a different name. |
| Import | Paste the loaded data into the currently displayed data. |
| Export | Save one or all of the settings of the various modes in the specified format. For details refer to "Concerning the File menu command Export." |
| Exit (Quit) | Exit the NS5R SoundEditor. |

## Edit menu

| | |
|---|---|
| Cut | Copy the selected data to the buffer, and delete it. |
| Copy | Copy the selected data to the buffer. |
| Paste | Paste copied data from the buffer. |
| Clear | Delete the selected data (without copying it to the buffer). |
| Compare | Compare the unedited data with the edited data (sound). For details refer to "About Compare." |
| EG Copy & Swap | Copy or exchange Pitch/VDF/VDA EG settings between oscillators when the OSC Mode is Double. |
| Swap Fx1 & Fx2 | In User Effect mode, exchange the contents of the Effect 1 and Effect 2. (This will appear in the menu only in User Effect mode.) Also, only when Effect Placement is Parallel 3, the contents of Effect 1 Level and Effect 2 Level will also be exchanged. |
| OSC Parameter Copy | Copy OSC parameters from the specified program to OSC1/OSC2 of another specified program. |
| Change OSC Level | In User Prog mode or Drum Kit mode, the OSC Level of all data can be set or modified using the method you specify. In Drum Kit mode, you can click the [Edit OSC Level] button to access the same dialog box. For details refer to "About the Edit OSC Level dialog box." |

## MIDI menu

| | |
|---|---|
| MIDI Setup | Make and save MIDI driver settings. |
| Receive | Receive MIDI data dumps. |
| Transmit | Transmit MIDI data dumps. |
| Reset | Transmit various reset commands including GM Mode ON to the NS5R. |
| All Notes Off | When notes are "stuck" for some reason, this will stop the sound. |

## Options menu

| | |
|---|---|
| Show Exclusive Data | When this is checked, the transmitted data will be displayed in the upper right. |
| Preferences | The Preferences dialog box will appear. For details refer to "About Preferences." |

## Window menu

| | |
|---|---|
| Keyboard | The Keyboard window will appear. |
| 1...5:Filename | Select the file that you wish to edit. |

## Help menu (Windows version only)

| | |
|---|---|
| About | This displays the "About Box" for the NS5R SoundEditor. |

## About data files created by X5/05 SoundEditor

NS5R SoundEditor can directly load data files created by X5/05 SoundEditor (extensions of [.X5] or [.05R]). However since some parameters cannot be converted accurately, the sound will not always be identical to that on the X5 or 05R/W. Also, effect data will be read either for programs or for combinations (not both). For details refer to the "X5 File Convert" item in "About Preferences."

### Windows version

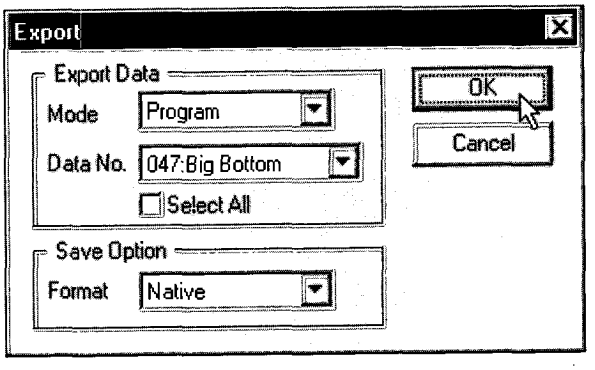
In the File menu, choose Open. In the "File type" of the dialog box that appears, select "NS5R Files," and select a file.

### Macintosh version

The Open command of the File menu can be used to load these files directly, in the same way as NS5R SoundEditor data files.

## About the Export command of the File menu

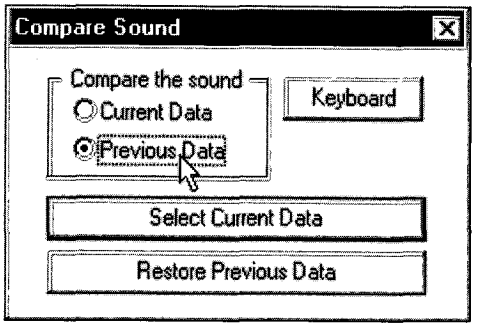
In the Export dialog box, the data of each mode (either individually or entire) can be saved to a file in the format specified by Save Option. Three formats are available: Native, Text, and SMF. Native is the common format used by the NS5R SoundEditor (the format used by the Open and Save commands of the File menu). Text saves the data as a text file consisting of the data name and value, separated by a tab character. SMF saves the selected data in NS5R exclusive format to a Standard MIDI File (format 0).




- When saving SMF format data, Mode change or Write Request data will not be included if an individual data item is selected. This means that with the exception of Multi, this data will have no meaning by itself.

## About Compare

After modifying a parameter setting, you can compare the edited data with the original data. Each time you click the "Current Data" or "Previous Data" radio button, the current settings or the previous settings will be transmitted to the NS5R. This allows you to hear the difference between the two settings. If you click the [Select Current Data] button, the modified settings will be applied. If you click the [Restore Previous Data] button, the settings before modification will be applied.




- If you reselect another program/combination in the Name List list box, Compare will no longer be available.

## About the Edit OSC Level dialog box

The "Edit OSC Level" dialog box will appear in User Prog mode when you choose "Change OSC Level" from the Edit menu, or in Drum Kit mode when you click the [Edit OSC Level] button. In this dialog box, you can simultaneously modify the OSC Level of all 128 User programs or OSC Level of all inst. of the Drum kit that are being edited. Broadly speaking, the modification can be performed in one of two ways.

"Change All OSC Levels" will set all OSC Level settings to the value that you specify. "Calculate All OSC Levels" will modify all OSC Level settings by adjusting the current value by the specified method and amount. This allows the settings to be modified while preserving the overall balance.

| | |
|---|---|
| "Set all values to ..." | Set all OSC Levels to the specified value. |
| "Change to ...% of current values" | Set all OSC Levels to ...% of their current value. |
| "Add ... to all values" | Add (or subtract) the specified value from all OSC Levels. |

With the above three methods, if the specified adjustment would cause a setting to exceed the maximum (minimum) value of the parameter, you will be asked whether the adjustment should be executed or not. If the adjustment is executed, the parameter will be limited to its maximum (minimum) value. If you select Cancel, the adjustment will be canceled.

| | |
|---|---|
| "Change as Maximum value to..." | All OSC Level values will be modified while preserving the overall balance so that ... is the maximum OSC Level. |
| "Change smoothly from ... to ..." | All OSC Level values will be modified while preserving the overall balance so that the minimum and maximum values are as specified. |

- In the case of Drum Kit mode, kits whose Key Assign Note ON is unchecked will not be modified. They will also be ignored when calculating the overall balance.

## About Preferences

The Preferences dialog box allows you to make various settings for NS5R SoundEditor.

Startup..... Make settings for when NS5R SoundEditor is started up.

Download from NS5R — When NS5R SoundEditor is started up, it will automatically receive parameter settings from the NS5R itself. Only those parameters which are checked will be received. However if NS5R SoundEditor is started up by specifying a filename, this setting will be ignored.

File Select ..... When two or more files are open, specify the operation that will occur when a file is selected.

Download to NS5R — When a file is selected using the Window menu, or when a file is opened from the File menu, the settings of that file will be transmitted to the NS5R. Only those parameters which are checked will be transmitted. Data transmission (dump) requires a fair amount of time. Except for special cases, it will normally not be necessary to check Download to NS5R. It is more efficient to use the MIDI menu Transmit or the [Transmit] button of each mode to transmit only the data required for editing.

Auto Dump ..... When an Edit menu command (Cut or Paste etc.) is executed in a mode for which this is checked, those settings will automatically be transmitted to the NS5R. If two or more programs (combinations or effects) were selected, the data will be transmitted as All Dump. This will take a substantial amount of time. Except for special cases, it will normally not be necessary to check Auto Dump. It is more efficient to perform All Dump (MIDI menu command "Transmit") after you finish editing.

MultiEdit..... Make settings for Multi mode.

Fix Part Channel — This setting specifies whether the MIDI channel of each Part will be modified to the new value when cut and paste is performed in Multi mode. If "Fix Part Channel" is checked, the MIDI channels of the paste destination will not be modified.

X5 File Convert..... Options when loading X5/05 SoundEditor files.

Effect — This setting specifies whether the Program or the Combination effect data will be loaded as NS5R User Effect data when a file created by X5/05 SoundEditor (extension [.X5] or [.05R]) is loaded.

### Other notes

1. The data files that are created are compatible between the Windows and Macintosh versions.
2. Only some of the Multi mode parameters can be edited.
3. The File menu command Import cannot be used to load data files that were created by X5/05 SoundEditor.

**Macintosh version**

### Cautions regarding MIDI

1. If the Macintosh and NS5R are connected when NS5R SoundEditor is started up, NS5R SoundEditor will automatically check the NS5R Connected check box in the MIDI Setup dialog box.
2. If while using NS5R SoundEditor, you wish to turn off the NS5R's power or disconnect a MIDI cable, un-check the NS5R Connected check box in the MIDI Setup dialog box before you do so.

**NOTICE**

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