TRITON

MUSIC WORKSTATION/SAMPLER

TRITON / TRITON*pro* / TRITON*pro*X

Basic Guide

Please read this guide first

H I HYPER INTEGRATED
SYNTHESIS SYSTEM

◄ TouchView
Graphical User Interface

GENERAL midi **PC I/F**

KORG

Ⓔ ④

Thank you for purchasing the Korg TRITON proX, TRITON pro, or TRITON music workstation/sampler. To ensure trouble-free enjoyment, please read this manual carefully and use the instrument as directed.

About this manual

The owner's manuals and how to use them

The TRITON proX, TRITON pro, and TRITON come with the following owner's manuals.

- Basic Guide
- Parameter Guide
- Voice Name List

Basic Guide

First read this manual carefully to gain a basic understanding of the instrument and to learn basic operation.

"Introduction" explains the function of each part, how to make connections, basic operation, and gives an overview of each mode.
"Quick Start" explains basic topics (hearing the demo songs, selecting sounds, convenient functions for performance). If you wish to begin playing immediately, read this section first.
"Basic Functions" contains mode-by-mode explanations of what you need to know to edit sounds, record on the sequencer, and record samples. This section also explains how to use the arpeggiator, effects, and MIDI.
"Appendices" explains how to install the Korg MIDI Driver that you will need when connecting the instrument to the TO HOST connector or to a computer, and lists the specifications etc.

Parameter Guide

The Parameter Guide contains explanations and other information regarding the operations of the parameters and settings on the TRITON proX, TRITON pro, and TRITON. The explanations are organized by mode, page, and tab. Explanations and other information on the effects and their parameters are also provided for each effect.
Refer to this guide when an unfamiliar parameter appears in the display, or when you need to know more about a particular function.

Voice Name List

This lists the multisamples and drumsamples that are built into the TRITON proX, TRITON pro, and TRITON, and the factory preset combinations, programs, drum kits, and user arpeggio patterns.
Refer to these lists when you wish to know more about the preloaded sounds.

Conventions in this manual

References to the TRITON proX, TRITON pro, and TRITON
The TRITON proX, TRITON pro, and TRITON are collectively referred to in this manual as the TRITON.

Switches and knobs [ ]
References to the switches, dials, and knobs on the TRITON's panel are enclosed in square brackets [ ]. References to **buttons** or **tabs** indicate objects in the LCD display screen.

Parameters in the LCD display screen " "
Parameters displayed in the LCD screen are enclosed in double quotation marks " ".

Boldface type
Parameter values are printed in boldface type. Content that is of particular importance is also printed in boldface type.

Procedure steps ① ② ③ ...
Steps in a procedure are listed as ① ② ③ ...

☞p.■
These indicate pages or parameter numbers to which you can refer.

Symbols 🖉 , note , MIDI
These symbols respectively indicate cautions, advice, and MIDI-related explanations.

Example screen displays
The values of the parameters shown in the example screens of this manual are only for explanatory purposes, and may not necessary match the values that appear in the LCD screen of your instrument.

MIDI-related explanations
CC# is an abbreviation for Control Change Number. In explanations of MIDI messages, **numbers in square brackets [ ]** always indicate hexadecimal numbers.

Data handling

Malfunctions due to incorrect operation may cause the contents of memory to be lost, so we recommend that you save important data on a floppy disk. Please be aware that Korg will accept no responsibility for any damages which may result from loss of data.
Also, when digitally recording copyrighted audio material from a DAT or CD etc., you must obtain permission for use. Please be aware that Korg will accept no responsibility for any copyright violations which may occur through your use of this product.

Table of Contents

Introduction

Introducing the TRITON

Main features

Overview

The TRITON is a music workstation/sampler that features the **HI (Hyper Integrated) synthesis system** as its tone generator.

It provides high-quality preset multisamples/programs/combinations and an effect section, and functionality such as sampling, sequencer, song play, dual polyphonic arpeggiator, RPPR, and two audio inputs and six audio outputs.

A rich array of controllers such as the joystick, ribbon controller, [SW1], [SW2], REALTIME CONTROLS [1]–[4] knobs, ARPEGGIATOR [TEMPO], [GATE], [VELOCITY] knobs, and connected pedals can be used to modify the sound etc. while you play (☞p.25).

In addition, options such as a **MOSS tone generator**, **PCM/sampling memory**, or **SCSI interface board** can be installed to further expand the potential of the TRITON (☞p.237 in the *Parameter Guide*).

The TRITON music workstation is a powerful tool for music production or live performance.

HI (Hyper Integrated) synthesis system

The HI (Hyper Integrated) synthesis system is a PCM tone generator system with full digital signal processing that guarantees pristine sound, and featuring enormous flexibility in musical extensibility, modulation, and effect routing.

Tone generator section:

- 32 Mbytes of preset PCM ROM contains 425 multisamples and 413 drumsamples.
  Separately sold EXB-PCM series PCM expansion boards (16 Mbytes PCM ROM) can be optionally installed to add more PCM data.
- 16 Mbytes of RAM is standard (expandable to a maximum of 64 Mbytes). Samples/multisamples that you sampled or edited in Sampling mode or loaded in Disk mode can be used as sound sources.
- The sampling frequency is 48 kHz, and the maximum polyphony is 62 voices.

Filter/synthesis section:

- 24 dB/oct Low Pass Resonance type or 12 dB/oct Low Pass & High Pass type filters can be used. A wide variety of filter effects can be achieved, from active sounds with aggressive resonance to subtle tones using a high pass filter.
- A broad range of editing parameters gives you minute control over every aspect of the sound.

Effect section:

- Five insertion effects (stereo-in/stereo-out), two master effects (mono-in/stereo-out), and a three-band master EQ (stereo-in/stereo-out) can all be used simultaneously. You can select from 102 types of effect algorithm, and edit them.
- Highly flexible effect routing is possible. Effects can also be routed freely to the individual outputs.

Alternate Modulation and Effect Dynamic Modulation:

- The synthesis section (filter etc.) provides Alternate Modulation functionality, and the effect section provides Effect Dynamic Modulation functionality. This allows you to freely apply modulation to parameters that affect the pitch, filter, amp, EG, LFO, and effects etc.
- LFO and delay time etc. can be synchronized to MIDI clock/tempo. You can synchronize sounds or effects to the tempo of the sequencer or the arpeggiator.

Programs and combinations

- In preset ROM, the TRITON provides 640 user programs, and 256 programs + 9 drumsets for GM2 compatibility. When shipped from the factory, it contains high-quality preset programs that cover a wide range of musical needs.
  The 640 user programs can be modified by adjusting the numerous editing parameters, the effects and the arpeggiator, to create your own original programs.
  When the separately sold EXB-MOSS option is installed, 128 programs for the Korg MOSS tone generator will also be available.
- For use as the oscillator of a drum program, the TRITON provides 64 user drum kits and nine GM2-compatible ROM drum kits. With the factory settings, preset drum kits that cover a variety of musical genres are provided. You can create your own original drum kits by assigning a drumsample or an original sampled sound to each note of the keyboard. For each note, you can make filter and amp settings, and even route the sound through effects and to a individual audio output.
- It's easy to create a program using samples/multisamples that you sampled in Sampling mode or loaded in Disk mode. These programs can also be used in combinations or songs. Samples can also be used as drum instruments in a drum kit.
- The TRITON provides 512 user combinations. With the factory settings, these contain a wide variety of preset combinations.
  A combination allows you to use layers, splits, or velocity switches etc. to combine up to eight pro-

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grams together with effects and two arpeggiators, in order to create complex sounds that could not be produced by a program. You can also make settings that include external tone generators.

Sampling

The TRITON provides 48 kHz 16 bit linear mono/stereo sampling functionality. 16 Mbytes of memory are provided as standard, allowing approximately 2 minutes 54 seconds of mono sampling (or approximately 1 minute 27 seconds of stereo sampling). When expanded to a maximum of 64 Mbytes, you can record up to four mono samples of 2 minutes 54 seconds, for a total of 11 minutes 39 seconds of sampling.

For more on the sampling features of the TRITON (☞p.75).

Sequencer

The TRITON provides a high-performance 16-track MIDI sequencer, with more than sufficient power for use as a stand-alone sequencer. The sequencer can serve as the core that brings together the TRITON's numerous capabilities, allowing it to serve as an integrated music workstation/sampler.

For more on the TRITON's sequencer (☞p.58).

Song Play

In Song Play mode, SMF (Standard MIDI File) data can be played back directly from a floppy disk or SCSI device (when the separately sold EXB-SCSI is installed). You can play along on the keyboard as you listen to the SMF playback, and even play the arpeggiator in synchronization with the playback tempo of the SMF.

*   Formats 0 and 1 are supported.
*   A jukebox function lets you edit the order in which songs are played back.

Dual polyphonic arpeggiator

*   Five preset arpeggio patterns (UP, DOWN, ALT1 ALT2, RANDOM) and 232 user arpeggio patterns are provided. With the factory settings, these contain a wide variety of preset user patterns. In addition to providing conventional arpeggiator functionality, the polyphonic arpeggiator of the TRITON can respond to the pitches or timing at which you play the keyboard, and produce a diverse range of chords or phrases. This can be used to play a variety of drum phrases (using the "Fixed Note Mode" that is ideal for drums), bass phrases, or guitar and keyboard backing riffs. The arpeggiator is also effective for use with subtly moving pads, synth sounds, or sound effects.
    In Combination mode, Sequencer mode, and Song Play mode, the TRITON provides dual arpeggiators that can simultaneously play two arpeggio patterns. You can apply separate arpeggio patterns to drum and bass programs, or use keyboard splits or velocity to switch between arpeggio patterns for an even more dynamic performance.

RPPR

The TRITON features a RPPR (Realtime Pattern Play/ Recording) function.
In Sequencer mode, this function allows you to assign preset patterns or user patterns (with a specified playback track) to individual notes of the keyboard, and playback or record that pattern in realtime simply by pressing the assigned note. Numerous preset patterns, including patterns ideal for a drum track, are built into the internal memory.

2 channel audio input / 6 channel audio output

*   The two channel audio input allows you to record samples in stereo. The MIC/LINE level select switch and the level adjustment knob can be used to support a wide range of external audio sources from mic level to line level.
    The audio inputs can also be routed through the effects. You can apply effects while sampling, use the TRITON as a 2-in/6-out effect processor, or use it as a vocoder effect that joins the external source with the TRITON's internal sounds.
*   In addition to the L/MONO and R main stereo audio outputs, the TRITON provides four individual audio outputs, for a total of six channels of audio output. The sound from each oscillator, drum, timbre/track, or insertion effect can be routed freely to any output.

TouchView user interface

The TRITON uses a TouchView user interface that lets you operate the instrument by directly touching a large 320 × 240 pixel LCD screen, for a revolutionary leap in ease of operation and user friendliness. When selecting programs, combinations, multisamples, drumsamples, or effects in the LCD screen, you can also view and select by categories such as types of instrument.

Overview of the modes

The TRITON has a large number of functions that let you play and edit programs and combinations, record and play sequence data, record and play back samples, and manage data on disk. The largest unit used to organize these functions is called a **mode**. The TRITON has seven modes.

Program mode

- Select and play programs
  You can choose programs from rewritable banks A, B, C, D, E and F which contain a total of 768 programs, and non-rewritable bank G (256 programs compatible with the GM2 standard, and nine drum programs).
  (The 128 programs of bank F can be selected only if the EXB-MOSS option has been installed.)
- Edit a program
  Make settings for the oscillator, filter, amp, EG, LFO, effects, and arpeggiator.
  Select a multisample (the following multisamples are available)
    - 425 internal multisamples (ROM)
    - Expanded multisamples (when a separately sold EXB-PCM series board is installed)

- Multisamples (RAM) created in Sampling mode
Create drum programs using a drum kit (created in Global mode)

Combination mode

- Select and play combinations
  A combination is a set of two or more programs (a maximum of eight), and allows you to produce complex sounds that could not be created by an individual program.
  You can choose combinations from rewritable banks A, B, C, and D which contain a total of 512 combinations.
- Edit a combination
  Make settings for volume, pan, layer/split etc. for each timbre (program), and make settings for effects and the two arpeggiators etc.

Sequencer mode

- Use the 16-track sequencer to record and playback songs.
- Make effect settings for the song.
- You can record a performance using the arpeggiator(s) into a song or pattern.

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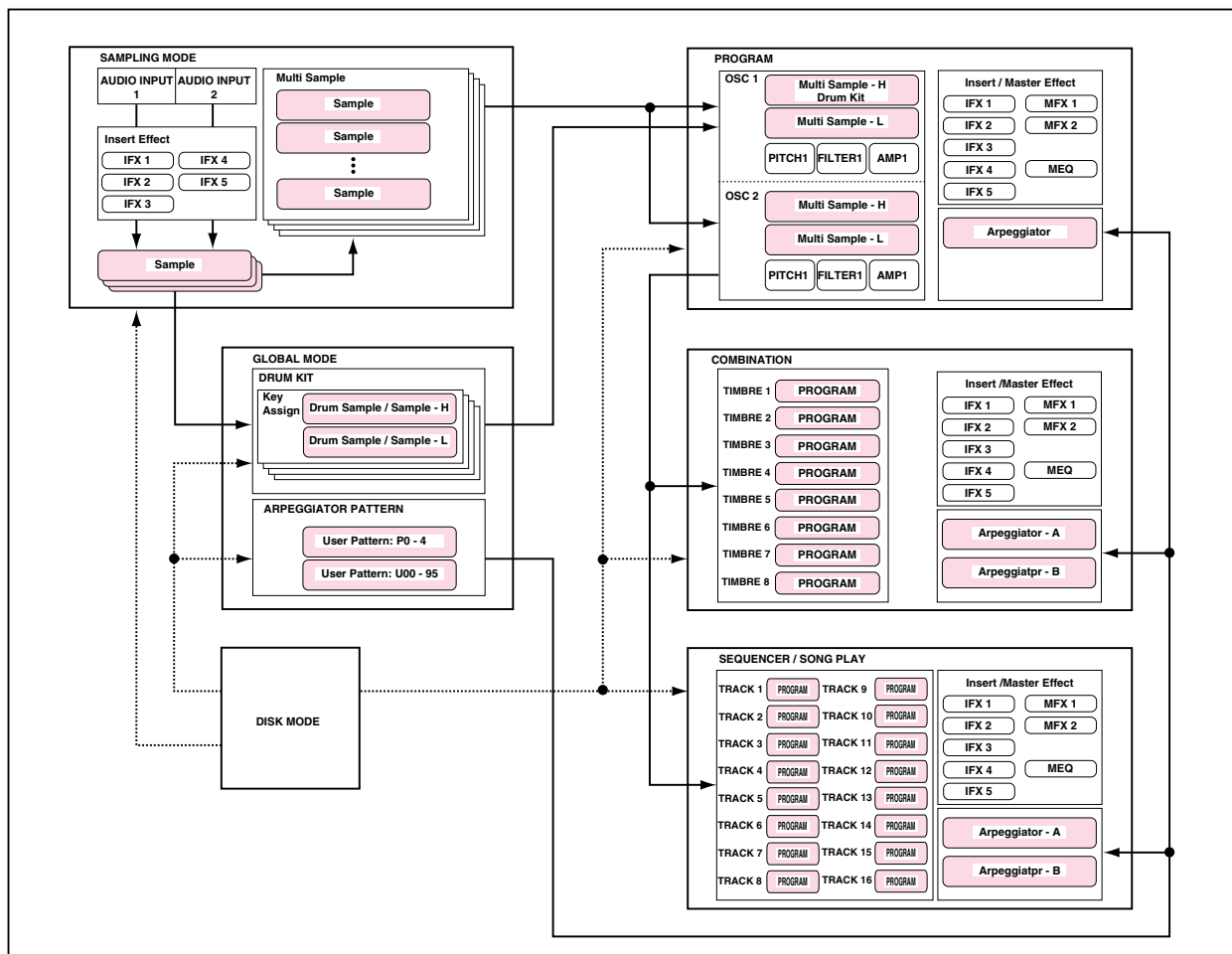
- You can use a cue list to set up consecutive playback of multiple songs, and specify the number of repeats for each song.
- You can use a maximum of 20 cue lists, 200 songs, and 100 preset patterns. One song can use as many as 100 patterns.
- The TRITON can be used as a 16-track multitimbral tone generator.
- Perform using the RPPR (Realtime Pattern Play/ Recording) function, and make settings for it.

Song Play mode

- Playback SMF (Standard MIDI File) data from a floppy disk or an external SCSI device such as a hard disk (when the separately sold EXB-SCSI option is installed), and play along with the playback if desired.
- Make effect settings for use in Song Play mode.
- The arpeggiator can be used while you play along with the SMF playback.
- SMF songs can be played back in succession. You can use the jukebox function to playback songs in any specified order.

Sampling mode

- Sample sounds from an external audio device or mic connected to the rear panel AUDIO INPUT jacks. Insert effects can be applied to the external input sound while you sample.
- Edit the waveform data you sampled or waveform data that you loaded in Disk mode, and set loop points etc.
- Edit multisamples consisting of two or more samples.
- A multisample can be converted into a program, so that a multisample created in Sampling mode can be used in Program, Combination, Sequencer, or Song Play modes.

Global mode

- Make settings that affect the entire TRITON, such as master tune and global MIDI channel.
- Create drum kits (64 kits), arpeggio user patterns (232 patterns), and user scales (16 one-octave scales and 1 all-note scale).
- Create drum kits using the 413 internal drumsamples (ROM). You can also use drumsamples from an optional EXB-PCM series board (if installed), or samples (RAM) that you created in Sampling mode.
- Adjust the input level etc. from the AUDIO INPUT 1 and 2. These settings are valid in modes other than Sampling mode. The TRITON's effects can be applied to the external input sound. (The settings for Sampling mode are made independently within Sampling mode.)
- Set the function of the assignable pedals and assignable switches.
- Transmit data dumps of MIDI exclusive data.

Disk mode

- Data of each mode can be saved and loaded using the floppy disk drive or an external SCSI device (when the separately sold EXB-SCSI option is installed).
- Media such as floppy disks or hard disks (when the separately sold EXB-SCSI option is installed) can be formatted, and data can be managed by copying etc.
- Korg format sample data can be loaded and saved. Akai, AIFF, and WAVE format sample data can be loaded.
- Songs that you created in Sequencer mode can be saved in SMF format. SMF files can be loaded as Sequencer mode songs.
- You can use the Data Filer function (to save/load MIDI exclusive data).

Front and rear panel

Front panel
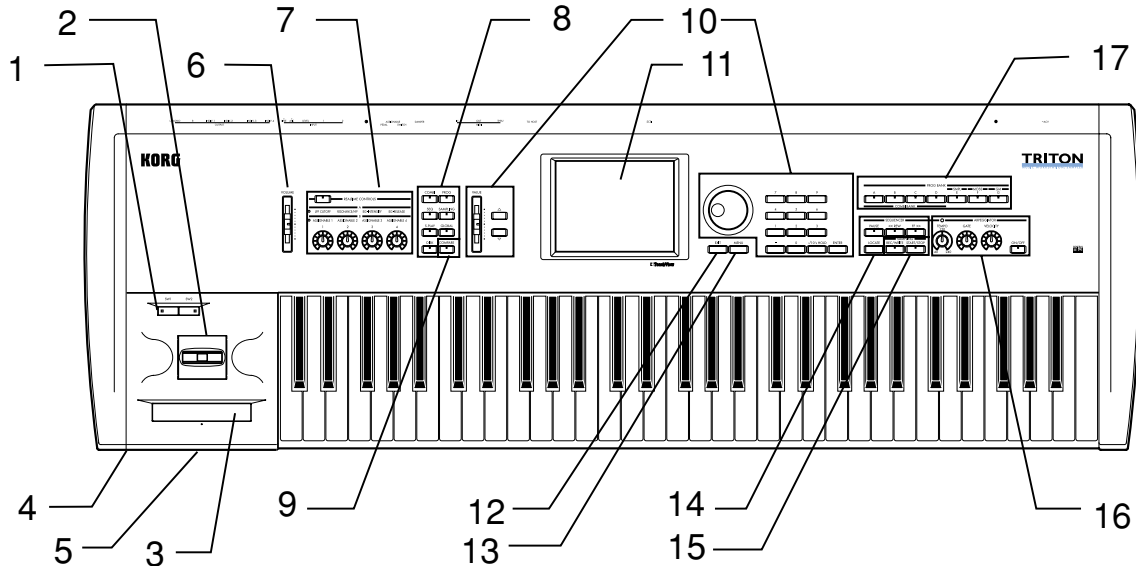
1. [SW1] key, [SW2] key

These keys are on/off switches for the functions to which they were assigned in Program, Combination, Sequencer, Song Play, and Sampling modes. When on, the LED will light (☞p.25).

2. Joystick

This controls pitch or modulation, etc.
Move the joystick up/down or left/right (+Y, –Y, –X, +X) to control (☞p.25).
Various program parameters and effect parameters will determine what is controlled by the joystick.

3. Ribbon controller

Slide your finger to the left or right on this ribbon controller to control the pitch or modulation (☞p.25).
Various program parameters and effect parameters will determine what is controlled by the ribbon controller.
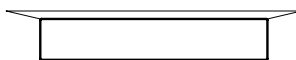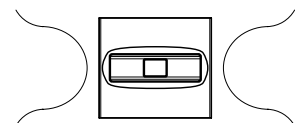
4. Headphone jack

A set of headphones (standard stereo phone plug) can be connected here (☞p.135).
The output from the L/MONO and R OUTPUT jacks can be monitored in stereo through the headphones.

5. Floppy disk drive

Insert 3.5 inch 2DD (double-side double-density) or 2HD (double-side high density) floppy disks here. Edited data can be saved on a floppy disk, and the factory preset data, SMF data, or multi-sampling/sampling data etc. can be loaded from a floppy disk.
For details on handling floppy disks, refer to "Floppy disk handling" (☞p.95).

Eject button

To remove a floppy disk, first make sure that the **disk access indicator** is dark, and then press this button. If the disk does not eject when you press this button, do not attempt to remove the disk by force. Please contact your dealer.
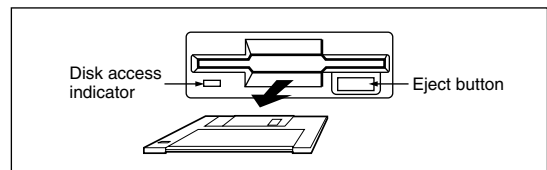
6. [VOLUME] slider

This adjusts the volume that is output from the OUTPUT jacks (L/MONO, R) and the headphone jack.
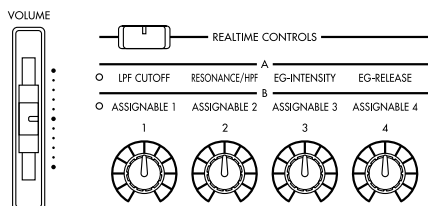
7. REALTIME CONTROLS

Use the [REALTIME CONTROLS] key to select A or B mode for the realtime controllers, and use knobs [1]–[4] to control the tone, effects, and MIDI control changes etc. in realtime (☞p.26).

[REALTIME CONTROLS] key

This key selects either A or B mode for the realtime controllers. The selected mode will light.

[1] knob, [2] knob, [3] knob, [4] knob

In **A mode**, the function of each knob is fixed. **[1]** is the low pass filter cutoff frequency, **[2]** is the filter resonance level or the cutoff frequency of the high pass filter, **[3]** is the filter EG intensity, and **[4]** is the filter/amp release time.
In **B mode**, each knob will control the function that you assigned in Program, Combination, Sequencer, Song Play, or Sampling modes.

8. Mode keys

Use these keys to enter the desired mode.
When you press a key, the LED will light, and you will enter the mode whose key you pressed (☞p.12).

[COMBI] key

In Combination mode you can play or create combinations.

[PROG] key

In Program mode you can play or create programs.

[SEQ] key

Sequencer mode is mainly for recording/playing songs. (You can create 16-track sequence data.) Use this mode when you wish to create an original song from scratch, or to add to sequence data that was converted from a Standard MIDI File.

[SAMPLING] key

In Sampling mode you can record samples, edit the waveform of a sample, and create multisamples. Samples and multisamples created in this mode can be used by the oscillators of a drum kit or program.

[S.PLAY] key

In Song Play mode you can playback Standard MIDI Files from a floppy disk or external SCSI device (when the separately sold EXB-SCSI option is installed), and play along with the playback.

[GLOBAL] key

In Global mode you can make settings that affect the TRITON's entire system. In this mode you can also create drum kits and arpeggio user patterns.

[DISK] key

In Disk mode you can save TRITON data on a floppy disk or external SCSI media (when the separately sold EXB-SCSI option is installed), and load data from the above-listed media.
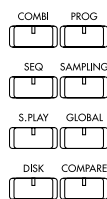
9. [COMPARE] key

Use this key when you wish to compare the sound of the program or combination that you are currently editing with the un-edited sound that was written into memory. You can also use this key to make "before and after" comparisons when recording or editing in Sequencer mode (☞p.14).

10. VALUE controllers

The following VALUE controllers are used to set the value of the selected parameter (☞p.13).
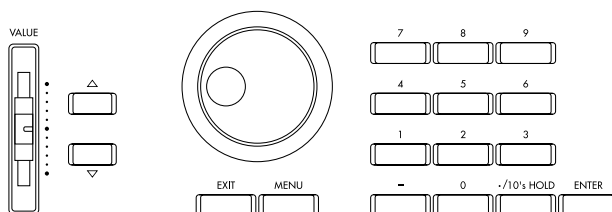
[VALUE] slider

Use this to modify the value of a parameter. This controller is convenient when you wish to make large changes in the value.
This slider can also be used as a modulation source.

[△][▽] keys

These are used to increase or decrease the parameter value in steps of one. It is convenient to use these to make fine adjustments.

[VALUE] dial

Use this dial to modify the value of the parameter.

Numeric keys [0] – [9]
[ENTER] key
[–] key
[./10's HOLD] key

Use these keys to numerically input a parameter value. Use numeric keys [0]–[9], the [–] key, and the [./10's HOLD] key to enter the value, and press the [ENTER] key to confirm it. The [./10's HOLD] key lets you input a value with a decimal point. The [–] key inverts the sign (+/−) of the parameter value. The [./10's HOLD] key is also used when you wish to hold the 10's place while selecting programs or combinations.
By holding down the [ENTER] key and pressing a numeric key [0]–[9], you can select up to ten page menu commands in the current page.

11. LCD screen

The TRITON features a Touch-View system that uses a touch-panel LCD screen.
By pressing objects that are shown in the LCD screen, you can select pages, tabs, and parameters, and set values (☞p.10).

12. [EXIT] key

When in P (page) 1–9 of each mode, pressing the [EXIT] key will move to P (page) 0 of that mode. When a dialog box is open, this key, will cancel the settings made in the dialog box and close the dialog box (corresponds to the **Cancel button**). If a popup menu or page menu is open, pressing [EXIT] will close the menu.

13. [MENU] key

Use this key to move between pages. When you press the [MENU] key, a list of the pages in the mode will appear in the LCD screen. Press the desired page, and you will move to that page. You can also move to a page by holding down the [MENU] key and pressing the corresponding numeric key [0]–[9] (☞p.12).

14. SEQUENCER

[PAUSE] key

In Sequencer mode, this key pauses the song or cue list playback. In Song Play mode, this key pauses SMF playback. When paused, the LED will light. Press [PAUSE] once again to defeat pause, the LED goes off.

[<<REW] key

In Sequencer mode this key rewinds the song or cue list playback. When you press and hold this key, the LED will light, and the playback will rewind. (This will not function during recording.)

[FF>>] key

In Sequencer mode this key fast-forwards the song or cue list playback. When you press and hold this key, the LED will light, and the playback will fast-forward. (This will not function during recording.)

[LOCATE] key

In Sequencer mode, this key returns the song or cue list playback location to the specified point. In Song Play mode, this key returns the playback location of the SMF to the specified point.
If for some reason any "stuck notes" occur, press this key.

15. SEQUENCER/SAMPLING

[REC/WRITE] key

In Sequencer mode, pressing this key will make the LED light, and if you then press the [START/STOP] key, recording will begin (☞p.64).
In Sampling mode, pressing this key will make the LED light, and if you then press the [START/STOP] key, sampling will begin (☞p.80).
In Program, Combination and Global modes, pressing this key will open a dialog box, and if you then press the **OK button**, the edited contents will be written (☞p.38, p.39).

[START/STOP] key

This is the start/stop key for song or cue list recording and playback in Sequencer mode, and SMF playback in Song Play mode. (During recording and playback, the LED will blink in time with the beat.)
In Sampling mode, press the [REC/WRITE] key (LED lights), and then press the [START/STOP] key to start/stop sampling. In Sampling P1, pressing this key (the LED will light) will sound the sample.
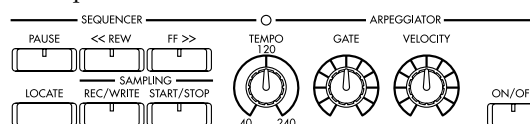
16. ARPEGGIATOR

These knobs control the performance of the arpeggiator in realtime (☞p.29).

[TEMPO] knob

This adjusts the base tempo of the arpeggiator and sequencer.

[GATE] knob

This adjusts the gate time (note duration) of the arpeggio notes. At the center position (12 o'clock), the gate time will be the same as the "Gate" parameter of the arpeggiator. Rotating the knob toward the left will shorten the gate time, and rotating it toward the right will lengthen the gate time.

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[VELOCITY] knob

This adjusts the velocity (playing strength) of the arpeggio notes. At the center position (12 o'clock), the velocity will be the same as the "Velocity" parameter of the arpeggiator. Rotating the knob toward the left will weaken the velocity, and rotating it toward the right will strengthen the velocity.

[ON/OFF] switch

This switches the Arpeggiator function on/off. When on, the LED will light.

17. [BANK] keys

These keys are used to switch Program/Combination banks.
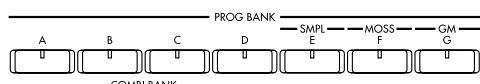
PROG BANK: [A], [B], [C], [D], [E], [F], [G]

When selecting programs, use keys [A], [B], [C], [D], [E], [F] (available when the EXB-MOSS is installed), and [G]. The LED of the selected bank will light.
Each time you press [G], you will cycle through the GM(2) variation banks and the drum bank as follows: G, g(1), g(2), ... g(8), g(9), g(d), G ... etc.

COMBI BANK: [A], [B], [C], [D]

When selecting combinations, use keys [A], [B], [C], and [D]. The LED of the selected bank will light.
In Combination, Sequencer, and Song Play modes when the edit cell (highlighted area) is located at the program of a timbre or track, you can use the BANK keys to select the bank of the program. The bank LED of the program selected for that timbre/track will light.

Rear panel

1. AC power supply connector

Connect the included power supply cable here. After connecting the power supply cable to the TRITON, connect the other end to an AC outlet (☞p.15).

2. [POWER] switch

This switch turns the power on/off (☞p.17).

3. SCSI connector (separately sold EXB-SCSI option)

Use a SCSI cable to connect SCSI-compatible devices (hard disk drives, CD-ROM drives etc.) here (☞p.15).

4. TO HOST connector

A special cable (sold separately: AG001B/002B) can be connected from here directly to your computer, to transmit and receive musical data and sound settings etc. (☞p.112).

5. MIDI THRU connector

Musical data and sound settings etc. that are received at the MIDI IN connector are re-transmitted without change from the MIDI THRU connector.
You can use this to connect multiple MIDI devices via MIDI cables (☞p.111).

6. MIDI OUT connector

Musical data and sound settings etc. are transmitted from this connector.
Use this to control another connected MIDI device from the TRITON (☞p.111).

7. MIDI IN connector

Musical data and sound settings etc. are received at this connector.
Use this to play the TRITON from another connected MIDI device (☞p.111).

8. DAMPER jack

A separately sold switch-type pedal such as the Korg DS-1H damper pedal can be connected here. If a DS-1H is connected, it will function as a half-damper pedal. If another switch-type pedal is connected, it will function as a damper switch. In order to ensure that the half-damper pedal functions correctly, please adjust the polarity and the sensitivity (☞p.115, 121 in the *Parameter Guide)*.
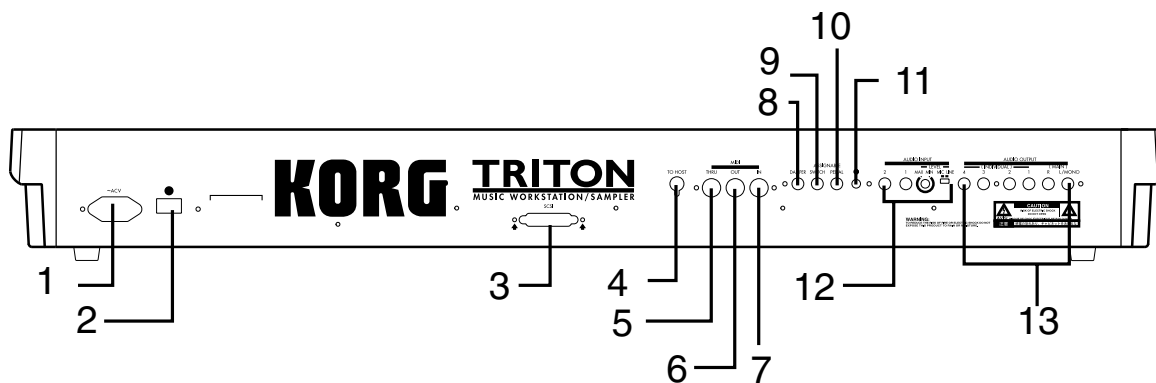
9. ASSIGNABLE SWITCH jack

A separately sold on/off foot switch such as the Korg PS-1 foot switch can be connected here (☞p.16).

Its function can be assigned in Global mode, allowing you to use the foot switch as a modulation controller, to select programs or combinations, or to start/stop the sequencer (☞p.125).

10. ASSIGNABLE PEDAL jack

A separately sold Korg EXP-2 or XVP-10 expression pedal can be connected here (☞p.16).

Its function can be assigned in Global mode, allowing you to use the pedal to control the volume etc. (☞p.126)

11. [Contrast adjustment] knob

This adjusts the contrast of the LCD screen.

The optimal setting will depend on the height or angle from which you view the screen display, so please adjust this as necessary.

12. AUDIO INPUT

These two audio inputs are used when recording a mono/stereo sample from a mic or external audio source (☞p.78), or when applying the TRITON's internal effects to an external audio source (☞p.109).

The MIC/LINE level select switch ([MIC-LINE] switch) and the level adjustment knob ([LEVEL] knob) allow you to use a wide range of external audio sources, from mic level to line level.

AUDIO INPUT 1/2 jacks

These are unbalanced phone jacks (☞p.136).

[LEVEL] knob

This adjusts the input level of the AUDIO INPUT 1/2 jacks.

[MIC-LINE] switch

This switches the input level of the AUDIO INPUT 1/2 jacks.

13. AUDIO OUTPUT

Connect these outputs to the input jacks of your amp or mixer. In addition to the L/MONO and R main stereo audio outputs, the TRITON provides four individual audio outputs. The sound from each oscillator, drum, timbre/track, or insertion effect can be freely routed to any output (☞p.107–).

(MAIN) L/MONO, R

These are unbalanced phone jacks (☞p.135).

These are the main audio output jacks. By setting "Bus Select" to **L/R**, the output from an oscillator, an insertion effect, an individual drum part, or the metronome can be output to the (MAIN) L/MONO and R jacks. When making connections in stereo, use L/MONO and R. When making connections in mono, use the L/MONO jack.

(INDIVIDUAL) 1, 2, 3, 4

These are unbalanced phone jacks (☞p.135).

These are individual (independent) audio output jacks. These are individual (independent) audio output jacks. By several times to make the "Bus Select" to **1**, **2**, **3**, **4**, **1/2**, or **3/4**, an oscillator, an insertion effect, an individual drum part, or the metronome etc. can be assigned to be output from the (INDIVIDUAL) 1, 2, 3, 4, jacks. The output from the 1, 2, 3, 4 jacks is not affected by the [VOLUME] slider.

Names and functions of objects in the LCD screen

The TRITON's LCD screen features a Touch View system that uses a touch panel.
By pressing objects displayed in the LCD screen, you can select pages, set parameter values, rename programs and combinations, write data, and perform many other operations.

note References in the TRITON's owner's manual to the "... button" or "... tab" refer to objects displayed on the LCD screen. References to the "[...] key," "[...] knob," "[...] dial]," or "[...] slider" refer to controls on the front or rear panel of the TRITON.

a: Current page
e: (category) Popup button
i: Page menu button
b: Edit cell
d: Popup button (2)
f: Check box
c: Popup button (1)
g: Radio buttons
h: Tab
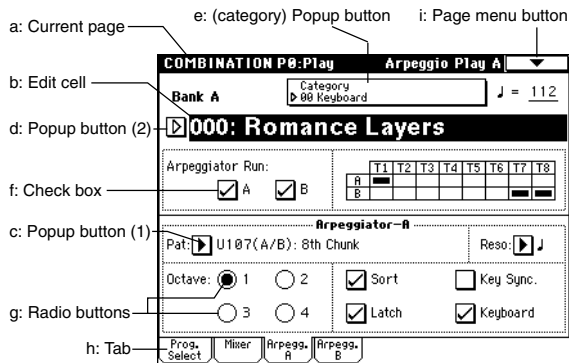
a: Current page

This shows the page within the currently selected mode.
From the left, this displays the **mode name**, the **page number: name** selected in the Jump page, and the **tab name**.

Mode name   Page number: name   Tab name
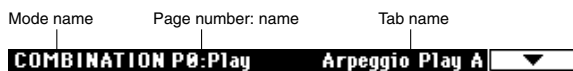
b: Edit cell

When you press a parameter in the LCD screen, the parameter or parameter value will sometimes be highlighted (displayed in inverse video). This is called the **edit cell**, and the highlighted item will be subject to your editing.
The parameter value of the edit cell can be modified using the VALUE controllers (☞p.13) or by using a popup button in the LCD screen. For parameters that accept a key number or a velocity value, you can also hold down the [ENTER] key and play a note on the keyboard to enter the key number or velocity value.

c: Popup button (1)

When this button is pressed, a **popup menu** will appear, showing the parameter values that are available for selection.
To input the parameter value, press the desired value in the popup menu.

When a popup menu is displayed, operating a VALUE controller (☞p.13) will close the popup menu. If the popup menu is unlocked (see below "Pin"), it will close if you touch a location outside the popup menu.

* Popup menu

Pin

Scroll bar
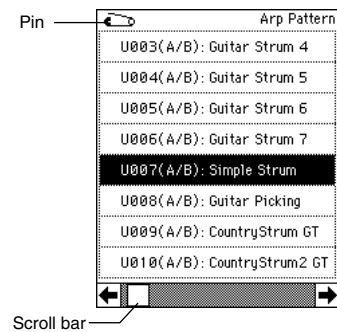
Pin

This switches the popup menu display between **locked** and **unlocked**.
When locked, the pin will be shown closed, and the popup menu will remain displayed even after you press a parameter value. When unlocked, the pin will be shown opened, and the popup menu will close immediately when you press a parameter value.

Scroll bar

Use this when you wish to see parameter values that cannot be displayed in the screen at once.

Press here to scroll to left or right.

Press here and slide to the left or right to scroll to the desired location.

Press here to scroll to the corresponding location.
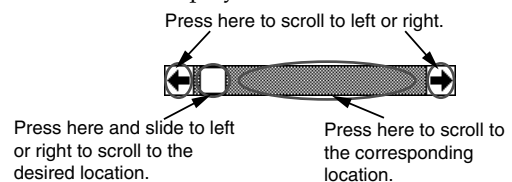
d: Popup button (2)

When you press this button, a tabbed **popup menu** will appear, allowing you to perform the following selections.

- "Bank/Program Select," "Bank/Combination Select": Select programs or combinations by bank
- "Multisample Select": Select a multisample for a program oscillator by category (ROM multisamples only)
- "Category/Effect Select": Select an insert effect or master effect by category

To close the tabbed popup menu, press the **OK button** or **Cancel button**.

e: (Category) popup button

When you press this button, a tabbed **popup menu** will appear, allowing you to perform the following selections.

- "Category/Program Select," "Category/Combination Select": Select programs or combinations by category

To close the tabbed popup menu, press the **OK button** or **Cancel button**.

f: Check box

Each time you press a check box, a check mark will be added or removed.
When **checked**, the parameter will function; when **unchecked**, the parameter will not function.

g: Radio buttons

Press a radio button to select one value from two or more choices.

h: Tab

Press the tab to select a page.

i: Page menu button

When this button is pressed, a list of **page menu commands** will appear.
The page menu commands that appear will depend on the page that is selected.
You can also select up to ten page menu commands by holding down the [ENTER] key and pressing a numeric key [0]–[9].
The page menu will close when you press the LCD screen at a location other than the page menu, or when you press the [EXIT] key.

* Dialog box

The **dialog box** that appears will depend on the **page menu command** that you select.
When selecting a program or combination number in a dialog box, use the VALUE controllers (☞p.13) to input the number.
Sometimes a **text edit button** will be displayed. In any case, perform the operations directed by the message in the dialog box.
To execute, press the **OK button**. To cancel without executing, press the **Cancel button**. (The operation will occur when you press and release the button.) The dialog box will close. The [EXIT] key corresponds to the **Cancel button**, **Done button**, and **Exit button**.

Text edit button

Write Program
A000: [T] Noisy Stabber
Category: [▶] 10: FastSynth
To
Program: [▷] A000: Noisy Stabber
[Cancel]   [OK]

Cancel button — OK button
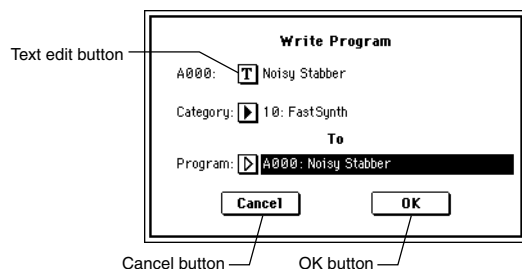
After some commands are executed, the previously-locked page menu will be unlocked automatically, and the page menu will be closed.

* Text edit button

When you press this button, a **text edit dialog box** will appear.
Here you can rename text (such as the name of a program, combination, or song etc.) (☞p.38).

* Page jump menu

COMBINATION Jump ▼
P0: Play
P1: Edit-Prog./Mixer   P2: Edit-Trk Param   P3: Edit-MIDI Filter
P4: Edit-Zone/Ctrl
P7: Edit-Arpeggiator   P8: Edit-Insert Effect   P9: Edit-Master Effect
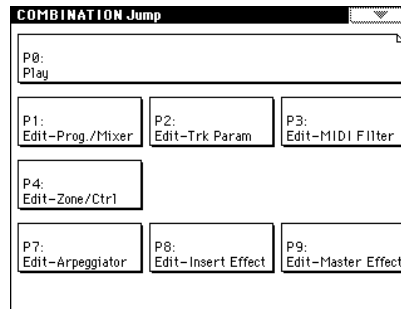
In Combination, Program, Sequencer, Sampling, Song Play, or Global modes, you can press the front panel [MENU] key to view a list of the pages in that mode. (As a reminder, the page in which you were when you pressed the [MENU] key will have its top right corner bent over.) By pressing one of the pages shown, you can move to that page. (You can also move to the corresponding page by pressing a numeric key [0]–[9].)
When you press the [EXIT] key, P0 will be displayed.

* Other objects

To modify the parameter value of an object shaped like a slider or knob, press it to move the edit cell to that object, and use the VALUE controllers to modify the value. In addition, there are also buttons similar to the **OK button** and **Cancel button** explained in "* dialog box" which execute an operation when they are pressed and released, such as the **Done button**, **Copy button**, and **Insert button**.

Toggle buttons

This type of button will change its function or switch on/off each time it is pressed.

PLAY	MUTE	PLAY/MUTE/REC button in Sequencer and Song Play mode
SOLO	Off	SOLO ON/OFF button in Sequencer and Song Play mode
On	Off	ON/OFF button for Insert Effect and Master Effect

Basic operation of the TRITON

1. Selecting modes

○ **In order to use a particular function on the TRITON, you must first select the appropriate mode. Press one of the front panel mode keys ([COMBI] key – [DISK] key) to enter the corresponding mode.**

[COMBI] key: Combination mode
[PROG] key: Program mode
[SEQ] key: Sequencer mode
[SAMPLING] key: Sampling mode
[S.PLAY] key: Song Play mode
[GLOBAL] key: Global mode
[DISK] key: Disk mode

2. Selecting pages and tabs

Each mode has a large number of parameters, which are grouped into pages. Each page is further divided into as many as eight groups. These are referred to as "tabs."

Selecting a page

① **Make sure that the desired mode is selected.**

To select a mode, press the appropriate mode key ([COMBI] key – [DISK] key). Here we will use Program mode as an example for our explanation. Press the [PROG] key.
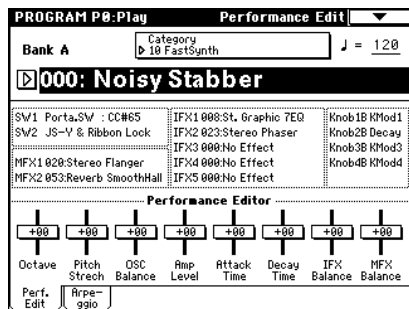
② **Press the [MENU] key.**

The page jump menu will appear.

note In Disk mode there is only one page, so the page jump menu will not appear.
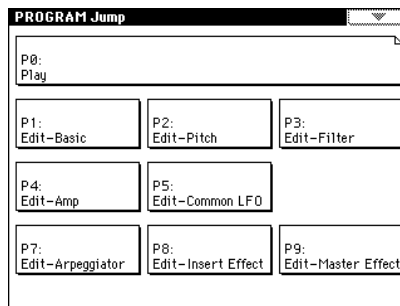
③ **In the LCD screen, press the desired page.**

You will jump to the selected page, and it will appear. As an example here, press P1: Edit-Basic.

• As a reminder, the page in which you were when you pressed the [MENU] key will have its top right corner bent over.
• You can also jump to the corresponding page by pressing a numeric key [0]–[9]. (P0–P9 correspond to numeric keys [0]–[9].)
• By holding down the [MENU] key and pressing a numeric key [0]–[9], you can jump directly to the corresponding page without displaying the page jump menu.
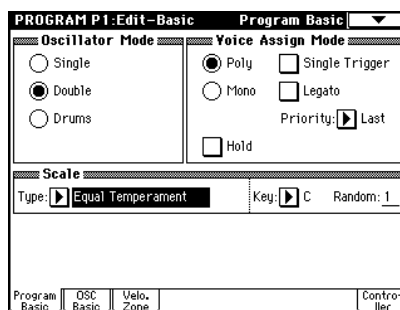
note When you press the [EXIT] key, you will return to P0 from any page.

Selecting a tab

④ **Press one of the tabs located at the bottom of the page.**

As an example here, press the "OSC Basic" tab which is the second from the left.

• Some pages have no tabs.
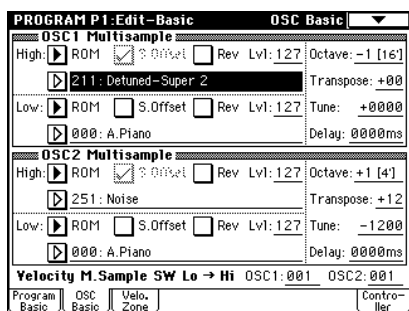
⑤ **To move to another page or tab, press the [MENU] key and repeat the procedure from step ②.**

3. Setting a parameter

The parameter value in the edit cell can be set by using the front panel VALUE controllers ([VALUE] slider, [△][▽] keys, [VALUE] dial, numeric keys [0]–[9], [–] key, [ENTER] key, and [./10's HOLD] key). As necessary, you can also use the [BANK] keys and the [COMPARE] key.

For some parameters, the value can be set by pressing a popup button to display the popup menu and then selecting a parameter value, or by holding down the [ENTER] key and playing a note on the keyboard to input a note number or velocity value.

VALUE controllers

[VALUE] slider

Use this when you wish to make major changes in the value.

In Program mode and Combination mode, this slider can also be used as a control source for alternate modulation or dynamic modulation. (This is active in Program or Combination P0: Play when the "Program Number: name" or "Combination Number: name" (the large characters in the upper part of the LCD) is selected).

[△][▽] keys

Use these when you wish to make small changes in the value.

[VALUE] dial

Use this when you wish to make large changes in a value.

Numeric keys [0]–[9], [ENTER] key, [–] key, [./10's HOLD] key

Use these when you know the parameter value that you wish to input.

After using the numeric keys [0]–[9] to input a number, press the [ENTER] key to finalize the parameter value.

Use the [–] key to enter negative numbers.

Use the [./10's HOLD] key to enter a decimal point. In

Program and Combination mode P0: Play, the [./10's HOLD] key performs the 10's Hold function. (☞p.21, p.23)

[BANK] keys

The [BANK] keys are used in Program mode to select the program bank and in Combination mode to select the combination bank. In Combination mode, they are also used to select the program bank for each timbre of the combination. In Sequencer and Song Play modes, these keys are used to select the bank of the program used by each track of the song.

[BANK] key	Program		Combination	
A [*1]	Bank A	(000...127)	Bank A	(000...127)
B [*1]	Bank B	(000...127)	Bank B	(000...127)
C [*1]	Bank C	(000...127)	Bank C	(000...127)
D [*1]	Bank D	(000...127)	Bank D	(000...127)
E [*2]	Bank E	(000...127)	---	
F [*3]	Bank F	(000...127)	---	
G [*4]	Bank G	(001...128)	---	
	Bank g(1)	(001...128)	---	
	Bank g(2)	(001...128)	---	
	:			
	Bank g(9)	(001...128)	---	
	Bank g(d)	(001...128)	---	

[*1] **Banks A–D** are rewritable user program/combination banks. The factory settings and the preset programs/combinations of the separately sold EXB-PCM series options are provided for banks A–D.

[*2] **Bank E** is also a rewritable user program bank (like banks A–D). We recommend that you use bank E for programs that you yourself create. When converting a multisample created in Sampling mode into a program ("Convert MS to Program"), it is best to use bank E.

[*3] **Bank F** is available if the separately sold EXB-MOSS option is installed. This bank is only for programs that use the EXB-MOSS.

[*4] **Banks G, g(1)–g(9)**, and **g(d)** comprise eleven banks. They contain 256 programs compatible with GM2, and 9 drum programs. These banks cannot be rewritten.

Each time you press the BANK [G] key, you will cycle through banks **G, g(1)–g(9), g(d)** and back to **G**.

Bank G contains 128 programs for the basic GM sounds. **Banks g(1)–g(9)** contain variation sounds. **Bank g(d)** contains drum programs. In banks which contain no variation sounds, the basic GM sounds will be selected. (An asterisk * will be added to the beginning of the program name.)

G001	Acoustic Piano
g(1) 001	Acoustic Piano w
g(2) 001	Acoustic Piano d
g(3) 001	*Acoustic Piano
g(4) 001	*Acoustic Piano
	:
g(9) 001	*Acoustic Piano
g(d) 001	STANDARD Kit
G001	Acoustic Piano
	:

[COMPARE] key

Use this key when you wish to compare an edited **program** or **combination** sound with the un-edited original (i.e., the sound that is written into memory). When editing a program or combination, press this key. The LED will light, and the last-written settings for that program number or combination number will be recalled. When you press the [COMPARE] key once again, the LED will go dark and you will return to the settings that you were editing.
If you edit the settings that are recalled by pressing the [COMPARE] key (i.e., the settings that are written into memory), the LED will go dark, and it will not be possible to return to the previous settings by pressing the [COMPARE] key again.

In **Sequencer mode**, you can use the [COMPARE] key to make "before and after" comparisons immediately after using realtime recording or step recording to record a song, or after performing a track edit operation.

For example, this can be used effectively when realtime-recording a track for a song.

① **Realtime-record a track. (Take 1)**

② **Once again, realtime-record on the same track. (Take 2)**

③ **Press the [COMPARE] key. The LED will light, and take 1 will be recalled.**

④ **Press the [COMPARE] key once again. The LED will go dark, and take 2 will be recalled.**

⑤ **If at step ③ you once again realtime-record on the same track (take 3), the object of the Compare function will now be take 1. If at step ④ you once again realtime-record on the same track (take 3), the object of the Compare function will be take 2.**

In this way, the Compare function lets you recall the previous recording or the previous state of event editing.

🖋 The Compare function is not available Sampling, Song Play, or Global modes.

Popup buttons and popup menus

You can press a popup button to access a popup menu, and then set parameter values (☞p.10).

Keyboard input

When inputting a note name or velocity value as the value of a parameter, you can use the keyboard to input the setting. Hold down the [ENTER] key and play the note that you wish to enter as a value. The note name (number) or velocity value will be input.

When the Global P5: DrumKit page is displayed, you can hold down the [ENTER] key and play a note to recall the settings that have been assigned to the note you played.
In Sampling mode, you can hold down the [ENTER] key and play a note to recall the index that is assigned to the note you played.

Connections

⚠️ Connections must be made with the power turned off. Please be aware that careless operation may damage your speaker system or cause malfunctions.

1. Connecting the power cable

○ **Connect the included power cable to the AC power supply inlet of the TRITON, and then connect the other end of the cable to an AC outlet.**

2. Connecting audio output devices

Connect a set of amplified monitor speakers or your audio system to output the TRITON's sound.

⚠️ If you playback the TRITON through your stereo audio system, be aware that high volumes may damage your speakers. Be careful not to raise the volume excessively.

○ **Connect the AUDIO OUTPUT (MAIN) L/MONO and R jacks to the INPUT jacks of your powered monitor system, etc.**

L/MONO and R are the main outputs. If you are outputting in stereo, make connections to the (MAIN) L/MONO jack and the R jack. If you are outputting in monaural, make connections to the (MAIN) L/MONO jack. We recommend that you playback in stereo if possible.

○ **If you wish to output from the AUDIO OUTPUT (INDIVIDUAL) 1, 2, 3, 4 jacks, connect these jacks to your mixer, and then connect the mixer output to the INPUT of your powered monitor system etc.**

For details on the output of each jack (☞p.107– "Routing").

3. Connecting audio input devices

When sampling in Sampling mode, or when you wish to apply the TRITON's effects to an external audio source in Program, Combination, Sequencer, or Song

1 Power switch — to an AC outlet — Power cable (included) — AC power supply inlet — **7** — Headphones — PHONES

6 TO HOST — **5** MIDI THRU OUT IN — **4** DAMPER ASSIGNABLE SWITCH PEDAL — **3** AUDIO INPUT 2 1 LEVEL MAX MIN MIC LINE — **2** AUDIO OUTPUT (INDIVIDUAL) 4 3 2 1 (MAIN) R L/MONO — Headphones

INPUT — PHONES

CD player, analog record player, etc.

Mic — Guitar

If you connect a guitar with passive pickups (i.e., a guitar which does not contain a preamp), it will not be possible to sample at an appropriate level due to the impedance mismatch. Please route the guitar signal through a preamp or an effect processor.

Effect processor etc.

OUTPUT

INPUT

Powered monitors, etc.

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Play mode and output the sound from the OUTPUT jacks, connect a mic or an external audio source to the AUDIO INPUT 1 and 2 jacks.

○ **For details on connections when sampling in Sampling mode (☞p.78).**

○ **For details on connections when outputting from the OUTPUT jacks in other modes (☞p.109).**

4. Connecting pedals etc.

Foot pedal connections

A foot pedal controls etc.
Connect a separately sold Korg assignable pedal such as the XVP-10 or EXP-2 to the rear panel **ASSIGNABLE PEDAL jack**.
The function controlled by the foot pedal is specified in Global: P2 "Foot Pedal Assign" (☞p.125). (☞p121, 220 in the *Parameter Guide*)

Foot switch connections

A foot switch controls sostenuto, soft pedal on/off, arpeggiator on/off, to select programs or combinations, and to start/stop the sequencer etc.
Connect a separately sold Korg foot switch such as the PS-1 to the rear panel **ASSIGNABLE SWITCH jack**.
The function that will be controlled by the foot switch and the polarity of the foot switch can be set in Global: P2 "Foot Switch Assign," and "Foot Switch Polarity" (☞p.125). (☞p.121, 219 in the *Parameter Guide*)

Damper pedal connections

A damper pedal applies a damper effect as you play.
Connect a separately sold Korg DS-1H damper pedal to the DAMPER jack of the TRITON. If a DS-1H is connected, half-damper effects can be produced.
The polarity of the pedal is set in Global P1 "Damper Pedal Polarity" and the sensitivity is set in Global P1 "Half Damper Calibration." (☞p.115, 121 in the *Parameter Guide*)

5. Connections to MIDI equipment

The keyboard, controllers and sequencer of the TRITON control and play an external MIDI tone generator, and an external MIDI keyboard or sequencer plays the TRITON's tone generator.

○ **Use MIDI cables to connect the MIDI connectors of the TRITON to the MIDI connectors of your external MIDI device (☞p.111).**

6. Connections to a computer

An IBM PC (compatible) or Apple Macintosh computer can be connected to the TRITON, so that the TRITON's keyboard, controllers and sequencer can transmit data to the computer, and so that the computer can play the TRITON's tone generator.

○ **Connect the TRITON's TO HOST connector to the appropriate port of your computer (☞p.112).**

7. Connections to a SCSI device

If the separately sold EXB-SCSI option is installed, you can connect the TRITON to a SCSI-compatible device (hard disk drive, CD-ROM drive, etc.).
For the EXB-SCSI installation refer to p.237 in the *Parameter Guide.*

Quick Start

Turning the power on/off

✎ Before you turn on the power, make sure that the desired connections have been made as described in "Connections" (☞p.15).

1. Turning the power on

① **Press the TRITON's [POWER] switch to turn on the power.**

The LCD screen will display the name of your model (TRITON, TRITON pro, or TRITON proX), and the software version.
(The following graphic shows the factory-set LCD screen of the TRITON. The version number is subject to change without notice.)

```
TRITON
MUSIC WORKSTATION/SAMPLER

SIMM Slot1 (16MB)          KORG
                    TRITON Version 1.0.0
```

② **Turn on your powered monitors or stereo amp.**

③ **Raise the TRITON's [VOLUME] slider to an appropriate level, and adjust the volume of your powered monitors or stereo amp.**

2. Turning the power off

① **Set the TRITON's [VOLUME] slider and the volume of your powered monitor or stereo amp to zero.**

② **Turn off the power of your powered monitor or stereo amp.**

③ **Press the TRITON's [POWER] switch to turn off the power.**

The mode and page that will be selected when the power is turned on

The state of the TRITON when the power is turned on will depend on the setting of "Power On Mode" (Global P0: System Preference tab).

If "Power On Mode" is **Reset** (factory setting), the TRITON will automatically selects the Combination mode P0: Play.
If "Power On Mode" is **Memorize**, the TRITON will be in the mode and page that were last selected when the power was turned off.

The **Memorize** setting will remember the mode and page that were last selected, the combination number that was last selected in Combination mode, and the program number that was last selected in Program mode.
If another mode is selected when the power is turned on, you can press the [COMBI] key or [PROG] key to select the P0: Play page with the last-selected combination number or program number.

The LCD screen when separately sold options or SIMM modules are installed

The TRITON series allows you to install separately sold options or SIMM (sampling memory) boards.

```
EXB - MOSS
EXB - SCSI
EXB - PCM 1 (EXB1)
EXB - PCM 2 (EXB2)
SIMM 1 (16MB)
SIMM 2 (32MB)
```

When the power is turned on, the type of installed options will be displayed. After installing an option, be sure to check this display to verify that the option was installed correctly. If the option is not displayed here even though it was installed, it was not installed correctly. Turn off the power and re-install the option. (☞For details on installing an option, refer to p.237 in the *Parameter Guide*)

EXB-MOSS: The EXB-MOSS option is installed.
EXB-SCSI: The EXB-SCSI option is installed.
EXB-PCM Slot1 (****): A PCM expansion board is installed in EXB-PCM series slot 1. The type of board is shown in parentheses.
EXB-PCM Slot2 (****): A PCM expansion board is installed in EXB-PCM series slot 2. The type of board is shown in parentheses.
SIMM Slot1 (MB):** A SIMM is installed in SIMM slot 1. The capacity of the SIMM is shown in parentheses. When the TRITON is shipped from the factory, a 16 MB SIMM is already installed in this slot.
SIMM Slot2 (MB):** A SIMM is installed in SIMM slot 2. The capacity of the SIMM is shown in parentheses.

17

Listening to a demo song

Here's how to listen to a demo song on the TRITON.

• •

Contents of the disks

The TRITON series comes with two floppy disks (TNFD-00P and TNFD-01P).

PRELOAD.PCG

- Preloaded data (programs, combinations, drum kits, arpeggio patterns, global settings)
- Program data (programs using the sampling function) used by the demonstration songs

note When you load PRELOAD.PCG, it will be written into internal memory. This data is preserved even if the power is turned off.

When you load PRELOAD.PCG, the data that had been written before loading this data will be rewritten. If you wish to keep this data, you must first save it on a floppy disk before loading PRE-LOAD.PCG (☞p.40).

PRELOAD.SNG

- Demonstration song and demonstration cue list data

note When you load PRELOAD.SNG, it will be written into internal sequencer memory. This memory is volatile, and the data will be lost when the power is turned off.

When you load PRELOAD.SNG, the data that had been written before loading this data will be rewritten. If you wish to keep this data, you must first save it on a floppy disk before loading PRE-LOAD.SNG. (☞p.40)

PRELOAD.KSC

- Sample program data used by the demonstration songs

note When you load PRELOAD.KSC, its multisample/sample data will be written into the TRITON's multisample/sample memory. This memory is volatile, and the data will be lost when the power is turned off.

Whether or not previously-written data will be erased when you load PRELOAD.KSC is determined by the "Select .KSC Allocation" setting. Refer to step ⑦ of the following procedure.

• •

1. Loading the demo song data in Disk mode

① **Insert the included "TNFD-00P" floppy disk into the disk drive.**

For details on handling a floppy disk and inserting it into the disk drive, refer to "Disk mode" ☞p.95.

② **Press the [DISK] key (the LED will light).**

You will enter Disk mode.

③ **Press the Load tab.**

The Load window will appear, and file information will be displayed.

④ **Press "PRELOAD.SNG."**

The display will be highlighted. This is the demo song data.
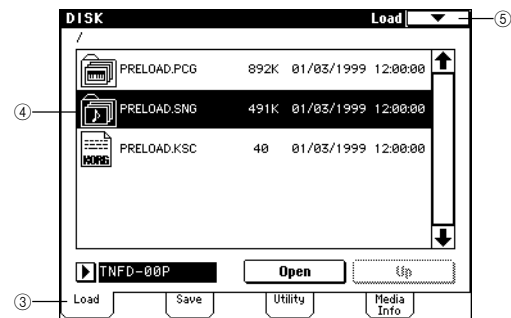
⑤ **Press the page menu command button.**

The page menu commands will be displayed.
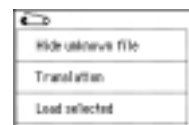
⑥ **Press "Load selected."**

A dialog box will appear.

⑦ **Press the check boxes to add a check mark.**

Check "Load PRELOAD.PCG too." When the data is loaded, the .PCG file will be loaded along with the .SNG file.

Check "Load PRELOAD.KSC too." When the data is loaded, the .KSC file will be loaded along with the .SNG file.

The "Select .KSC Allocation" radio buttons specify how the sample data will be loaded into sample memory. For this example, select **Clear**.

```
        Load PRELOAD.SNG
   ☑ Load PRELOAD.PCG too

   ☑ Load PRELOAD.KSC too

   Select .KSC Allocation:  ○ Append   ● Clear
        [ Cancel ]        [ OK ]
```
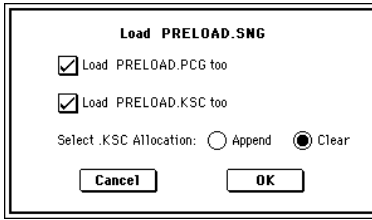
If you load with "Select .KSC Allocation" set to **Clear**, the sample data will be loaded from the beginning of the sample memory area.
If you load with "Select .KSC Allocation" set to **Append**, the sample data will be loaded into the unused portion of the sample memory.

If sample memory already contains sample data that you do not wish to lose, either select **Append**, or save the sample data to a floppy disk (☞p.40).

⑧ **Press the OK button.**

The data will be loaded in the order of PRE-LOAD.PCG, PRELOAD.SNG, and PRELOAD.KSC. When the PRELOAD.KSC file begins to load, the following dialog box will appear.

```
   Where is a NEWMS000.KMP file
   /
   📁 PRELOAD.PCG    892K  01/03/1999 12:00:00   ↑
   📁 PRELOAD.SNG    491K  01/03/1999 12:00:00
   📁 PRELOAD.KSC     40   01/03/1999 12:00:00   ↓
   ▶ TNFD-00P        [ Open ]      [ Up ]
              [ Skip ]  [ Cancel ]  [ Select ]
```
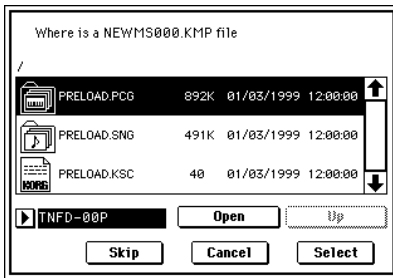
The sample/multisample data listed in PRE-LOAD.KSC is contained in "TNFD-01P."

⑨ **Remove the "TNFD-00P" floppy disk from the floppy disk drive, and insert the "TNFD-01P" floppy disk.**

⑩ **Press the LCD screen once.**

The LCD display will change. (The newly inserted floppy disk will be recognized when you press the LCD screen.)

```
   Where is a NEWMS000.KMP file
   /
   📁 PRELOAD         ----  01/05/1999 12:00:00   ↑
                                                  ↓
   ▶ TNFD-02P        [ Open ]      [ Up ]
              [ Skip ]  [ Cancel ]  [ Select ]
```

⑪ **Press the Select button to resume loading.**

2. Selecting and playing a demonstration song in Sequencer mode

⑫ **Press the [SEQ] key (the LED will light).**

You will enter Sequencer mode.

⑬ **Press the [MENU] key.**

The LCD screen will show a list of the pages in Sequencer mode.

```
   SEQUENCER Jump                       ▼
   P0:
   Play/REC

   P1:          P2:          P3:
   Cue List     Trk Param    MIDI Filter

   P4:          P5:          P6:
   Zone/Ctrl    Track Edit   Pattern/RPPR

   P7:          P8:          P9:
   Arpeggiator  Insert Effect Master Effect
```
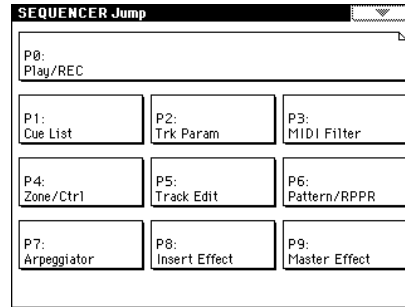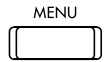
For this example, press either "P0: Play/REC" or numeric key [0]. The P0: Play/REC page will appear.

⑭ **Select the demonstration song.**

Press the "Song No. and name" area to highlight the song name.

Song No. and name

Popup button

```
   SEQUENCER P0:Play/REC   Program T01-08   ▼
   001:01.000  Meter: 1/4    ♩ = 102   ▶ Auto
   ▶ S000: Deep Cut
   ▶ Track01: Drums 1        Reso: ▶ Hi   □ RPPR
   T01:A052:Psycho Kit    Ch:01  RPPR:NoAssign
                    Category
   ▶15  ▶13  ▶11  ▶15  ▶04  ▶03  ▶00  ▶00
   Drums SE  LeadSyn Drums Vocal/P Strings Keyboar Keyboar
                  Bank/Program
   ▶A052 ▶A098 ▶B028 ▶A100 ▶B011 ▶B067 ▶A001 ▶A001
   Psycho Goa Love Glide Lea BD&SD Ki Slow Cho Solo Violi Acoustic Acoustic
   PLAY PLAY PLAY PLAY PLAY PLAY PLAY PLAY
   SOLO SOLO SOLO SOLO SOLO SOLO SOLO SOLO
   OFF  OFF  OFF  OFF  OFF  OFF  OFF  OFF
   Prog. Prog. Mixer Mixer PlyLoop PlyLoop      Prefe-
   1-8   9-16  1-8   9-16  1-8    9-16          rence
```

⑮ **To select the first song, press numeric key [0], and press the [ENTER] key.**

To select the second song, press numeric key [1], and press the [ENTER] key.

note You can select songs from a popup menu.
Press the popup button for "Song No. and name" to access the popup menu.
In the LCD screen, press the song that you wish to play. The popup menu will close, and the song you pressed will be selected.

⑯ **Press the front panel [START/STOP] key.**

START/STOP

The LED will blink and the selected song will play.

⑰ **If you wish to stop playback, press the [START/STOP] key once again.**

3. Playing a cue list

Here's how to playback the demonstration cue list. A cue list allows you to playback multiple songs in succession, and specify the number of times that each song will be repeated.

① **Press the [MENU] key.**

The LCD screen will show a list of the pages in Sequencer mode.

② **Press either "P1: Cue List" or numeric key [1].**

The P1: Cue List page will appear.

③ **Press the [START/STOP] key.**

④ **To stop playback, press the [START/STOP] key once again.**

If the last step is **End**, playback will stop automatically when it reaches that point. If the last step is **Continue to Step01**, playback will return to the first step and continue.

Cue lists can be selected in the same way that songs are selected. Refer to ⑮ and ⑯ in the previous page.

Selecting and playing a program

In Program mode you can select a program from **banks A–G** and play it. Here we will show how to select preset programs. Select various programs and hear how they sound.

Selecting a program

① **Press the [PROG] key (the LED will light), and you will enter Program mode.**

PROG

② **Make sure that P (page) 0: Play is selected in the LCD screen.**

If this page is not selected, press the [MENU] key to access the page jump menu, and either select "P0: Play" in the LCD screen or numeric key [0] to display P0: Play.

MENU

Category popup button
Program Number: name
Popup button

```
PROGRAM P0:Play          Performance Edit  ▼
Bank A            Category                 ♩ = 120
                 ▷ 10 FastSynth
▣ 000: Noisy Stabber
SW1 Porta.SW  : CC#65   IFX1 008:St. Graphic 7EQ   Knob1B KMod1
SW2 JS-Y & Ribbon Lock  IFX2 023:Stereo Phaser     Knob2B Decay
                        IFX3 000:No Effect          Knob3B KMod3
MFX1 020:Stereo Flanger IFX4 000:No Effect          Knob4B KMod4
MFX2 053:Reverb SmoothHall IFX5 000:No Effect
              ─── Performance Editor ───
  +00    +00   +00    +00    +00    +00   +00    +00
 Octave  Pitch  OSC    Amp   Attack  Decay  IFX    MFX
        Stretch Balance Level  Time   Time  Balance Balance
Perf.  Arpe-
Edit   ggio
```

③ **Press "Program Number: name" in the LCD screen to select the program.**

The display will be highlighted.

④ **Press a PROGRAM BANK [A]–[G] key to select the bank. (☞p.22 "Program banks of the TRITON")**

For example to select **bank A**, press the [A] key. (The LED will light, and the upper left of the LCD screen will indicate **Bank A**.)

Bank G is unlike other banks. Each time you press the [G] key, the selection will cycle in the order of G → g(1) → g(2) → g(3) → g(4) → g(5) → g(6) → g(7) → g(8) → g(9) → g(d) → G (the LED will light, and the upper left of the LCD screen will indicate **Bank G**, **g(1)–g(9)**, **g(d)** respectively.

PROG BANK
SMPL — MOSS — GM
A   B   C   D   E   F   G
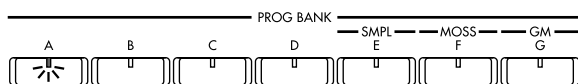
⑤ **Use numeric keys [0]–[9] to input the program number, and press the [ENTER] key. Alternatively, you can use the [VALUE] dial or [△][▽] keys to make a selection.**

7 8 9
4 5 6
1 2 3
EXIT MENU − 0 ./10's HOLD ENTER
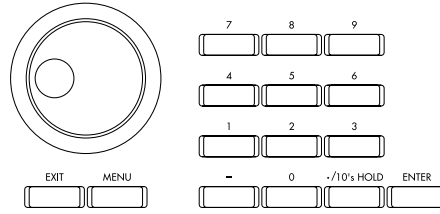
If you press the [./10's HOLD] key to turn on the **10's Hold function** (the LCD screen will indicate), the ten's place of the program number will be fixed, and you will be able to switch programs simply by pressing a single numeric key. Each time you press a numeric key, the one's place will change. You can also use the [△][▽] keys to change the ten's place.
To release the 10's Hold function, press the [./10's HOLD] key once again.

● ●

Selecting programs from Bank/Program Select

You can select programs from a list organized by program bank.

① **Press the "Program Number: name" popup button.**

A tabbed "Bank/Program Select" popup menu will appear.

```
Bank/Program Select
Bank A  A000: Noisy Stabber    A008: Rez. Down       Bank g(2)
Bank B  A001: Acoustic Piano   A009: Fat Brass       Bank g(3)
Bank C  A002: Chipper Dayglow  A010: <Techno Vox Box> Bank g(4)
Bank D  A003: Legato Strings   A011: Fresh Breath    Bank g(5)
Bank E  A004: ! {Tricky} Kit ! A012: Smooth Sine Lead Bank g(6)
Bank F  A005: Acoustic Guitar  A013: Sax Ensemble    Bank g(7)
Bank G  A006: Nasty Bass       A014: Swirling Dreams Bank g(8)
Bank g(1) A007: BX3 VelSwitch  A015: Monkey Skulls   Bank g(9)
                                                     Bank g(d)
←                                    →
                        Cancel      OK
```

In the graphic, bank A is selected. The center area shows the programs contained in that bank.

② **Press the tabs located at the left and right to select banks.**

③ **Press program names in the center area to select programs.**

The selected program will be highlighted.

④ **When you are satisfied with the selected program, press the OK button to close the popup menu.**

If you press the **Cancel button**, the selection you made here will be discarded, and you will return to the program that had been selected when you opened the popup menu.

● ●

Selecting programs from Category/Program Select

You can select programs from a list organized by category. With the factory settings, the programs are classified into sixteen categories of instrument (keyboard, organ, bass, drums etc.).

① **Press the Category popup button.**

A tabbed "Category/Program Select" popup menu will appear.
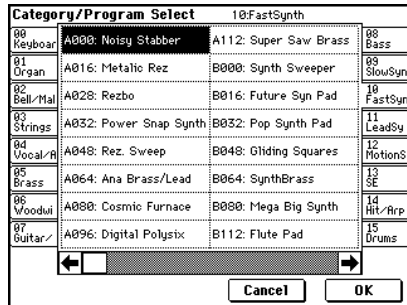
In the above graphic, category 10: FastSynth is selected. The center area shows the programs contained in that category.

② **Press the tabs located at the left and right to select a different category.**

The name of the selected category will be displayed in full in the upper right.

③ **Press a program name in the center area to select a program.**

The selected program will be highlighted.

note If you wish to change a program to a different category, you can set in the dialog box when writing the program (☞p.39). Category names can be changed in "Category Name" (Global P4).

④ **When you are satisfied with the selected program, press the OK button to close the popup menu.**

If you press the **Cancel button**, the selection you made here will be discarded, and you will return to the program that had been selected when you opened the popup menu.

Other ways to select a program

Using a connected switch to select programs (☞p.125)

An separately sold on/off type foot switch such as the Korg PS-1 can be connected to the ASSIGNABLE SWITCH jack, and used to select programs.

Selecting programs from a MIDI device (☞p.114)

MIDI program change messages can be transmitted from an external MIDI device, and received by the TRITON to select programs.

Program banks of the TRITON

The TRITON contains **program banks A–G**.

- **Banks A–E** each contain 128 programs (numbered 000–127), for a total of 640 programs.
  With the factory settings, **banks** contain a variety of preset programs that use the internal PCM ROM multisamples, effects, and arpeggiator patterns etc. With the factory settings, **bank E** does not contain programs. It can be used as a user bank for you to write programs you yourself create (such as programs that use multisamples you sampled in Sampling mode).
- **Bank F** can be used if the EXB-MOSS option (sold separately) is installed. It can contain 128 programs (numbered 000–127) that use the MOSS tone generator. (☞For the program names, refer to the owner's manual of the EXB-MOSS option.)
- **Bank G** contains 256 programs compatible with the GM2 sound map, and nine drum programs. This bank is read-only.
  Bank G consists of banks G, g(1), g(2)–g(9), and g(d). The 128 programs from 001–128 can be used. **G** contains the GM2 original programs. **g(1)–g(9)** allow you to select variation programs of the G bank programs. **g(d)** lets you select drum programs.

☞ For the preset program banks and program names, refer to the separate *Voice Name List*.

Selecting and playing a combination

In Combination mode you can select a combination from **banks A–D** and play it. Here we will show how to select preset combinations. Select various combinations and hear how they sound.

Selecting a combination

① **Press the [COMBI] key (the LED will light), and you will enter Combination mode.**

COMBI

② **Make sure that P (page) 0: Play is selected in the LCD screen.**

If this page is not selected, press the [MENU] key to access the page jump menu, and either press "P0: Play" in the LCD screen or numeric key [0] to display P0: Play.

MENU

Category popup button

Combination Number: name

Popup button

Bank/Program
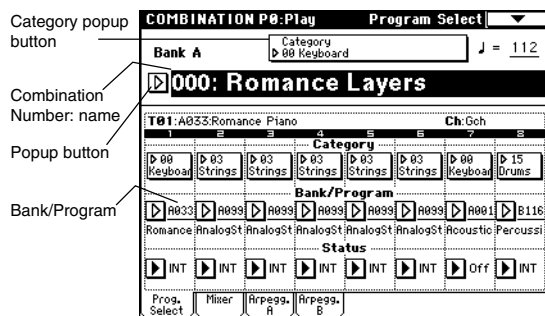
③ **Press "Combination Number: name" in the LCD screen to select the combination.**

The display will be highlighted.

④ **Press a COMBI BANK [A]–[D] key to select the bank. (☞p.24 "Combination banks of the TRI-TON")**

For example to select **bank A**, press the [A] key. (The LED will light, and the upper left of the LCD screen will indicate **Bank A**.)

COMBI BANK

✍ When the edit cell is located at the "Bank/Program" of a timbre 1–8, pressing a [BANK] key will allow you to select the program bank for that timbre, and the LED of the program bank selected for that timbre will light. If you wish to select a combination bank, make sure that the edit cell is not located at the "Bank/Program" of timbres 1–8.

⑤ **Use numeric keys [0]–[9] to input the combination number, and press the [ENTER] key. Alternatively, you can use the [VALUE] dial or [△][▽] keys to make a selection.**

If you press the [./10's HOLD] key to turn on the **10's Hold function** (the LCD screen will indicate ⌨), the ten's place of the combination number will be fixed, and you will be able to switch combinations simply by pressing a single numeric key. Each time you press a numeric key, the one's place will change. You can also use the [△][▽] keys to change the ten's place.
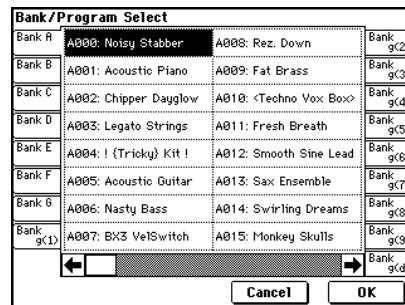To defeat the 10's Hold function, press the [./10's HOLD] key once again.

• •

Selecting combinations from Bank/Combination Select

You can select combinations from a list organized by combination bank.

① **Press the "Combination Number: name" popup button.**

A tabbed "Bank/Combination Select" popup menu will appear.
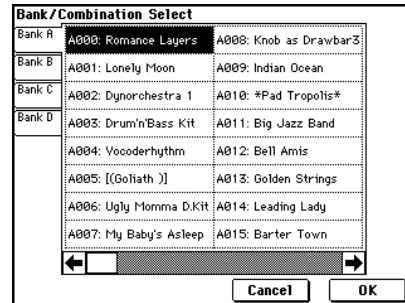
In the above graphic, bank A is selected. The center area shows the combinations contained in that bank.

② **Press the tabs located at the left to select banks.**

③ **Press combination names in the center area to select combinations.**

The selected combination will be highlighted.

④ **When you are satisfied with the selected combination, press the OK button to close the popup menu.**

If you press the **Cancel button**, the selection you made here will be discarded, and you will return to the combination that had been selected when you opened the popup menu.

• •

Selecting combinations from Category/Combination Select

You can select combinations from a list organized by category. With the factory settings, the combinations are classified into sixteen categories of instrument (keyboard, organ, bass, drums etc.). Here the combinations are divided into sixteen categories.

① **Press the Category popup button.**

A tabbed "Category/Combination Select" popup menu will appear.
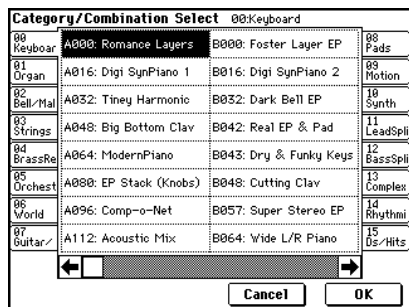
In the graphic, category 00: Keyboard is selected. The central area shows the combinations contained in that category.

② **Press the tabs located at the left and right to select a different category.**

The name of the selected category will be displayed in full in the upper right.

③ **Press a combination name in the central area to select a combination.**

The selected combination will be highlighted. Press the scroll bar to move to additional pages of combinations in the selected category.

note If you wish to change a combination to a different category, you can set in the dialog box when writing the combination (☞p.39). Category names can be changed in "Category Name" (Global P4).

④ **When you are satisfied with the selected combination, press the OK button to close the popup menu.**

If you press the **Cancel button**, the selection you made here will be discarded, and you will return to the combination that had been selected when you opened the popup menu.

Other ways to select a combination

Using a connected switch to select combinations (☞p.125)

An separately sold on/off type foot switch such as the Korg PS-1 can be connected to the ASSIGNABLE SWITCH jack, and used to select combinations.

Selecting combinations from a MIDI device (☞p.114)

MIDI program change messages can be transmitted from an external MIDI device, and received by the TRITON to select combinations.

Combination banks of the TRITON

The TRITON contains **combination banks A–D**.

Each bank contains 128 combinations (numbered 000–127), for a total of 512 combinations.
With the factory settings, these banks contain a variety of preset combinations that use programs, effects, and arpeggio patterns.

☞ For the preset combination banks and combination names, refer to the separate *Voice Name List*.

Using controllers to modify the sound

The TRITON provides a variety of controllers that can be used to control the tone, pitch, volume, effects, and arpeggiator etc. in realtime while you play.

Joystick
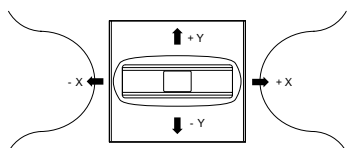
JS(+X): Move the joystick toward the right to apply an effect. Normally this is used to control the pitch (bend up).

JS(–X): Move the joystick toward the left to apply an effect. Normally this is used to control the pitch (bend down).

JS(+Y): Move the joystick away from yourself to apply an effect. Normally this is used to control the oscillator LFO (vibrato).

JS(–Y): Move the joystick toward yourself to apply an effect. Normally this is used to control filter LFO (wah).

note You can use the **Lock function** of SW 1 or 2 to hold the effect even after the joystick is returned to the center position. For the procedure, refer to "SW1, SW2."

note You can use the joystick as a source for alternate modulation or effect dynamic modulation, to control program parameters or effect parameters.

Ribbon controller
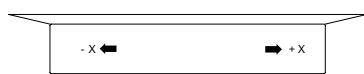
Move your finger to the left and right on the ribbon controller to apply an effect.
Normally, this is used to control pitch, volume or filter etc.

note You can use the **Lock function** of SW 1 or 2 to hold the effect even after you release your finger from the ribbon controller. For the procedure, refer to "SW1, SW2."

note You can use the ribbon controller as a source for alternate modulation or effect dynamic modulation, to control program parameters or effect parameters.

SW1, SW2
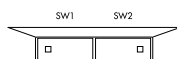
You can use these keys as sources for alternate modulation or effect dynamic modulation to control program parameters or effect parameters.
These switches can also be used to switch the octave, to turn portamento on/off, or to lock the position of the ribbon controller or after touch function.

You can specify the way in which the [SW1] and [SW2] keys will operate: either **Toggle**, when the assigned function will be switched on/off each time the key is pressed, or **Momentary**, when the assigned function will be switched on only as long as you hold down the key.

note In Program mode, the function of the [SW1] and [SW2] keys can be checked in the P0: Play tab Performance (☞p.27).

note When you write a program or combination, the on/off status of the [SW1] and [SW2] keys is saved.

note For details on making these settings, refer to "Setting the functions of [SW1] and [SW2]" (☞p.127).

The Lock function

Joystick
When the [SW1] or [SW2] key function is set to **JS X Lock**, **JS +Y Lock**, or **JS –Y Lock**, the sound produced by moving the joystick can be held even after the joystick is returned to the center position.

When the [SW1] key is set to **JS–Y Lock** and is operating as a **Toggle** switch, the lock function can be used as described in the following example.

① **Move the joystick toward yourself to modify the sound.**

② **While continuing to hold the joystick toward yourself, press [SW1] (the [SW1] key LED will light).**

The sound at this point will be held.

③ **Even if you release the joystick, or move it toward yourself once again, the sound will remain unchanged from when the [SW1] key was pressed.**

This is the "locked" condition. Moving the joystick to left or right will produce the normal result.

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④ **To release the locked condition, press the [SW1] key once again.**
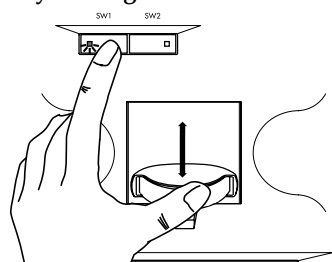
Ribbon controller

When the [SW1] or [SW2] key function is set to **Ribbon Lock**, the sound produced by moving the ribbon controller can be held even after the ribbon controller is released.

When the [SW1] key is set to **Ribbon Lock** and is operating as a **Toggle** switch, the lock function can be used as described in the following example.

① **Press [SW1] (the [SW1] key LED will light).**

② **Move your finger to left or right on the ribbon controller. The sound will change.**

③ **Even when you remove your finger from the ribbon controller, the sound at that point will be held.**

This is the "locked" condition.

④ **To release the locked condition, press the [SW1] key once again.**
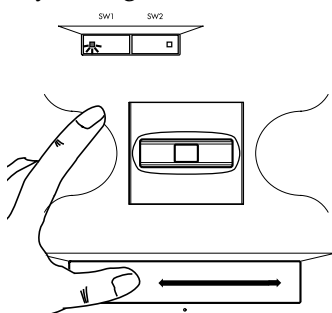
note When the [SW1] or [SW2] key function is assigned to **JS X & Ribbon Lock**, **JS+Y & Ribbon Lock**, or **JS–Y Ribbon Lock**, both locking functions will apply simultaneously.

After touch

When the [SW1] or [SW2] key function is set to **After Touch Lock**, the sound produced by applying pressure to the keyboard can be held even after the keyboard is released.

When the [SW1] key is set to **After Touch Lock** and is operating as a **Toggle** switch, the lock function can be used as described in the following example.

① **After playing a note, apply pressure to the keyboard (after touch). The sound will change.**

② **While maintaining the pressure on the keyboard, press [SW1] (the [SW1] key LED will light).**

③ **Even when you apply further pressure to the keyboard, the sound at the moment you pressed [SW1] key will be held.**

This is the "locked" condition.

④ **To release the locked condition, press the [SW1] key once again.**

Realtime control knobs [1], [2], [3], [4]

These knobs can be used to control the filter cutoff frequency and resonance, the amp and filter EG, volume, portamento time, pan, pitch LFO, or the send levels to the master effects, etc.

① **Press the [REALTIME CONTROLS] key to switch the function of the realtime controllers to A mode or B mode.**

Each time you press the key, A mode or B mode will be selected alternately, and the corresponding LED will light.
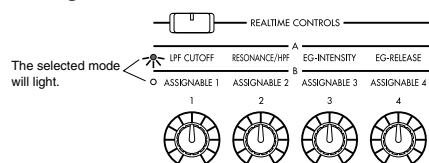
② **Rotate the desired knob to control the sound, etc.**

A mode controls

In A mode, knobs [1]–[4] will control/edit the following functions.
Placing the knobs in the center (12 o'clock) position will produce the values specified by the program parameters.

Knob [1]: LPF CUTOFF

Adjust the cutoff frequency of the low pass filter. When you adjust the cutoff frequency of the filter, the brightness of the sound will change. The effect will depend on the settings of the program parameters, but normally, rotating the knob toward the left will darken the sound, and rotating it toward the right will brighten it.
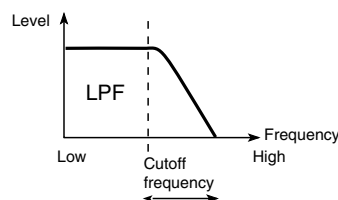
Knob [2]: RESONANCE/HPF

Adjust the resonance level of a low pass filter or the cutoff frequency of a high pass filter.
The content that is controlled will depend on the filter type specified by the program.

By adjusting the filter resonance level, you can increase or decrease the resonance level to add a unique character to the sound.
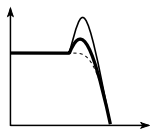
By adjusting the cutoff frequency of a high pass filter, you can modify the brightness of the sound.
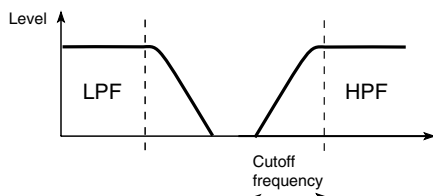
Knob [3]: EG-INTENSITY

Adjust the filter EG intensity (the depth at which the filter EG is applied).

Rotating the knob will affect the depth of the filter EG. Normally, rotating the knob toward the left will make the filter EG apply less deeply, and rotating it toward the right will make the filter EG apply more deeply. Since the filter EG will operate based on the cutoff frequency of the filter, knobs [1] and [3] will work together to control the tonal changes produced by the filter.
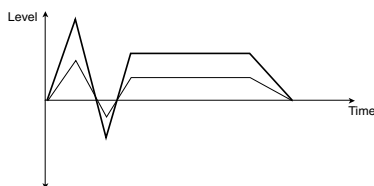
Knob [4]: EG-RELEASE

Adjust the EG release times of the filter and amp. This will determine the time from note-off until the sound disappears.

When you operate the knob, the release times of the filter EG and the amp EG will change. Normally, rotating the knob toward the left will shorten the release time, and rotating it toward the right will lengthen the release time.
When the arpeggiator is running, it is effective to use this in conjunction with the arpeggiator [GATE] knob to control the arpeggiated notes.
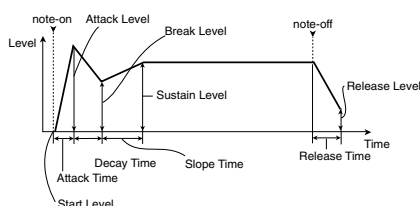
B mode controls

You can control parameters such as volume, portamento time, pan or filter and amp EG, pitch LFO, and master effect send levels etc.

note   In each preset program, appropriate functions are assigned to the B-mode knobs. The functions that are assigned can be viewed in the LCD screen.

The B-mode function settings are made for each individual program, combination, or song. In Sampling mode and Song Play mode, the B-mode functions are set for the entire mode.

For details on making these settings (☞p.127).

• •

Viewing the parameters that are assigned to [SW1], [SW2], and the realtime control B-mode

In Program mode, the P0: Play shows the functions that are assigned to [SW1] and [SW2], and to the B-mode of realtime control knobs [1], [2], [3], and [4].

Functions assigned to B-mode knobs [1]–[4]

Functions assigned to [SW1] and [SW2] keys

• •

[VALUE] slider

When a program number is selected in Program P0: Play, or when a combination number is selected in Combination mode page P0: Play, you can use the [VALUE] slider as a source for alternate modulation or effect dynamic modulation, and control program parameters or effect parameters.

Keyboard

Velocity

The force with which you play a note can apply an effect.
Normally this is used to control volume, or the speed or sensitivity of the EG.

After Touch

An effect can be applied by pressing down on the keyboard after playing a note.
Normally this is used to control volume, tone (cutoff frequency), or LFO sensitivity etc.

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Note Number

An effect can be applied by the note number (keyboard location) that you play.
Normally this is used to control volume, tone (cutoff frequency), LFO sensitivity, and EG sensitivity etc.

note This can be used as a source for alternate modulation or effect dynamic modulation, to control program parameters or effect parameters.

Foot pedals

Damper Pedal

A separately sold Korg switch-type damper pedal such as the DS-1H can be connected to the TRITON. If a DS-1H is connected, it will function as a half-damper pedal. The half-damper function cannot be controlled by other pedals.

Assignable Foot Switch

A separately sold on/off switch such as the Korg PS-1 foot switch can be connected to the TRITON, allowing you to turn an assigned function on/off by stepping on the foot switch.

The function of the foot switch is assigned in Global P2: Controller "Foot Switch Assign" (☞p.125).

Assignable Foot Pedal

A separately sold Korg expression pedal such as the EXP-2 orXVP-10 can be connected to the ASSIGNABLE PEDAL jack, and used to apply an effect.

The function of the foot pedal is assigned in Global mode P2: Controller "Foot Pedal Assign" (☞p.125).

ARPEGGIATOR [TEMPO] knob, [GATE] knob, [VELOCITY] knob

These knobs control the effect of the arpeggiator in realtime. For details on the operation, refer to p.29 "Using the arpeggiator while you play."

Using the arpeggiator while you play

The **arpeggiator** is a function that automatically generates arpeggios (broken chords). Most arpeggiators produce an arpeggio when you play a chord on the keyboard.

The chord you played on the keyboard is sounded as an arpeggio (broken chord)
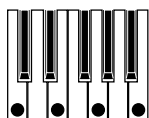
In addition to this, the TRITON's arpeggiator is a polyphonic arpeggiator that is able to produce a variety of chordal transformations or phrases based on the pitch or timing of the notes you play on the keyboard. These functions let you use the arpeggiator to play a wide range of patterns including drum or bass phrases, and guitar or keyboard backing riffs. It is also effective to use the arpeggiator as part of the sound-creating process when creating subtly-moving pads, synth-sounds, or sound effects.

In addition, the TRITON features a Dual Arpeggiator that lets you simultaneously use two arpeggio patterns in Combination mode, Sequencer mode, and Song Play mode. You can take advantage of this in many ways, such as applying separate arpeggio patterns to a drums program and a bass program, or using keyboard split or velocity to switch between two arpeggio patterns.

The TRITON provides five preset arpeggio patterns (the standard **UP**, **DOWN**, **ALT1**, **ALT2**, and **RANDOM**), and lets you program and store 232 user arpeggio patterns. With the factory settings, these contain a wide variety of preset user patterns. An arpeggio pattern that you create can also be stored as a user arpeggio pattern.

For the arpeggio pattern names, refer to the separate *Voice Name List*.

Using the arpeggiator in Program mode

① **Press the [PROG] key to enter Program mode, and select a program. (☞p.21 "Selecting and playing a program")**

As you select various programs, you will notice that the ARPEGGIATOR [ON/OFF] key LED will light for some programs. (☞p.31 "Linking the arpeggiator to programs") When you press the keyboard, the arpeggiator will start.
For other programs, you can press the ARPEGGIATOR [ON/OFF] key (the LED will light) to turn on

the arpeggiator. Arpeggios will begin sounding when you play the keyboard.

② **As described in the following sections "Settings using controllers" and "Settings in the LCD screen," move the controllers or modify the parameters to change the way in which the arpeggios are played.**

Settings using controllers

Arpeggiator on/off

○ **Each time you press the ARPEGGIATOR [ON/OFF] key, the arpeggiator will be switched on/off.**

When the arpeggiator is turned on, the LED will light, and the selected arpeggio pattern will begin sounding when you play the keyboard.

note The on/off status is saved when you write the program.

⚠ In Combination, Song, and Song Play modes, depending on the arpeggiator A, B settings, the arpeggio may not start when you press the ARPEGGIATOR [ON/OFF] key to turn it on (☞p.31).

Adjusting the arpeggiator tempo

Rotate the ARPEGGIATOR [TEMPO] knob to adjust the tempo. The "♩=" display in the upper right of the LCD will change. The tempo can be adjusted over a range of **40–240**. You can also set the tempo by selecting "♩=," using numeric keys [0]–[9] to enter a tempo, and pressing the [ENTER] key. The tempo can also be set by the [VALUE] slider, [VALUE] dial, or [△][▽] keys. The LED will blink in time with the specified tempo.
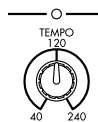
note The knob setting is saved when you write the program.

note The arpeggio playback speed is affected by the "Reso" setting (Program P0: Arpeggio tab, or "Resolution" P7: Arpeg.Setup tab).

⚠ If "MIDI Clock" (Global P1: MIDI) is set to **External MIDI** or **External PCI/F**, the display will indicate "♩=" **EXT**. The tempo will be synchronized to an external MIDI device, and it will not be possible to adjust the tempo on the TRITON.

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Adjusting the length of the arpeggio notes

Rotate the ARPEGGIATOR [GATE] knob to adjust the length of the arpeggio notes. Rotating the knob toward the left will shorten the notes, and rotating it toward the right will lengthen the notes. At the center position (12 o'clock), the note length will be as specified by the program parameter "Gate" (Program P7: Arpeg. Setup tab).

GATE

note The knob setting is saved when you write the program.

note It is effective to control this in conjunction with the REALTIME CONTROLS A-mode knob [4] **EG RELEASE**.

Adjusting the strength of the arpeggio notes

Rotate the ARPEGGIATOR [VELOCITY] knob to adjust the strength of the arpeggio notes. Rotating the knob toward the left will make the notes weaker, and rotating the knob toward the right will make the notes stronger. At the center position (12 o'clock), the velocity will be as specified by the program parameter "Velocity" (Program P7: Arpeg. Setup tab).

VELOCITY

note The knob setting is saved when you write the program.

note It is effective to control this in conjunction with the REALTIME CONTROLS A-mode knobs [1]–[3] **LPF CUTOFF, RESONANCE/HPF**, and **EG-INTENSITY**.

Settings in the LCD screen

○ **In Program P0: Play, press the Arpeggio tab.**
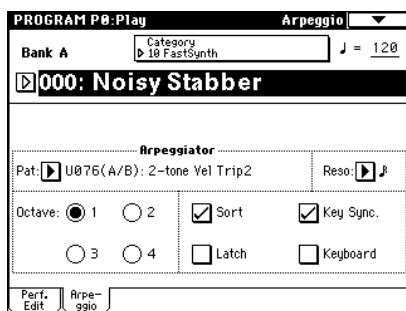
Selecting an arpeggio pattern

An arpeggio pattern can be selected from preset arpeggio patterns **P000–P004** and user arpeggio patterns **U000–231**. With the factory settings, **U000–199** contain a wide variety of preset user arpeggio patterns. For the arpeggio pattern names, refer to the separate *Voice Name List*.

○ **Press "Pat" (Pattern Select).**

Use the [VALUE] slider, [VALUE] dial, [△][▽] keys, or popup menu to select the desired arpeggio pattern. To select a user arpeggio pattern **U000–231**, use numeric keys [0]–[9] to input the pattern number, and press the [ENTER] key (☞p.96).

Changing the interval of the arpeggio notes

The "Reso" (Resolution) parameter in the LCD screen lets you set the interval between arpeggio notes in a range of ♪₃– ♩.

○ **Press "Reso," and use the [VALUE] slider, [VALUE] dial, [△][▽] keys, or popup menu to select the desired arpeggio note interval.**

Selecting the octave range in which the arpeggio is sounded

Use the "Octave" radio buttons in the LCD screen to specify the range of octaves in which the arpeggio will be sounded (☞p.97).

○ **Press an "Octave" radio button to make your selection.**

Sounding an arpeggio in the order of the pitches in the chord you played

You can select whether the notes of the arpeggio will be sounded in the order of the pitches in the chord you played (regardless of the order in which you actually played the notes), or in the order in which you played the notes.

○ **Press the "Sort" check box in the LCD screen to make this setting.**

Checked: the arpeggio will sound each note in the order of its pitch, regardless of the order in which you actually played the notes.
Unchecked: the arpeggio will sound each note in the order in which you actually played the notes.

Letting the arpeggio continue playing even after you take your hand off the keyboard

You can select whether the arpeggio will continue playing when you take your hand off the keyboard, or whether the arpeggio will stop playing when you take your hand off the keyboard.

○ **Press the "Latch" check box in the LCD screen to make this setting.**

Checked: The arpeggio will continue playing even after you remove your hand from the keyboard.
Unchecked: The arpeggio will stop playing when you remove your hand from the keyboard.

Synchronizing the arpeggiator to your keyboard timing

You can specify whether the arpeggio will begin at the moment you play the keyboard, or whether it will always play in synchronization to the MIDI clock tempo.

○ **Press the "Key Sync." check box in the LCD screen to make this setting.**

Checked: When you take your hand completely off of the keyboard and then play the first note-on, the arpeggio pattern will start from the beginning. This setting is suitable when you want the arpeggio to start from the beginning of the measure as you are playing in realtime.
Unchecked: The arpeggio will always be synchronized to the MIDI clock tempo.

Sounding both the arpeggio notes and the notes you play

○ **Press the "Keyboard" check box to make this setting.**

Checked: The notes you play on the keyboard and the notes played by the arpeggiator will both sound.
Unchecked: Only the arpeggio notes will sound.

• •

Other settings for the arpeggiator

You can also set "Gate," "Velocity," "Swing," and "Scan Zone." These parameters are set in Program P7: Arpeggiator (☞p.97).

• •

Linking the arpeggiator to programs

You can specify whether the arpeggiator settings written in a program will change when the program is switched (check "Auto Arpeggiator"), or whether the state of the arpeggiator will not change (uncheck "Auto Arpeggiator").
With the factory settings, the former is selected. Use the latter when you want to keep the same arpeggio pattern running, and change only the program sound. This setting is made in "Auto Arpeggiator" (Global P0: Basic tab).

• •

Creating an user arpeggio pattern

Arpeggio patterns that you create can be written to U000–231.
These can be created in Global P6: User Arpeggio (☞p.100).

• •

Using the arpeggiator as you play in Combination mode

In Combination mode the TRITON provides dual arpeggiators, allowing you to run two arpeggio patterns simultaneously.

① **Press the [COMBI] key to enter Combination mode, and select a combination. (☞p.23 "Selecting and playing a combination")**

As you select various combinations, you will notice that the ARPEGGIATOR [ON/OFF] key LED will light for some combinations. (☞p.32 "Linking the arpeggiator to combinations") When you press the keyboard, the arpeggiator will start.
For other combinations, you can press the ARPEGGIATOR [ON/OFF] key (the LED will light) to turn on the arpeggiator.

② **As described in the preceding section "Settings using controllers" and the following section "Settings in the LCD screen," move the controllers or modify the parameters to change the way in which the arpeggios are played.**

✍ The ARPEGGIATOR [ON/OFF] key, ARPEGGIATOR [TEMPO] knob, ARPEGGIATOR [GATE] knob, and ARPEGGIATOR [VELOCITY] knob will apply to both arpeggiators A and B. Their state is saved when the combination is written.

Settings in the LCD screen

○ **In Combination mode P0: Play, press the Arpeggio Play A tab.**

Select the arpeggiator(s) that will run

Use the "Arpeggiator Run" **check** boxes to specify the arpeggiator(s) that you want to run. The arpeggiator(s) that are checked here will operate when the ARPEGGIATOR [ON/OFF] key is on. However, the arpeggiator will play a timbre only if the table displayed beside the check boxes assigns arpeggiator A or B to a T (timbre) 1–8. These settings are made in Combination P7: Edit-arpeggiator Setup tab "Arpeggiator Assign" (☞p.98).

Arpeggiator-A, Arpeggiator-B

For each arpeggiator A and B, you can make settings for "Pattern Select," "Resolution," "Octave," "Sort," "Latch," "Key Sync," and "Keyboard." (☞p.96)

- -

Other settings for the arpeggiator

You can also set "Gate," "Velocity," "Swing," and "Scan Zone." These parameters are set in Combination P7: Arpeggiator (☞p.99).

- -

Linking the arpeggiator to combinations

You can specify whether the arpeggiator settings written in a combination will also be selected when you switch combinations, or whether the arpeggiator status will not change when you switch combinations.
With the factory settings, the former is selected. Use the latter when you want to keep the same arpeggio pattern running, and change only the combination sound.
This setting is made in "Auto Arpeggiator" (Global P0: Basic tab).

- -

Creating an user arpeggio pattern

Arpeggio patterns that you create can be written to U000–231.
These can be created in Global P6: User Arpeggio (☞p.100).

- -

Checking the structure of a user arpeggio pattern

Combination B063: Echo Jamm
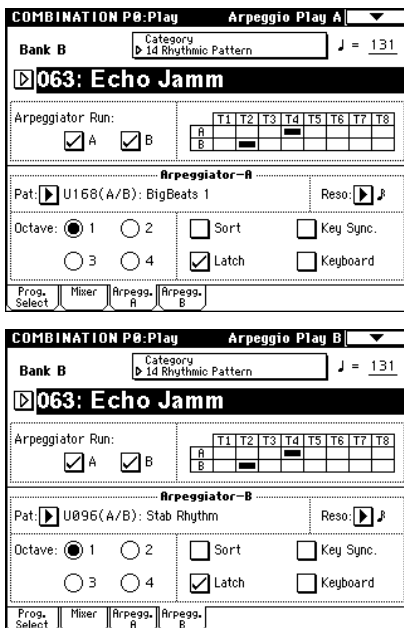
① **Select combination B063: Echo Jamm, and look at the Arpegg. A tab and Arpegg. B tab.**

- Arpeggiator A is assigned to **T** (timbre) **4**, and arpeggiator B is assigned to **T** (timbre) **2**. When you play the keyboard, the **T4** program **B068: Drum'n'Bass Kit** will be sounded by the **U168: Bigbeats 1** arpeggio pattern. The **T2** program **B053: Funkin' Guitar** will be sounded by the **U096: Stab Rhythm** arpeggio pattern.
- If you **uncheck** "Arpeggiator Run A" or "Arpeggiator Run B," the unchecked arpeggiator will stop.
  If you **check** it once again and play the keyboard, the arpeggiator will begin running.
- The "Scan Zone Key" is set so that notes **B3 and below** will use arpeggiator **A**, and notes **C4 and above** will use arpeggiator **B**. (These settings are made I Combination P7: Scan Zone A/B tab parameters A and B, "Top Key" and "Bottom Key.")

Playing with the RPPR (Realtime Pattern Play/Recording) function

The TRITON's Sequencer mode provides an RPPR (Realtime Pattern Play/Recording) function.
Using the **RPPR function**, a note of the keyboard can be assigned to a preset pattern or user pattern and a track that will play the assigned pattern. You can then playback the assigned pattern in realtime (and record it, if desired) simply by playing a single note. (Preset patterns suitable for playing by the drum track are already provided in internal memory.)

In this section, we will explain how to load an RPPR demo song, and play it.
As described in steps ①–⑧ of "Listening to a demo song" (☞p.18), load PRELOAD.SNG and PRELOAD.PCG.

① **Press the [SEQ] to enter Sequencer mode.**

② **Press the [MENU] key to access the page list.**

   Either press the P0: Play/REC area, or press numeric key [0].
   The P0: Play/REC page will appear.

③ **Press the "Song No. and name" area in the display.**

   The song name will be highlighted.

④ **Use the numeric key [3], and press the [ENTER] key.**

   S003: FEVER will be selected.

note   You can also select a song from the popup menu.
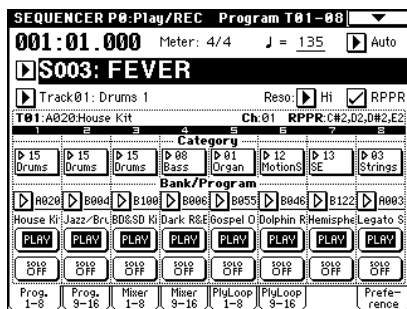
⑤ **Make sure that the RPPR check box is checked.**

   Checked: The specified RPPR (set in Sequencer P6 Pattern/RPPR RPPR Setup) will function.
   Unchecked: RPPR will not function. Operation will be as in normal Sequencer mode.

⑥ **Press a key.**

   The pattern assigned to that key will playback.
   In some cases, the pattern will continue playing after you release your hand from the keyboard. You can stop playback either by pressing that key once again, or by pressing a key in the area of C2 or below.

Shutdown Key *:

When you play a key in the range of C–1 – C2, the currently-playing pattern will stop.

Pattern Assignable**:

A pattern and track can be assigned to each of the 72 keys in the range of C#2–C8. If you do not assign a key, it can be used to play as usual.

As in the example shown in the following diagram, you can make one key play a drums pattern, another key a bass phrase, and yet another key play guitar chords, all by specifying a different pattern and track for each key.

33
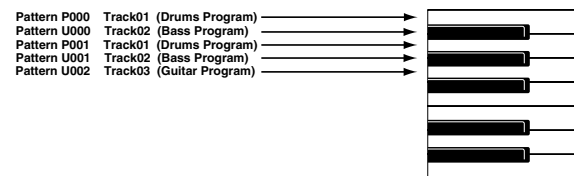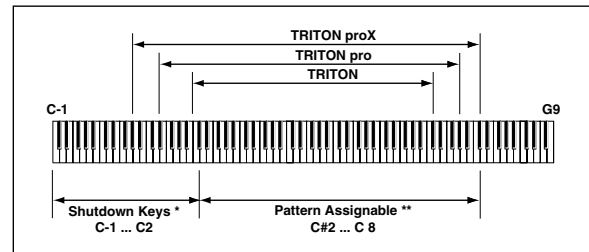
Simple program editing

Program sounds can be modified and created in Program P1: Edit-Basic–P9: Edit-Master Effect. However, you can also use the "Performance Editor" to perform simple editing in Program P0: Play as well.
You can also use REALTIME CONTROLS [1]–[4] knobs to modify the sound.

🖊 The sound that you edit using the Performance Editor or using REALTIME CONTROLS knobs [1]–[4] in A-mode (or B-mode if CC#70–79 are assigned) can be saved by writing the program. If you wish to keep the edited sound, you must write the program before selecting another program or turning off the power (☞p.38).

Performance Edit

① **Press the [PROG] key to enter Program mode.**

② **Press the Performance Edit tab.**

Type of Insert effect

Functions assigned to [SW1] and [SW2] keys

Type of Master effect

Performance editor

Parameters assigned to B-mode of the realtime editor
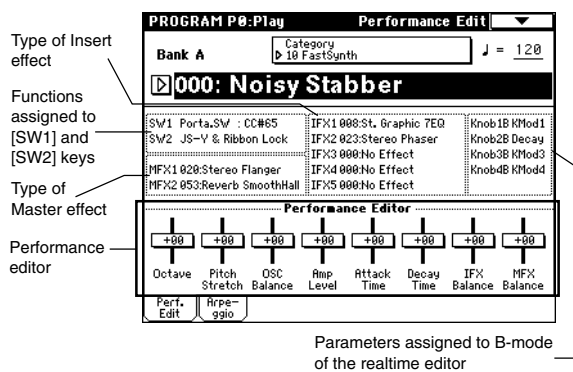
By using the eight sliders of the Performance Editor, you can make overall adjustments to the sound. When you move a slider, multiple program parameters are adjusted simultaneously.

🖊 Depending on the settings of the program parameters, the result may not be noticeable.

Octave

Adjust the octave.

Pitch Stretch

Simultaneously adjust the transpose and tune settings of the oscillator. This allows you to produce a variety of tonal changes without losing the character of the original sound.

🖊 This Performance Edit function cannot be used on bank F.

OSC Balance

Adjust the level balance between oscillators 1 and 2.

🖊 For programs whose "Oscillator Mode" (Program P1: Program Basic tab) setting is **Single**, oscillator 2 will not sound. Only the level of oscillator 1 will change. For a **Drums** program, this performance editor will have no effect.

Amp Level

Adjust the amp level. This will adjust the volume of the entire program.

Attack Time

Adjust the attack time of the filter EG and amp EG. This will adjust the speed of the attack from note-on.

🖊 In order to maximize the effect of the Attack Time adjustment, the amp EG Start Level, Attack Level, Start Level Modulation, and Attack Time Modulation parameters are also adjusted.

Decay Time

Adjust the decay time and slope time of the filter EG and amp EG.

IFX Balance

This simultaneously adjusts the "Wet/Dry" balance of all insert effects 1–5. The type of each insert effect is shown in the LCD screen.

MFX Balance

This simultaneously adjusts the Return 1 and 2 parameters of the master effects. The type of each master effect is shown in the LCD screen.

Realtime controls

These can be used to edit parameters such as the filter cutoff frequency, resonance, the amp and filter EG, volume, portamento time, pan, pitch LFO, and master effect send level etc. (☞p.26).

Simple combination editing

A combination is a set of multiple (up to eight) programs, and allows you to create complex sounds that could not be produced by a single program.
You can edit a combination in Combination P1: Edit-program/Mixer–P9: Edit-Master Effect, but can also make settings for "Program Select," "Status," "Pan," and "Volume" in Combination P0: Play as well.

✍ If you wish to keep the results of your editing, you must Write the combination into memory before selecting another combination or turning the power off. (☞p.38)

An example of editing

As an example, here's how to do some simple editing on combination **Bank A064: ModernPiano**.

① **Press the [COMBI] key to enter Combination mode.**

② **Select preset combination Bank A064: ModernPiano.**
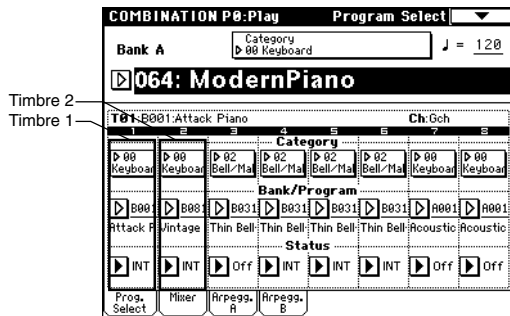
This combination **layers** (simultaneously sounds) the programs of timbre 1 and timbre 2. Timbre 1 sounds **B001: Attack Piano**, a piano with a crisp attack. Timbre 2 sounds **B081: Vintage EP**, a classic electric piano. These two programs are layered to produce a piano-type sound that you may have heard in various contexts.

📝 A **timbre** consists a of program together with multiple parameters that control that program. A combination can use up to eight of these timbres.

Selecting the program for a timbre

③ **Press the Prog. Select tab.**

When a timbre's "Status" is turned **Off**, the program assigned to that timbre will not sound. If the "Status" is set to **INT**, the program will sound. Try setting timbres 1 and 2 alternately to **INT** and **Off**, and listen to the result.

Only timbre 1 will sound
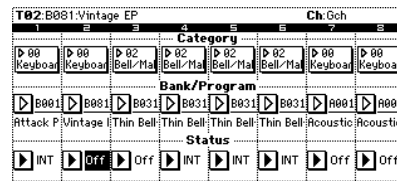
Only timbre 2 will sound
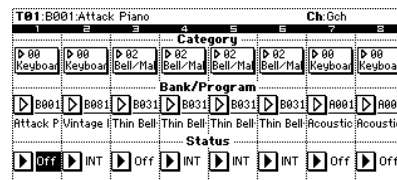
④ **Now let's change the program of timbre 2 to a different program. (Make sure that the "Status" of timbres 1 and 2 are set to INT.)**
Press the timbre 2 "Bank/Program" switch (it will be highlighted).
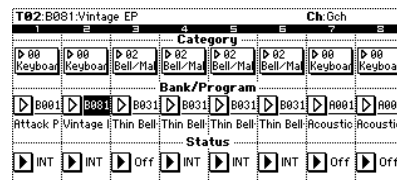
Use the [BANK] keys, numeric keys [1]–[9], [ENTER] key, [VALUE] slider, [VALUE] dial, and [△][▽] keys to select a program.

Alternatively, you can select a program from a popup menu. Press the popup button, and select the desired program from the popup menu that appears.

⑤ **You can also select programs by category. Press "Category" for timbre 2.**

The "Category/Timbre2 Program" select menu will appear. In this combination, a program from the "Keyboard" category is selected for both timbres 1 and 2.

○ If you wish to select a different program from the same category, press the desired program. That program will be highlighted. Press the scroll bar to see other programs in the same category.

```
┌─────────────────────────────────────────────┐
│Category/Timbre2 Program    00:Keyboard        │
│┌──┬─────────────────┬─────────────────┬─────┐│
││00│A097: Clav       │B065: Classic Piano│98   ││
││Keyboar│              │                 │Bass ││
│├──┼─────────────────┼─────────────────┼─────┤│
││01│A107: Synpiano X  │B081: Vintage EP │99   ││
││Organ│               │                 │SlowSyn││
│├──┼─────────────────┼─────────────────┼─────┤│
││02│A113: Sweeping EP │B097: Sticky Rez Clav│10││
││Bell/Mal│            │                 │FastSyn││
│├──┼─────────────────┼─────────────────┼─────┤│
││03│B001: Attack Piano│B104: L/R Piano (Knob1│11││
││Strings│             │                 │LeadSy││
│├──┼─────────────────┼─────────────────┼─────┤│
││04│B017: Dyno Tine EP│B113: Hybrid Digi EP│12 ││
││Vocal/A│             │                 │MotionS││
│├──┼─────────────────┼─────────────────┼─────┤│
││05│B033: Piano Pad   │B126: Pro-Dyno EP│13   ││
││Brass│               │                 │SE   ││
│├──┼─────────────────┼─────────────────┼─────┤│
││06│B049: Night Tines EP│C001: Warm CP-80│14  ││
││Woodwi│              │                 │Hit/Arp││
│├──┼─────────────────┼─────────────────┼─────┤│
││07│B056: HarpsyKorg 8'+4'│C017: Pro-Stage EP│15││
││Guitar/│             │                 │Drums││
│└──┴─────────────────┴─────────────────┴─────┘│
│  ◄─┤▓▓▓│─────────────────────────►          │
│                         Cancel      OK        │
└─────────────────────────────────────────────┘
```

○ If you wish to select a program from a different category, press one of the tabs located at left and right to select the desired category. The full name of the selected category will appear in the upper right. Let's select the 03 Strings category. Press the 03 Strings tab, and then press the desired program to select it. The program you pressed will be highlighted. Press the scroll bar to see other programs in the same category.

For this example, select **A003: Legato Strings**. This will produce a layered combination consisting of a piano and rich strings.

```
┌─────────────────────────────────────────────┐
│Category/Timbre2 Program    03:Strings         │
│┌──┬─────────────────┬─────────────────┬─────┐│
││00│A003: Legato Strings│B003: Octave Strings│98││
││Keyboar│             │                 │Bass ││
│├──┼─────────────────┼─────────────────┼─────┤│
││01│A019: Camera Strings│B019: String Quartet│99││
││Organ│               │                 │SlowSyn││
│├──┼─────────────────┼─────────────────┼─────┤│
││02│A035: Arco Strings│B035: Symphonic Bows│10 ││
││Bell/Mal│            │                 │FastSyn││
│├──┼─────────────────┼─────────────────┼─────┤│
││03│A051: PizzAnsamble│B051: HybridStrg/Choir│11││
││Strings│             │                 │LeadSy││
│├──┼─────────────────┼─────────────────┼─────┤│
││04│A067: Stereo Strings│B067: Solo Violin│12 ││
││Vocal/A│             │                 │MotionS││
│├──┼─────────────────┼─────────────────┼─────┤│
││05│A083: Few Bows Here│C003: Stereo Strings│13 ││
││Brass│               │                 │SE   ││
│├──┼─────────────────┼─────────────────┼─────┤│
││06│A099: AnalogStrings1&2│C019: Rosin Strings│14││
││Woodwi│              │                 │Hit/Arp││
│├──┼─────────────────┼─────────────────┼─────┤│
││07│A115: WatcherOfTheSky│C035: Viola Solo│15  ││
││Guitar/│             │                 │Drums││
│└──┴─────────────────┴─────────────────┴─────┘│
│  ◄─┤▓▓▓│─────────────────────────►          │
│                         Cancel      OK        │
└─────────────────────────────────────────────┘
```

⑥ **If you are satisfied with the selected program, press the OK button to close the popup menu.**

If you press the **Cancel button**, your selection will be discarded, and you will return to the program that had been selected when the popup menu was opened. For this example, press the **OK button**.

Adjusting the stereo position

⑦ **Press the Mixer tab.**

```
┌─────────────────────────────────────────────┐
│COMBINATION P0:Play           Mixer  ▼         │
│                    ┌──────────────┐           │
│Bank A              │Category      │  ♩ = 120  │
│                    │▷00 Keyboard  │           │
│▷064: ModernPiano                              │
│┌─────────────────────────────────────────────┐│
││T02:A003:Legato Strings         Ch:Gch        ││
││ 1    2    3    4    5    6    7    8          ││
││Keyboar Strings Bell/Mall Bell/Mall Bell/Mall Bell/Mall Keyboar Keyboar││
││              Pan                              ││
││ ◯    ◯    ◯    ◯    ◯    ◯    ◯    ◯          ││
││C064 C064 C064 C064 C064 C064 C064 C064       ││
││              Volume        □ Hold Balance    ││
││┌───┐┌───┐ 127  127  127  127  127  127       ││
│││096││084│                                     ││
│└─────────────────────────────────────────────┘│
│ Prog. │ Mixer │ Arpegg. │ Arpegg.             │
│ Select│       │   A     │   B                 │
└─────────────────────────────────────────────┘
```

⑧ **Press timbre 2 "Pan" (it will be highlighted).**

Use the numeric keys [0]–[9], [ENTER] key, [VALUE] slider, [VALUE] dial, or [△][▽] keys to modify the value.

With a setting of **C064** the sound will be located in the center. A setting of **L000** places the sound at the far left, and **R127** at the far right. With a setting of **RND**, the sound will move randomly between left and right each time a note is played.
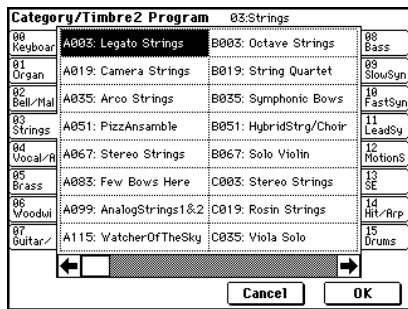
Adjusting the volume

⑨ **Press timbre 2 "Volume" (it will be highlighted).**

Use the numeric keys [0]–[9], [ENTER] key, [VALUE] slider, [VALUE] dial, or [△][▽] keys to modify the value.

If you **check** "Hold Balance" and adjust the "Volume" value, the volume balance between the timbres at the time that "Hold Balance" was checked will be maintained while the volume of all timbres is adjusted.

```
┌─────────────────────────────────────────────┐
│T02:A003:Legato Strings         Ch:Gch        │
│ 1    2    3    4    5    6    7    8          │
│Keyboar Strings Bell/Mall Bell/Mall Bell/Mall Bell/Mall Keyboar Keyboar│
│              Pan                              │
│ ◯    ◯    ◯    ◯    ◯    ◯    ◯    ◯          │
│C064 C064 C064 C064 C064 C064 C064 C064       │
│              Volume        □ Hold Balance    │
│┌───┐┌───┐ 127  127  127  127  127  127       │
││096││084│                                     │
└─────────────────────────────────────────────┘
```

Basic functions

Saving data

Types of data that can be saved

On the TRITON, there are three ways to save data: **writing to internal memory**, **saving on external media (floppy disk etc.)**, and **MIDI data dump**.

Writing to internal memory

The following data that you edit can be written into internal memory.

* Program settings
  Programs 0–127 in banks A–F
  (However, bank F is available only if the separately sold EXB-MOSS option is installed.)
* Combination settings
  Combinations 0–127 in banks A–D
* Global settings (Page 0–4)
* User drum kits 00 (A/B)–63 (User)
* User arpeggio patterns U000 (A/B)–U231 (D)
* User template songs
  Song settings such as the song name and tempo, track settings (☞p.60), arpeggiator settings, and effect settings can be saved (Write) to internal memory. However, the musical data for song tracks and patterns are not saved to internal memory. Furthermore, settings that govern how the musical data is played back such as "Meter," "Metronome," "Play/Mute," "Track Play Loop (including Start/End Measure)," and RPPR settings will not be saved either. Use the Sequencer mode or Song Play mode page menu command "Save as User Template Song" to write this data (☞p.48 in the *Parameter Guide*).

  🖉 If multisamples or samples from the RAM bank are used in the **Multisample** or **Drum Kit** of a program, you should be aware that these multisamples or samples cannot be written into memory. This means that if you turn the power of and then on once again, programs or combinations that use such multisamples or samples will not sound as intended. To reproduce such programs or combinations, the necessary multisamples or samples must be saved on external media (such as floppy disk), and then reloaded.

  🖉 Data that you edit in Sequencer, Song Play, or Sampling cannot be saved in internal memory by the Write operation.

Saving to external media (floppy disk etc.)

The following data can be saved on external media (floppy disk etc.). If the separately sold EXB-SCSI option is installed, this data can also be saved on high-capacity media such as a hard disk etc.

For details on the file format when saving (☞p.139 in the *Parameter Guide*).

* Programs, combinations, global settings, drum kits, and user arpeggio patterns from internal memory
* Songs, cue lists, and patterns
* Multisamples and sample data created in Sampling mode
* Standard MIDI Files (SMF)
  Sequencer mode songs can be saved as SMF data.
* System exclusive data
  System exclusive data received by the TRITON from an external MIDI device (The TRITON can function as a data filer.)
* Jukebox lists
  Jukebox lists are saved in Song Play mode (☞p.88). Other data is saved in Disk mode.

MIDI data dump

The following types of data can be transmitted as a MIDI data dump and saved on an external data filer or other device.

* Internal memory programs, combinations, drum kits, arpeggio patterns, and global settings
* Songs, cue lists, patterns

Writing to internal memory

●●●●●●●●●●●●●●●●●●●●●●●●●●●●

Memory protect

To prevent programs, combinations, songs, drum kits, and user arpeggio patterns from being overwritten accidentally, the TRITON provides a Memory Protect setting that prohibits writing to memory.
Before you save edited data or load data from floppy disk or other external media, use the following procedure to turn off memory protect (uncheck the appropriate check box).

Memory protect must also be turned off before the above-listed data or a song in Sequencer mode can be loaded from external media or via MIDI data dump, and before recording.

① **Press the [GLOBAL] key to enter Global mode.**

② **After pressing the [MENU] key, press either P0: Basic Setup or the [0] key.**

③ **Press the System Pref. tab.**

The System Preference page will appear.

```
GLOBAL P0:Basic Setup    System Preference  ▼
╔═══ System Preference ═══════════════
  Bank Map:            ▶ GM(2)
  Power On Mode:       ▶ Reset
  PC I/F Baud Rate:    ▶ 31.25 [kBPS]
  ☐ Beep Enable
╔═══ Memory Protect ═════════════════
  ☐ Program           ☐ Drum Kit
  ☐ Combination       ☐ Arpeggio User Pattern
  ☐ Song
╚═══════════════════════════════════
[Basic][System Pref.][Audio Input]
```
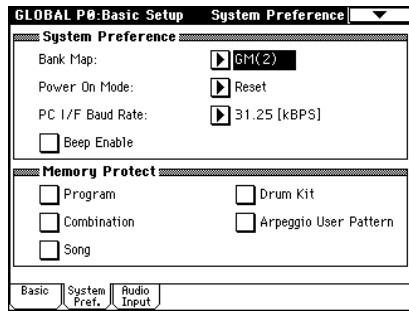
④ **Press the "Memory Protect" check box for the type of internal memory into which you wish to write data, so that the box is unchecked.**

• •

Assigning a name (Rename)

You can modify the name of an edited program, combination, song, drum kit, user arpeggio pattern, multisample or sample etc.

You can also modify the category names for programs and combinations.

These renaming operations can be performed in the following pages.

Programs	Program P0...9 Page Menu Command: Write Program
Combinations	Combination P0...9 Page Menu Command: Write Combination
Songs	Sequencer P0, 2...4, 7 Page Menu Command: Rename Song
Cue lists	Sequencer P1 Page Menu Command: Rename Cue List
Tracks	Sequencer P5: Track Name
Patterns	Sequencer P6: Pattern Name
Multisamples	Sampling P0...4 Page Menu Command: Rename MS
Samples	Sampling P0...4 Page Menu Command: Rename Sample
Drum kits	Global Page Menu Command P5: Rename Drum Kit
User arpeggio patterns	Global Page Menu Command P6: Rename Arpeggio Pattern
Program categories	Global P4: Program Cat.
Combination categories	Global P4: Combination Cat.

For details on the renaming procedure, refer to "Writing a program or combination."

• •

Writing a program or combination

A program or combination that you create by editing its settings in the Performance Editor or in the various Edit pages can be saved in internal memory. This procedure is called Program Write or Combination Write. If you wish to use the edited settings again after turning the power off, be sure to write the settings into memory.

There are two ways to write a program or combination.

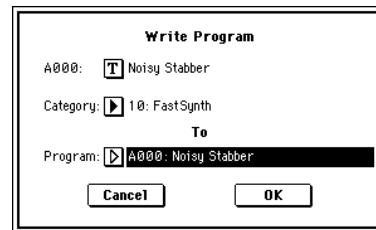⚠ Before you write data into memory, you must turn off the memory protect setting in Global mode (☞ "Memory protect").

Using a page menu command to write

① **Press the "Write Program" or "Write Combination" page menu command.**

The Write Program/Write Combination dialog box will appear.
You can also access the same dialog box by holding down the [ENTER] key and pressing the [0] key.
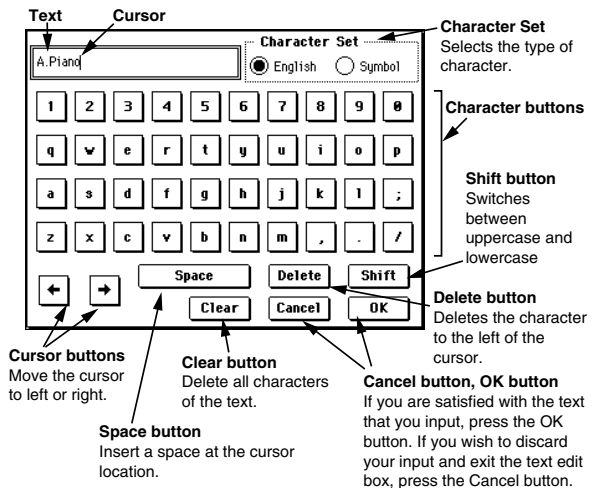
The screen shown is for Program mode

```
┌─────────────────────────────────────┐
│           Write Program              │
│  A000:    [T] Noisy Stabber          │
│  Category: ▶ 10: FastSynth           │
│              To                      │
│  Program: [▷] A000: Noisy Stabber    │
│  [ Cancel ]          [ OK ]          │
└─────────────────────────────────────┘
```

📝 If you wish to overwrite the edited settings onto the currently selected program/combination with the same program/combination name and program/combination category, simply press the **OK button** in the dialog box.

② **If you wish to modify the program/combination name, press the text edit button.**

The text edit dialog box will appear.
Input the program/combination name.

Text   **Cursor**

```
[ A.Piano                  ]  ═ Character Set ═
                              ◉ English  ○ Symbol

[1][2][3][4][5][6][7][8][9][0]

[q][w][e][r][t][y][u][i][o][p]

[a][s][d][f][g][h][j][k][l][;]

[z][x][c][v][b][n][m][,][.][/]

[←][→]  [ Space ] [ Delete ] [ Shift ]
        [ Clear ] [ Cancel ] [ OK ]
```

Character Set
Selects the type of character.

Character buttons

Shift button
Switches between uppercase and lowercase.

Delete button
Deletes the character to the left of the cursor.

Cancel button, OK button
If you are satisfied with the text that you input, press the OK button. If you wish to discard your input and exit the text edit box, press the Cancel button.

Clear button
Delete all characters of the text.

Cursor buttons
Move the cursor to left or right.

Space button
Insert a space at the cursor location.

When you have input the desired name, press the **OK button** to return to the Write Program/Write Combination dialog box.

③ **In "Category," specify the category of the program/combination.**

The category you specify here can be selected in the Category/Program Select menu, the Category/Track Program Select menu, or the Category/Timbre Program Select menu (when choosing a program), or in the Category/Combination Select menu (when choosing a combination).

④ **Use "To Program" and "To Combination" to specify the writing destination program/combination number.**

Use the [△][▽] keys, [VALUE] slider, [VALUE] dial, numeric keys [0]–[9], or [ENTER] key to make your selection. Alternatively, you can press the popup button and use the popup menu to specify the writing destination bank and program/combination number.

⑤ **To write the data, press the OK button. To cancel without writing, press the Cancel button.**

When you press the **OK button**, the display will ask "Are you sure?" When you press the **OK button** once again, the data will be written.
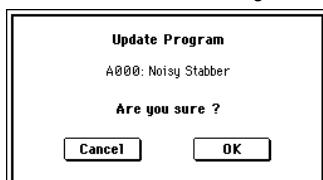
Using the [REC/WRITE] key to write

This method can only be used to write to the selected program/combination number.

① **Press the front panel [REC/WRITE] key.**

The following display will appear.

The screen shown is for Program mode

```
      Update Program

      A000: Noisy Stabber

        Are you sure ?

    [ Cancel ]     [   OK   ]
```

② **To write the data, press the OK button. To cancel without writing, press the Cancel button.**

• •

About the Edit Buffer

When you select a program or combination in Program P0: Play and Combination P0: Play, the program or combination data is called into the "edit buffer."
When you modify the parameters in P0: Play or in the edit pages P1–P9, the changes you make will affect the data in the edit buffer.
If you wish to save this modified data into internal memory, you must perform the Write operation.
When you perform the Write operation, the data in the edit buffer is written to the specified program number or combination number of the specified bank.
If you select another program or combination without writing, the data of the newly selected program or combination will be called into the edit buffer, and your changes will be lost.

🖉 When you press the front panel [COMPARE] key in the edit pages P1–P9 of Program mode or Combination mode, the data from memory (i.e., the contents that were written into memory) will be temporarily called into the edit buffer. This allows you to compare the settings you are editing with the original un-edited settings.
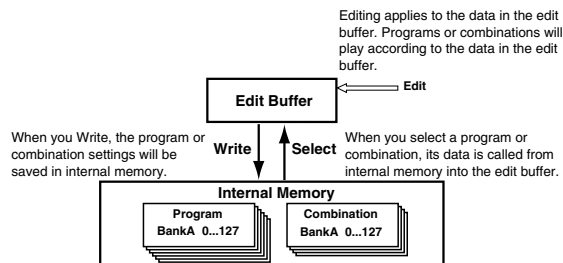
Writing global settings, user drum kits, and user arpeggio patterns

The settings you edit in Global mode can be written into internal memory. This is done using the operations **Write Global Setting**, **Write Drum Kits**, and **Write Arpeggio Patterns**. If you wish to use these settings after turning the power off, be sure to write the data.

There are two ways to write global settings, user drum kits, and user arpeggio patterns.

🖉 Before you write a user drum kit or user arpeggio pattern, the Global mode memory protect setting must be turned off (☞"Memory protect").

🖉 The **user arpeggio pattern** settings "Tempo," "Pattern," "Octave," "Resolution," "Sort," "Latch," "Key Sync," and "Keyboard" are parameters that are set independently in Program, Combination, Song, and Song Play mode. These settings are not saved when you perform the Write operation described here.
If you moved from Program or Combination mode and set these parameters, you must return to the original mode and write them.

Using a page menu command to write

① **To write global settings (Global P0–P4), press the page menu command "Write Global Setting" in Global P0–P4.**
The Write Global Setting dialog box will appear.

**To write user drum kits, press the page menu command "Write Drum Kits" in Global P5.**
The Write Drum Kits dialog box will appear.

To write user arpeggio patterns, press the page menu command "Write Arpeggio Patterns" in Global P6.
The Write Arpeggio Patterns dialog box will appear.

The same dialog box will also appear if, in each of the above pages, you hold down the [ENTER] key and press the [0] key.

The example shown is for Write Arpeggio Patterns
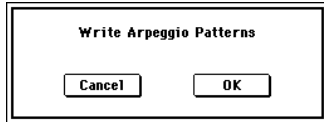
```
Write Arpeggio Patterns
[ Cancel ]        [ OK ]
```

② **To execute the Write operation, press the OK button. To cancel, press the Cancel button.**

When you press the **OK button**, the display will ask "Are you sure?" Press the **OK button** once again to write the data.

Using the [REC/WRITE] key to write

① **In the following pages, press the front panel [REC/WRITE] key. A dialog box will appear.**

Global settings:	Global P0–P4
User drum kits:	Global P5
User arpeggio patterns:	Global P6

The example shown is for Update Arpeggio Patterns

```
Update Arpeggio Patterns
Are you sure ?
[ Cancel ]        [ OK ]
```
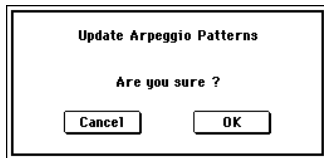
② **To execute the Write operation, press the OK button. To cancel, press the Cancel button.**

• •

Memory in Global mode

When the power is turned on, the Global mode data is called from internal memory into the Global mode memory area. Then when you modify the parameters in Global mode, the data in the memory area will be modified. If you wish to save this modified data in internal memory, you must Write it.
When you write, the data in the memory area will be written into the global settings, drum kits, and arpeggio patterns of internal memory.
If you turn off the power without writing, the modified data in the memory area will be lost.

• •
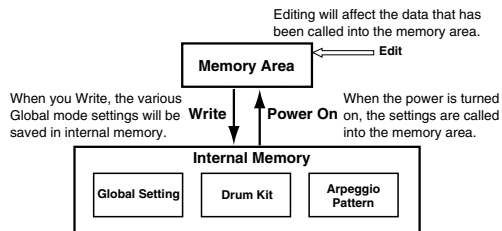
Saving on external media

For details on the data that can be saved on external media (floppy disk etc.) (☞p.37 "Types of data that can be saved").

⚠ Song data, patterns and cue lists in the TRITON's Sequencer mode, and multisamples and samples in Sampling mode cannot be written into internal memory. This data will disappear when the power is turned off. If you wish to keep this data, you must save it on a floppy disk or on other external SCSI storage media (if the separately sold EXB-SCSI option is installed).

Other types of data can also be saved on a floppy disk, or (if the separately sold EXB-SCSI option is installed) on external SCSI storage media (maximum 4 GB), and loaded to restore the original settings even if they have been modified. It is a good idea to save favorite settings that you create.

**As an example, we will explain how to save the following data.**
- Internal memory programs, combinations, global settings, drum kits, user arpeggio patterns
- Songs, cue lists, patterns
- Multisamples and samples created in Sampling mode

① **If you wish to save the data on a floppy disk, insert a floppy disk into the TRITON's floppy disk drive.**

For details on floppy disk handling, be sure to refer to "Cautions for floppy disk handling (☞p.95).
If the separately sold EXB-SCSI option is installed and you wish to save the data on a hard disk or other external SCSI media, refer to the EXB-SCSI owner's manual, and make sure that the external SCSI drive etc. is connected correctly.

Format the disk if necessary (☞p.142 in the *Parameter Guide*)
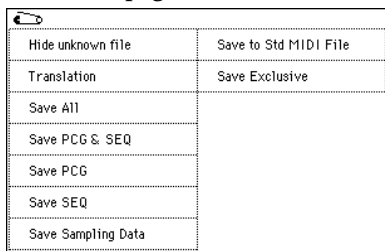
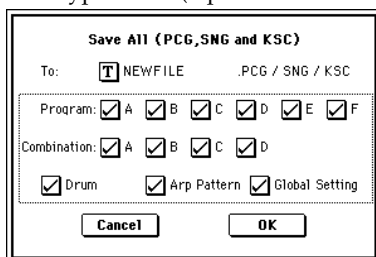② **Press the [DISK] key. You will enter Disk mode.**
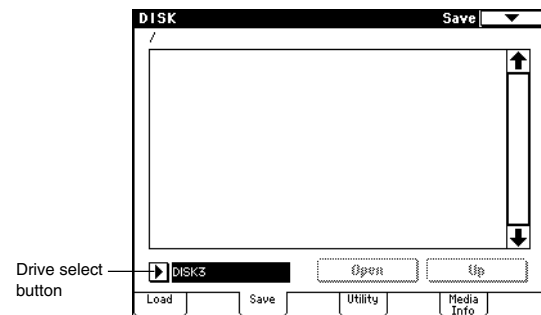
③ **Press the Save tab, and the Save window will appear.**

④ **If you are saving to external SCSI media, press the drive select button to select the save destination drive.**

⑤ **If the media contains directories, select the director in which you wish to save the data.**

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To move to a lower directory level, press the **Open button**. To move to a higher level, press the **Up button**.

⑥ **Press the page menu button, and then press the "Save All" page menu command.**

Hide unknown file	Save to Std MIDI File
Translation	Save Exclusive
Save All	
Save PCG & SEQ	
Save PCG	
Save SEQ	
Save Sampling Data	

A dialog box will appear. The contents of the dialog box and the settings etc. will differ depending on the type of data that you are saving. For details on each type of file (☞p.139 in the *Parameter Guide*).
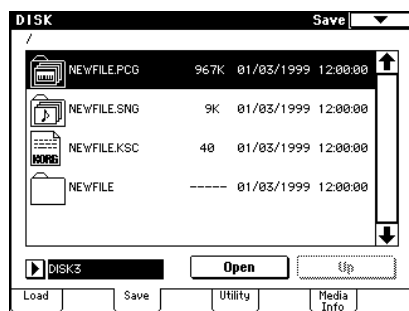
Save All (PCG,SNG and KSC)

To: [T] NEWFILE   .PCG / SNG / KSC

Program: ☑A ☑B ☑C ☑D ☑E ☑F

Combination: ☑A ☑B ☑C ☑D

☑Drum   ☑Arp Pattern ☑Global Setting

[Cancel]   [OK]

⑦ **Use the text edit button to input a name (☞p.38).**

⑧ **Use the check boxes to uncheck items that you do not wish to save.**

In order to accurately reproduce the data you created, we recommend that you leave all check boxes checked.

⑨ **Press the OK button.**

The data will be saved on the specified media, and you will return to the Save page. The amount of time required will depend on the amount of data. If a file with the same name already exists on the floppy disk, you will be asked whether you want to Overwrite. If you wish to overwriting, press the **OK button**. If you wish to save without overwriting, press the **Cancel button**, re-do the operation from step ⑥, and rename the data in step ⑦ before saving it. The LCD screen will show the files that were saved. **The data will be saved as the following files**.

DISK	Save ▼
/	
📁 NEWFILE.PCG	967K 01/03/1999 12:00:00
📁 NEWFILE.SNG	9K 01/03/1999 12:00:00
KORG NEWFILE.KSC	40 01/03/1999 12:00:00
📁 NEWFILE	----- 01/03/1999 12:00:00

▶ DISK3   [Open]   [Up]

Load   Save   Utility   Media Info

.PCG file

Programs, combinations, drum kits, user arpeggio patterns, and global settings that were saved in internal memory

.SNG file

Sequencer songs, cue lists, and user patterns

.KSC file

A file which lists the multisamples and samples used

Directory

A directory containing the multisamples (.KMP files) and samples (.KSF files) that are listed in the .KSC file

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Other ways to save

In addition to "Save All," the page menu commands include "Save PCG which saves programs, combinations, drum kits, user arpeggio patterns, and global settings; "Save SEQ" which saves only sequencer songs, cue lists, and user patterns; and "Save Sampling Data" which saves only multisamples and samples. Select the appropriate page menu command for the data that you wish to save on external media.

note When using "Save All," "Save PCG & SNG," and "Save PCG" to save combinations, you should also remember to save the programs used by each timbre (and the drum kits used by the programs) and user arpeggio patterns at the same time. Similarly when saving programs, you should also remember to save the drum kits and user arpeggio patterns used by the programs.

note If your programs or drum kits use multisamples and samples that were created in Sampling mode, we recommend that you use "Save All" to save the data. When you use "Save PCG" or "Save Sampling Data" to individually save a program or drum kit, or a multisample or sample that you created in Sampling mode, we recommend that you save them under the same filename in the same directory. When you use "Load PCG" to load a .PCG file, the identically-named .KSC file will also be loaded so that the correct multisamples/samples will correspond automatically.

note When saving .KSC, .KMP, and .KSF files and the data does not fit on a single floppy disk (or other volume of media), another dialog box will appear, and you will be asked to specify the next volume of media (☞p.141 in the *Parameter Guide* "Select other medium")

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MIDI data dump

The programs, combinations, drum kits, arpeggio patterns and global settings of internal memory, and songs, cue lists, and patterns can be transmitted as MIDI exclusive data and saved on a connected MIDI data filer, computer, or another TRITON.

☞ p.119 in the *Parameter Guide*.

Restoring the factory settings

The factory setting data is referred to as the "preload data", and you can restore the factory settings for the TRITON's programs, combinations, and global settings by loading this preload data.

🔑 This will rewrite any data that had been written before loading. If you do not wish to lose this data, you must first save it on a floppy disk or (if the separately sold EXB-SCSI option is installed) on external SCSI media (☞p.40).

Loading the preload data

① **Insert the included TNFD-00P floppy disk into the floppy disk drive.**

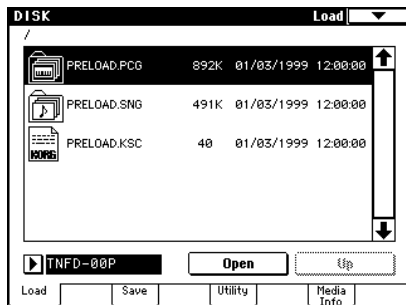For details on floppy disk handling, refer to "Disk mode" (☞p.95).

② **Press [DISK].**

You will enter Disk mode.

③ **Press the Load tab.**

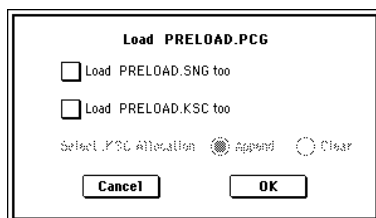You will move to the Load page, and file information will be displayed.

④ **Press "PRELOAD.PCG." The display will be highlighted.**

A .PCG file contains programs, combinations, drum kits, arpeggio patterns, and global setting data.

⑤ **Press the page menu button to display menu commands, and select "Load Selected."**

A dialog box will appear.

⑥ **If "Load PRELOAD.SNG too" is checked when you load, the .SNG file will also be loaded when the .PCG file is loaded.**

If you check "Load PRELOAD.KSC too" is checked when you load, the .KSC file will also be loaded when the .PCG file is loaded.

For details on the files that are loaded by the .KSC file, refer to "Listening to a demo song" (☞p.18).

⑦ **Press the OK button.**

Program mode

About the pages in Program mode

In Program mode you can select and edit programs. Program mode consists of pages P0–P9.
In P0: Play you can play programs. You can also perform simple editing (☞p.34).
In P1–P9, you can edit the parameters of the program that was selected in P0.

○ **For details on how to access these pages or modes, refer to "Basic operation of the TRITON" (☞p.12).**

P0: Play	Select a program, use the Performance Editor to perform simple editing, and select and set arpeggio patterns.
P1: Edit-Basic	Set basic program parameters such as oscillator and multisample. Set scale and controllers.
P2: Edit-Pitch	Settings related to the pitch, including the pitch EG.
P3: Edit-Filter	Settings related to the filter (tone), including the filter EG.
P4: Edit-Amp	Settings related to the amplifier (volume), including amp EG and pan.
P5: Edit-Common LFO	For each of the two LFO's provided for each oscillator, select the LFO type and speed, etc. (Settings in the pitch, filter, and amp pages will determine how deeply the LFO that you specify here is applied.)
P6:	---
P7: Edit-Arpeggiator	Settings for the arpeggiator. (Some of these are shared with the arpeggiator settings of P0, and you may edit them in either location.)
P8: Edit-Insert Effect	Select insert effects and make settings for them. Specify the oscillator routing (send levels to the insert effects, master effects, and independent outputs).
P9: Edit Master Effect	Select master effects and make settings for them. Make settings for the master EQ.

⚠️ If the separately sold EXB-MOSS has been installed, you will be able to use bank F. The page structure and parameter structure of bank F programs is different than for the programs of other banks. Refer to the owner's manual for the EXB-MOSS.

When it is shipped from the factory, the TRITON is loaded with a variety of preset programs. You can create your own programs by modifying these factory-preset programs or by creating original programs from scratch. You can also create original programs using sample waveforms and multisamples that you

recorded in Sampling mode or loaded into memory in Disk mode.

Programs that you edit or create can be written into the 640 program memory areas in banks A–E. In Disk mode, programs can also be saved on external media such as floppy disk (☞p.40).

note The TRITON provides AUDIO INPUT jacks that allow an external audio source to be input. In addition to sampling the external audio input in Sampling mode, you can apply the TRITON's effect section to the external audio input in other modes such as Program mode, or even use vocoder effects that combine the sound of an oscillator with an external audio source (☞p.109). (☞p.201 in the *Parameter Guide*)

MIDI All transmission and reception of MIDI data in Program mode is performed on the Global MIDI channel. The global MIDI channel is set in Global mode P1: MIDI "MIDI Channel."

Playing a program

P0: Play

Here you can select and play programs. You can also use the Performance Editor to do some simple editing, and make arpeggiator settings.

Selecting a program

There are three ways to select a program. For the procedure, refer to the appropriate page.

- Using the controls of the TRITON ("Selecting and playing a program" ☞p.21)
  Selecting by bank/program number
  Selecting by program category
  Selecting with 10's Hold
- Using a connected switch ("Other functions" ☞p.125)
- Receiving MIDI program change messages ("MIDI" ☞p.114)

  For the names of the factory-set programs, refer to the separate *Voice Name List*.

The Performance Edit tab

- Here you can view the insert/master effect settings, the functions of [SW1], [SW2] keys, and the B-mode functions of REALTIME CONTROLS knobs [1]–[4].
- You can use the performance editor to adjust the major parameters of Program P1–P9 (☞p.34, or "Performance Edit" on p.2 in the *Parameter Guide*). If you wish to save the program settings that you

modify using the performance editor, you must turn off memory protect in Global mode (☞p.37), and write the program (☞p.38).

The Arpeggio tab

- Use the ARPEGGIATOR [ON/OFF] key to turn the arpeggiator on/off.
- You can select arpeggio patterns and edit arpeggiator parameters in realtime while you play.
- You can use the ARPEGGIATOR [TEMPO], [GATE], and [VELOCITY] knobs to control the tempo of the arpeggio, the note length, and the strength of the notes.

For details refer to "Using the arpeggiator while you play" (☞p.29).

How a program is organized

A program consists of the many parameters of P1–P9. The diagram below shows the structure of a program.

Sound has three aspects: **pitch**, **tone**, and **volume**. On the TRITON, the **Pitch**, **Filter**, and **Amplifier** blocks which make up a program correspond to these three aspects of sound. In other words, adjust the Pitch section to modify the pitch, adjust the Filter section to modify the tone, and adjust the Amplifier section to modify the volume.

First, make **Oscillator** settings (P1: Edit-Basic) to select a **multisample** waveform that will be the basis of the sound. Then make **pitch** settings (P2: Edit-Pitch), **filter** settings (P3: Edit-Filter) and **amplifier** settings (P4: Edit-Amp) to create the basic program. (This is the program as it is used in Combination, Sequencer, or Song Play mode.) To this, you can add **insert effect** settings (P8: Edit-Insert Effect), **master effects** and **master EQ** settings (P9: Edit-Master Effect) to add finishing touches to the sound. You can also make arpeggiator settings (P7: Edit-arpeggiator) and controller settings (P1: Edit-Basic, Controller tab) to create the final **program**.

note For programs that are used in Combination, Sequencer, and Song Play mode, settings for insert effects, master effects, master EQ, arpeggiator, and controllers must be made separately from the settings made in Program mode.
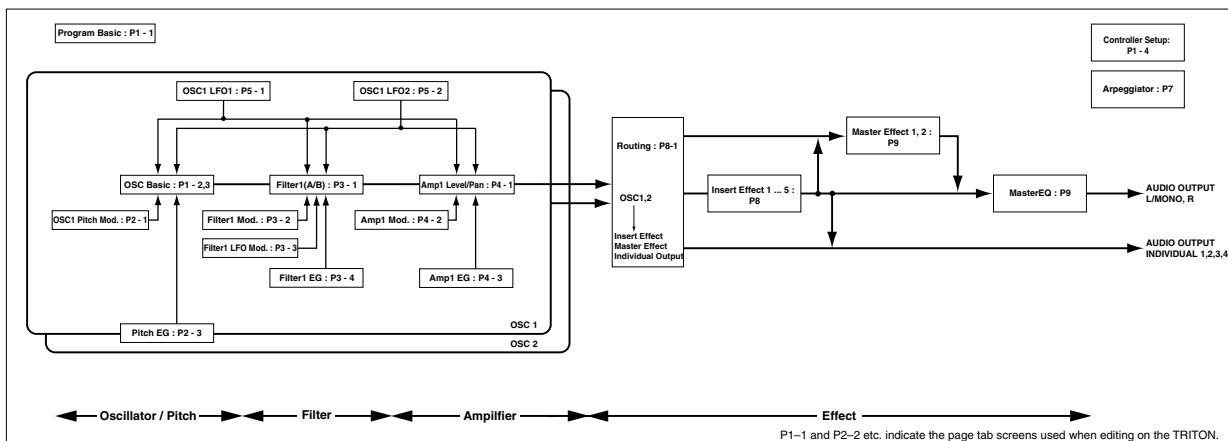
Basic program editing

Program editing refers to the process of modifying the parameters that make up a program to vary the sound or to set controllers etc.

General program editing can be performed using the performance editor of Program P0: Play, or using the REALTIME CONTROLS knobs [1]–[4], but detailed editing is performed in Program P1–P9.

Use the parameters of P1–P9 to edit the program that you selected in Program P0: Play. In this section we will give examples of how to modify representative parameters in each page, so that you can understand the operation of each parameter. For details on all parameters, refer to in the *Parameter Guide*.

note For parameters in P1–P5 that are set independently for each oscillator 1 and 2, you can use the page menu command "Copy Oscillator" to copy settings from one oscillator to the other. This is a convenient way to make the same settings for two oscillators, or to copy settings from one oscillator to the other.

✍ If you wish to save an edited program into internal memory, be sure to Write the program. (☞p.38)

✍ If the separately sold EXB-MOSS option is installed, you will be able to use the special bank F. The parameter structure of bank F programs is different than that of the other banks. Refer to the EXB-MOSS owner's manual.

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The Compare function

When P1–P9 are displayed, you can press the [COMPARE] to make the LED light. This will recall the sound that had been written before you started editing. Press the [COMPARE] key once again and the LED will go dark, and you will return to the sound that you had been editing. Use this function when you wish to compare the unedited sound with the results of your editing.

✍ When the [COMPARE] key LED is lit, editing a parameter will make the LED go dark, and that sound will now be the sound that is recalled when the [COMPARE] key LED is dark.

P1: Edit-Basic   Oscillator settings

In P1: Edit-Basic you can make oscillator-related settings. The TRITON provides two oscillators, and for each oscillator you can select a basic waveform ("**multisample**") and set the pitch. The multisamples provided by the TRITON include waveforms for musical instruments such as pianos, as well as special waveforms unique to synthesizers. Multisamples reproduce the complex overtone structure and frequency characteristics that allow us to identify a sound as being "piano-like" or "guitar-like."

Program Basic tab
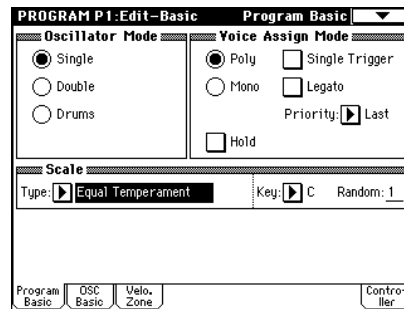
Oscillator Mode

This sets the mode of the oscillator. **Single** uses one oscillator and **Double** uses two oscillators. In the case of **Single** the maximum polyphony is 62 notes, and in the case of **Double** the maximum polyphony is 31 notes. If you wish to use a Drum Kit to create a drums program, select **Drums**.

Voice Assign Mode

Select whether the program will sound in **Poly** (polyphonically) or **Mono** (monophonically). If this is set to **Poly**, you will be able to play chords using the program. If this is set to **Mono**, only one note will sound even if you play a chord. Normally you will set this to **Poly**, but it is effective to use **Mono** when you are playing sounds such as analog-synth bass or synth lead. Try switching between **Poly** and **Mono**, and listen to the result.

OSC Basic tab
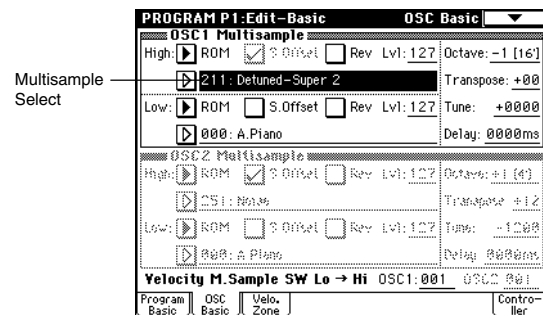
In this page you can select the multisample for the oscillator. The TRITON provides 425 multisamples in its internal ROM memory. For the multisample names, refer to the separate *Voice Name List*.

Additional multisamples can be added by installing a separately sold EXB-PCM series option board. You can also use multisamples from the RAM memory that you created in Sampling mode.

Selecting a multisample

The multisample will determine the basic character of the program.

○ **Press "Multisample Select" (it will be high-lighted), and use the [△][▽] keys, [VALUE] slider, [VALUE] dial, numeric keys, and [ENTER] key, [0]–[9] to select the desired multisample.**

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note If you press the popup button, all multisamples of internal ROM will be displayed, grouped into fifteen categories.
Use the tabs at left and right to select a category, and select the desired multisample.

About High/Low

You can specify two multisamples for an oscillator, and use velocity (keyboard playing dynamics) to switch between the two multisamples. This capability is called "**velocity multisample switching**."

① **Select different multisamples for "High" and "Low."**

② **Set the "Velocity M.Sample SW Lo → Hi" parameter to set a value of (for example) 100 for OSC1.**

The **Low** and **High** multisamples will be switched at this velocity value.

③ **Play the keyboard softly, and the multisample specified for "Low" will sound.**

④ **Play the keyboard strongly, and the multisample specified for "High" will sound.**

⑤ **Adjust the "Lvl" (level) for "High" and "Low" multisamples to set their volume balance.**

If you do not wish to use this function, set the "Velocity M.Sample SW Lo → Hi" value to **001**. Only the High multisample will sound.

Rev (Reverse) check box

If this is **checked**, the multisample will be played backward. This can produce interesting results when used on sound-effects, etc. Normally you will not **check** this.

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When "Oscillator Mode" = Double

To use OSC2, set "Oscillator Mode" to **Double** in the Program Basic tab.
In the same way as for OSC1, you can set High and Low multisamples for OSC2.
The playback pitch can be set independently. By using the same multisample with slightly different "Tune" settings, you can "detune" the oscillators to produce a richer sound.

note It will be convenient to use the page menu command "Copy Oscillator" to make the oscillator settings match each other.

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When "Oscillator Mode" = Drums
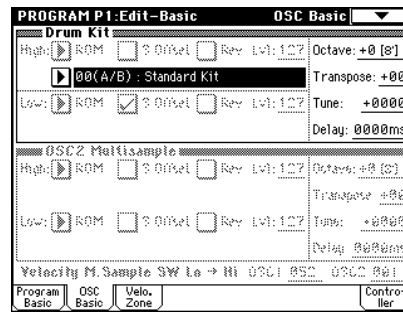
In the Program Basic tab, set "Oscillator Mode" to **Drums**. When this is set to **Drums**, you will be able to create a drum program.
This will select a drum kit instead of a multisample.
The TRITON provides sixteen factory preset drum kits that are suitable for a wide variety of music. For the drum kit names, refer to the separate *Voice Name List*.
Here you can only select a drum kit. To edit or create a drum kit, use Global P5: Drum Kit (☞p.90).

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Velocity Zone tab
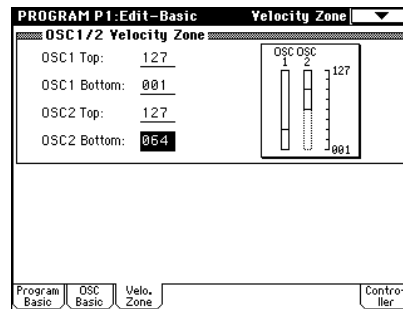
Here you can specify the range of velocities that will sound oscillators 1 and 2. In the example shown above, the velocity ranges are as follows.

• OSC1 will sound for all velocity values.
• OSC2 will sound only for strongly played notes (64 and above).
• You can use Velocity Multisample Switching in addition to this (☞"About High/Low"). For this example, set "OSC1" in "Velocity M.Sample SW Lo→Hi" to **032** and "OSC2" to **096**. The settings are shown as horizontal lines in the velocity zone display.
In this example, the multisamples will sound over four levels.

Velocity values 001–031: sound only the OSC1 Low multisample.
Velocity values 032–063: sound only the OSC1 High multisample.
Velocity values 064–095: sound the OSC1 High multisample and the OSC2 Low multisample.
Velocity values 096–127: sound the OSC1 High multisample and the OSC2 High multisample.

Controller Setup tab

For each program, this tab lets you make settings for the [SW1] and [SW2] keys, and for the B-mode of REALTIME CONTROLS knobs [1]–[4] (☞p.127). (☞p.8, 217, 218 in the *Parameter Guide*)

P2: Edit-Pitch   Pitch settings

Here you can specify how the pitch of the multisample selected for the oscillator will change. Pitch EG and LFO settings allow the pitch to varied over time. When the "OSC Mode" is **Single** or **Drums**, only the OSC1 P.Mod. tab is available.

OSC1 Pitch Mod. tab
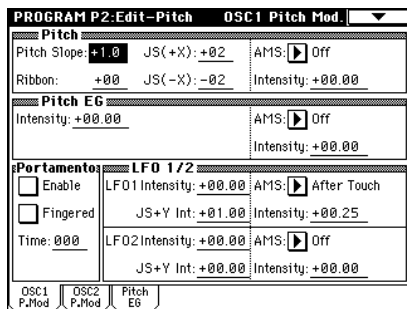
Pitch

JS(+X) and JS(-X) specify the amount of pitch change that will occur when the joystick is moved to right or left, in semitone units. With a setting of **+12** the pitch can be raised a maximum of one octave, and with a setting of **–12** the pitch can be lowered a maximum of one octave.

"Pitch Ribbon" specifies the amount of pitch change that will occur when you operate the ribbon controller toward the left or right. With a setting of **+12**, moving your finger to the right edge will raise the pitch one octave, and moving your finger to the left edge will lower the pitch one octave.

Pitch EG

When the "Intensity" value is set to **+12.00**, the pitch EG specified in the Pitch EG tab will produce a maximum of ±1 octave of pitch change.

Portamento

If "Enable" is checked, portamento will be applied. Portamento makes the pitch change smoothly when you play the next note before releasing the previous note.
The "Time" parameter specifies the portamento time. As this value is increased, the pitch will change over a longer time. With a value of **000**, there will be no portamento.

✍ If **Porta.SW CC#65** is assigned as the function of [SW1] or [SW2] key, the portamento effect can be switched on/off by [SW1] or [SW2] key.

LFO 1/2

An LFO can be used to cyclically modulate the pitch (the "vibrato" effect).
"LFO Intensity" specifies the amount of pitch change that the LFO will produce. With a setting of **+12.00**, vibrato will produce a maximum of ±1 octave of pitch change.
"JS+Y Int" specifies the amount of vibrato that the LFO will produce when the joystick is pushed away from yourself.
"AMS Intensity" specifies the amount of vibrato that the LFO will produce when an AMS (alternate modulation source) is operated. For example if "AMS" is set to **After Touch**, vibrato will be applied when you apply pressure to the keyboard.

Pitch EG tab

Here you can make settings for the pitch EG.
When you wish to create sound effects etc., set the pitch EG to make major changes in pitch over time.
To realistically simulate the slight change in pitch that occurs when a string is plucked or at the attack of a brass or vocal sound, you can use the pitch EG to create a subtle change in pitch at the attack (☞p.10 in the *Parameter Guide*).

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EG and LFO

When controlling the pitch, filter, and amplifier, the EG (envelope generator) and LFO (low frequency oscillator) are used to create time-varying and cyclical changes.

EG (Envelope Generator)

The TRITON provides a Pitch EG, Filter EG, and Amplifier EG, which produce time-varying changes in pitch, tone, and volume respectively.
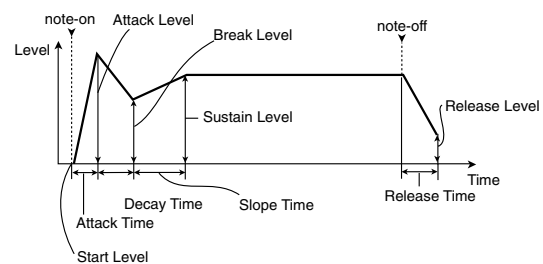
LFO (Low Frequency Oscillator)

For each oscillator, the TRITON provides two LFO's that can be used to apply cyclical change in pitch, tone, and volume.
Examples of this are "vibrato" (cyclical change in pitch), "wah" (cyclical change in tone), and "tremolo" or "auto-pan" (cyclical change in volume).

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P3: Edit-Filter   Filter settings

The filter allows you to diminish or emphasize specified frequency areas of the multisample selected for the oscillator. The tone of the sound will depend significantly on the filter settings.

The TRITON lets you choose between two types of filter for each oscillator. Filter 1 is used for OSC1, and Filter 2 is used for OSC2. If "OSC Mode" is **Single** or **Drums**, only Filter 1 will be available.

Filter EG and LFO can be used to produce time-varying changes in the filter.
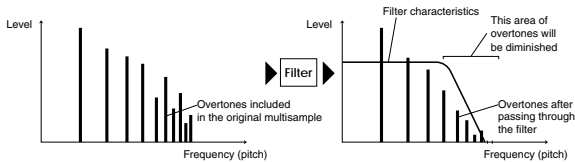
Filter 1 tab
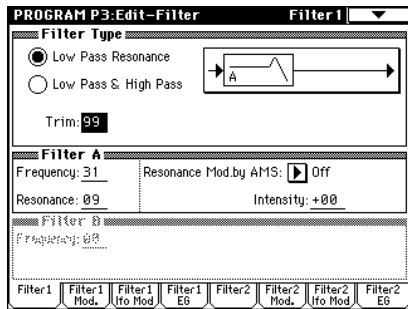

Filter Type, Filter A, Filter B

Select the type of filter, and specify the "Frequency" (cutoff frequency) and "Resonance" (resonance level).

- **Low Pass Resonance** (24 dB/oct low pass filter with resonance): Make settings for filter A.
- **Low Pass & High Pass** (12 dB/oct low pass filter and 12 dB/oct high pass filter in series connection): Make low pass filter settings in filter A, and high pass filter settings in filter B.

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Low pass filter

This is the most common type of filter, which passes the low frequency range and cuts the high frequency range. When the overtones of the high range are cut, a bright sound will become darker (more mellow).

24 dB/oct and 12 dB/oct refer to the steepness of the cut. 24 dB/oct means that the gain will decrease 24 dB in one octave (i.e., as the frequency doubles). A 12 dB/oct filter would decrease the gain 12 dB in one octave. The 24 dB/oct filter produces a steeper cut.
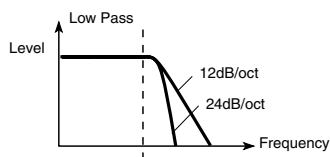

High pass filter

This type of filter passes the high frequency range and cuts the low frequency range. Use this when you wish to make the sound thinner. However if the cutoff frequency (Frequency) is raised excessively high, the volume will become very low.
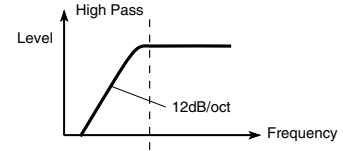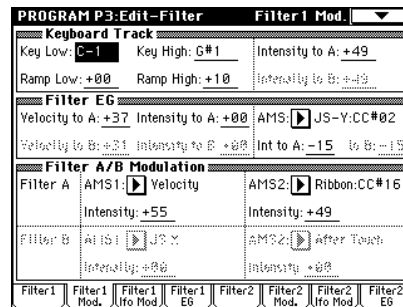

Resonance

When "Resonance" is set to a higher value, the overtones in the region of the cutoff frequency will be boosted as shown in the diagram below, giving a distinctive character to the sound.

When resonance is applied

• •
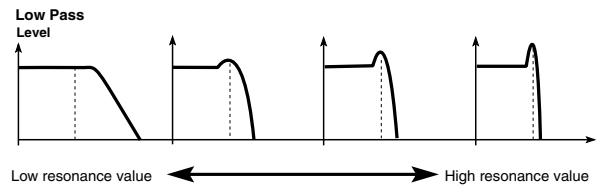
Filter 1 Mod. tab

Controllers and the filter EG can be used to modulate the filter cutoff frequency that was specified in the Filter 1 tab. By using a controller to vary the tone or by using an EG to create time-varying changes, you can add a rich variety of tonal change to the sound.

Keyboard Track

This varies the cutoff frequency according to the keyboard location that you play.

- When "Ramp Low" is set to a positive **(+) value**, the cutoff frequency will rise as you play lower on the keyboard, making the sound brighter. When set to a negative **(–) value**, the cutoff frequency will fall as you play lower on the keyboard, making the sound darker.
- When "Ramp High" is set to a positive **(+) value**, the cutoff frequency will rise as you play higher on the keyboard, making the sound brighter. When set to a negative **(–) value**, the cutoff frequency will fall as you play higher on the keyboard, making the sound darker.

- "Intensity to A" and "Intensity to B" adjust the effect that keyboard tracking will have on filters A and B (☞p.13 in the *Parameter Guide*).

Filter EG

Adjust the effect produced by the filter EG, whose settings are made in the Filter 1 EG tab.

- "Velocity to A" and "Velocity to B" adjust the effect that velocity will have on the filter EG depth.
- "Intensity to A" and "Intensity to B" adjust the depth of the filter EG.
- "AMS Int to A" and "AMS Int to B" adjust the effect that AMS will have on the filter EG depth. These three settings will determine the depth of the tonal change produced by the filter EG.

Filter A/B Modulation

Set this when you wish to produce tonal change by using controllers etc. to vary the cutoff frequency.

Filter 1 LFO Mod. tab

Make settings that allow the LFO to produce cyclic changes in tone (a "wah" effect).

"LFO Intensity to A" and "LFO Intensity to B" will cause the tone to be modulated.
"JS–Y Intensity to A" and "JS–Y Intensity to B" specifies the depth of the wah effect that is produced when you move the joystick toward yourself.
"AMS Intensity to A" and "AMS Intensity to B" specifies the depth of the wah effect that is produced when you operate an "AMS" (alternate modulation source). For example if you set "AMS" to **After Touch**, a wah effect will be produced when you apply pressure to the keyboard.

Filter 1 EG tab

Make settings for the filter EG, which controls time-variant changes in tone. Make settings for the EG here, and set the depth of its effect in the Filter 1 Mod. tab "Filter EG" parameter (☞p.15 in the *Parameter Guide*).

• •

Filter EG and Amplifier EG

When the Filter EG changes the cutoff frequency, the tone will change. However depending on the volume changes produced by the Amplifier EG, this can be heard in different ways. For example by changing the speed at which the tone and volume begin (attack) or decay, you can significantly vary the character of the tonal change. It is a good idea to adjust the changes of both the Filter EG (tone) and the Amplifier EG (volume) as you proceed with editing. (☞"Amp 1 EG" tab.)

• •

P4: Edit-Amp   Amplifier settings

These settings affect the volume. Here you can adjust the way in which the Amp EG and LFO produce time-varying and cyclic changes in volume, and how the controllers etc. will affect the volume.
Amp1 applies to OSC1, and Amp2 applies to OSC2. If the "OSC Mode" is **Single** or **Drums**, only Amp1 will be available.

For example, the volume of a piano note begins at a high volume the instant you play the note, and then decreases gradually. The volume of an organ note remains constant as long as you continue pressing the key. The volume of a note on a violin or wind instrument can be varied during the note by the musician (i.e., by regulating the amount of pressure on the bow or the force of the breath).
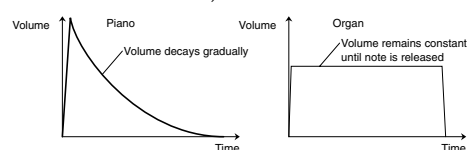
Amp1 Lvl/Pan tab
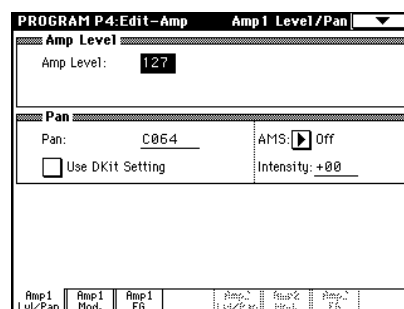
Amp Level

Adjust the volume of the sound that has passed through the oscillator, filter, and amp.

Pan

Adjust the pan (stereo position) of the sound that has passed through the oscillator, filter, and amp. Normally this will be set to **C064**. If "OSC Mode" is **Double** and you wish to produce a sense of stereo, you can use this setting to place oscillators 1 and 2 at the left and right. With a setting of **Random**, the sound will be placed at a random location each time you play a note, producing an interesting effect.

AMS Intensity

"AMS Intensity" specifies the depth of the panning effect that will occur when "AMS" is operated.

When "AMS" is set to **Note Number**, the pan will change according to the location you play on the keyboard. With a setting of **LFO1** or **2**, the pan will sweep from side to side (auto pan). Other settings allow you to move the oscillator pan by operating a controller.

Use DKit Setting

This is valid when "OSC Mode" is set to **Drums**. If this is **checked**, the pan location specified by the Drum Kit for each drum sound will be used. If this is **unchecked**, all drum sounds will sound at the same location. Preset drum kits are set to stereo settings. Normally you will leave this **checked**.

Amp1 Mod. tab
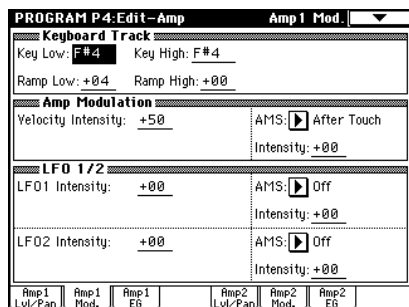
Keyboard Track

This lets you vary the volume by the keyboard location you play.

- When "Ramp Low" has a positive **(+) value**, the volume will increase as you play lower on the keyboard. With a negative **(–) value**, the volume will decrease as you play lower on the keyboard.
- When "Ramp High" has a positive **(+) value**, the volume will increase as you play higher on the keyboard. With a negative **(–) value**, the volume will decrease as you play higher on the keyboard.

Amp Modulation

"Velocity Intensity" is used by most programs to decrease the volume of softly played notes and increase the volume of strongly played notes, and this Amp Modulation parameter adjusts the depth of this control. Normally you will set Amp Modulation to positive **(+) values**. As this setting is increased, there will be greater volume difference between softly played and strongly played notes.

LFO 1/2

Specify how the LFO's will produce cyclic changes in volume (the tremolo effect).
The volume will be affected by the LFO(s) for which you set an "LFO Intensity" value.
"AMS Intensity" adjusts the depth by which the tremolo effect produced by the LFO will be affected when you operate an "AMS" (alternate modulation source). For example if "AMS" is set to **JS–Y**, moving the joystick toward yourself will apply tremolo.

Amp1 EG tab

Here you can make settings for the amplifier EG that produces changes in volume over time.

Every instrument has its own characteristic curve of volume change. This is part of what gives each instrument its identifiable character. Conversely, by applying a strings-type Amp EG curve to an organ-type multi-

sample, you can produce a sound with a character unlike a typical organ.
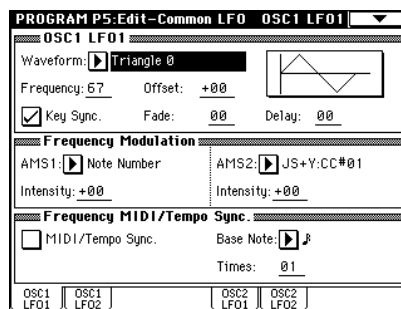
Piano

Organ

Strings

P5: Edit-Common LFO   LFO settings

For each oscillator, you can use two LFO (Low Frequency Oscillator) units: LFO1 and LFO2. You are free to select the type of each LFO and set its speed. The depth of the LFO1 and LFO2 whose settings you make here can be adjusted in pages P2: Edit-Pitch, P3: Edit-Filter, and P4: Edit-Amp.

OSC (1/2) LFO (1/2)

"Waveform" selects the type of LFO. You can choose from a variety of waveforms, including standard waveforms such as **Triangle**, **Saw**, **Square**, and **Sine**, as well as **Step** or **Random** waveforms that produce a sample-and-hold effect (☞p.20 in the *Parameter Guide*). A wide range of variations can also be produced using the "Offset," "Fade," and "Delay" parameters, and by changing the sign of the "Intensity" parameters in P2: Edit-Pitch, P3: Edit-Filter, and P4: Edit-Amp. "Frequency" sets the speed of the LFO.

Frequency Modulation

"AMS" can be used to vary the LFO speed. This lets you change the LFO speed by operating a controller, or by the EG or Keyboard Track settings.

Frequency MIDI/Tempo Sync.

If "MIDI/Tempo Sync" is **checked**, the "Frequency" setting will be ignored, and the LFO will synchronize to the tempo of the arpeggiator or sequencer. This lets you produce vibrato, wah, auto-pan, or tremolo that is synchronized to the playback speed of the arpeggiator.

P7: Edit-arpeggiator
Arpeggiator settings

Here you can make arpeggiator settings (☞p.96).

P8: Edit-Insert Effect
Insert Effect settings

Here you can select insert effects and make settings for them. You can also specify the oscillator routing (the signal sent to the insert effects, master effects, and independent outputs) (☞p.107).

P9: Edit Master Effect
Master Effect settings

Here you can select master effects and make settings for them. The master EQ is also set here (☞p.108).

More about Alternate Modulation

Alternate Modulation is a type of modulation that can be used to control various aspects of the sound.

AMS (Alternate Modulation Source) refers to any of the numerous sources that can control alternate modulation, and includes controllers such as the joystick or ribbon controller that you physically operate, incoming MIDI data, as well as modulators such as the EG or LFO.
Since the TRITON allows you apply modulation to a modulator, this type of control is referred to as "alternate modulation."

Intensity is a parameter that sets the degree (speed or depth) to which AMS will control alternate modulation.

Combinations that are frequently used in sequencer performance (such as using the joystick or ribbon controller to vary the pitch) are also provided as special parameters separately from alternate modulation.

The TRITON provides 29 types of alternate modulation.
In single mode you can use 29 alternate modulation destinations of 29 types, and in double mode you can use 55 alternate modulation destinations of 29 types. There are 42 AMS sources. (However depending on the type of modulation, some sources cannot be selected.)
For details on alternate modulation and AMS, refer to p.209 in the *Parameter Guide*.

● ●

Suggestions on using alternate modulation
When making settings for alternate modulation, think of the effect that you wish to produce, what type of modulation will be necessary to produce that effect, and what parameter of the oscillator, filter, or amplifier needs to be controlled. Then select a source ("AMS") and set the "Intensity."
If you proceed logically in this way, you will achieve the desired effect.
For example if you want to "control a guitar-like sound so that it appears to be approaching feedback when the joystick is moved away," you will make settings so that the joystick controls filter modulation or the resonance level.

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Combination mode

Pages in Combination mode

In Combination mode you select combinations and edit them. Combination mode consists of pages P0–P9. To play a combination, select P0: Play. In P1–P9 you can edit the parameters of the combination that was selected in P0.

○ **For details on accessing each page or modes (☞p.12 "Basic operation of the TRITON").**

P0: Play	Select a combination; select a program for each timbre; set the status, pan, and level; select and set the arpeggio pattern.
P1: Edit-program/ Mixer	Select a program for each timbre, and set pan and level. (These are common to the parameters in P0, and can be edited from either page.)
P2: Edit-Trk Param	Set various parameters for each timbre, such as MIDI, OSC, Pitch etc.
P3: Edit-MIDI Filter	MIDI transmission/reception filter settings for each timbre.
P4: Edit-Zone/Ctrl	Key zone and velocity zone settings for each timbre. Make controller settings. If the separately sold EXB-MOSS option is installed, set related parameters.
P5:	---
P6:	---
P7: Edit-Arpeggiator	Arpeggiator settings. (These are common to the parameters in P0, and can be edited from either page.)
P8: Edit-Insert Effect	Select insertion effects and make settings. Specify the timbre routing (send levels to the insertion effects, master effects, and independent outputs).
P9: Edit Master Effect	Select master effects and make settings. Also make master EQ settings.

🖉 If the separately sold EXB-MOSS option is installed, bank F programs can be used by the timbres of a combination. For details on the parameters of bank F programs, refer to the EXB-MOSS owner's manual.

When the TRITON is shipped from the factory, it contains a wide variety of factory preset combinations that use the preset programs, preset arpeggio patterns, and effects. You can create your own combinations by modifying these preset combinations, or by creating a combination from scratch by starting with an initialized combination.
Your own programs that use original sample waveforms or multisamples that were sampled in Sampling mode or loaded into the TRITON in Disk mode can also be used by a combination.
Combinations that you edit or create can be written into the 512 combination memory areas of banks A–D. In Disk mode, you can save combinations on a floppy disk or on other external media (☞p.40).

Playing a combination

P0: Play

Here you can select and play combinations. For each timbre 1–8, you can also select the program and set its status, pan, and level. You can also make arpeggiator settings.

Selecting a combination

There are three ways to select a combination. For the procedure, refer to the appropriate page.

- From the TRITON's front panel ("Selecting and playing a combination" ☞p.23)
  Selecting by bank/combination number
  Selecting by combination category
  Selecting with [./10's HOLD]
- With a connected foot switch ("Other functions" ☞p.125)
- By receiving MIDI program change messages ("MIDI" ☞p.115)

  For the factory-set combination names, refer to the separate *Voice Name List*.

Program Select tab

Selecting a program for each timbre 1–8

There are three ways to select a program for each timbre 1–8. For the procedure, refer to the appropriate page.

- From the TRITON's front panel ("Simple combination editing" ☞p.35)
  Selecting by bank/program number
  Selecting by program category
- By receiving MIDI program change messages ("MIDI" ☞p.115)

🖉 It is not possible to use MIDI program changes to select a program on a Timbre whose "Status" is other than **INT**.

🖉 If a program currently being edited in Program mode is used in a combination, the combination will use the sound that is being edited.

  For the factory-set program names, refer to the separate *Voice Name List*.

Status

For each timbre 1–8, this indicates the status of MIDI and the internal tone generator. Normally, you will set this to **INT** if you want the TRITON's internal tone generator to sound. Turn this **Off** for unused timbres. With settings of **Off**, **EXT** or **EX2**, that timbre will not sound. Settings of **EXT** and **EX2** allow the timbre to control an external tone generator connected via MIDI (☞p.35). (☞p.30 in the *Parameter Guide*)

Mixer tab

Here you can adjust the pan and level of each timbre 1–8 (☞p.35). (☞p.31 in the *Parameter Guide*)

Arpeggio Play A/Arpeggio Play B tab

- Arpeggiators A and B can be switched on/off independently. To turn both arpeggiators on/off, use the ARPEGGIATOR [ON/OFF] key.

  ✍ The arpeggiators will function only for timbres 1–8 to which arpeggiator A or B is assigned.

- Arpeggiator parameters including the arpeggio pattern selection can be edited in realtime while you play.
- ARPEGGIATOR [TEMPO], [GATE], and [VELOCITY] knobs will control the tempo, note length, and strength of the arpeggio notes.

For details refer to "Using the arpeggiator while you play" (☞p.31).

How a combination is structured

A combination consists of a variety of parameters that can be accessed in P1–P9. The diagram below shows how a combination is structured.

Parameters for each timbre are found in P1–P4. Here you can bring programs together to create the basic combination. Finishing touches can be added to the combination by using **insert effects**, **master effects**, and the **master EQ**. Effect settings are made for the combination independently of the settings in Program mode. To these settings you can add arpeggiator and controller settings to create the final **combination**.

## Basic combination editing

Combination editing refers to actions such as re-selecting the program for a timbre to change the sound, changing the keyboard area or velocity range that will sound the program for each timbre, or making controller settings.
Quick editing of a combination can be performed in the Program Select tab and Mixer tab of Combination P0: Play, but for detailed editing you will need to use Combination P1–P9.

The parameters in P1–P9 will affect the combination that you selected in Combination P0. In the pages that follow, we will be modifying some of the representative parameters as we explain their function. For details on all parameters, refer to the *Parameter Guide*.

note The most effective procedure is to first use P1: Edit-program/Mixer to select the program for each timbre. Then use P4: Edit-Zone to specify the keyboard range for each program (layer, split, velocity switch etc.). Finally, adjust the volume of each timbre, and make other parameter settings.

note If you execute the page menu command "Solo Selected Timbre," only the sound of the selected timbre will be heard when you play the keyboard. This provides a convenient way to hear individual timbres that have been layered. (☞p.31 in the *Parameter Guide*)

P1–1 and P2–2 etc. indicate the page tabs used when editing on the TRITON.
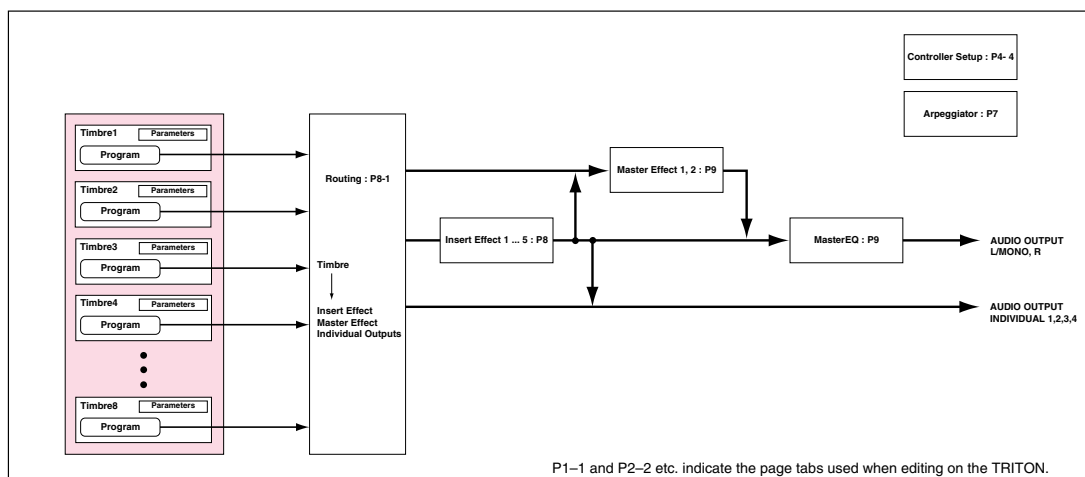
✎ If you wish to keep a combination that you edited, you must Write it (☞p.38).

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Layer, split, and velocity switch

Within a combination, you can use keyboard location and velocity to change the program that sounds. The programs assigned to each timbre can sound in three ways: as a **layer**, a **split**, or a **velocity switch**. A combination can be set to use any one of these methods, or to use two or more of these methods.
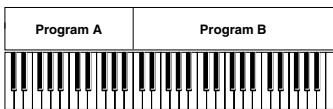
Layer

Layer refers to settings which cause two or more programs to sound simultaneously when a note is played.
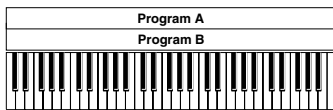
Layer:
Two or more programs sound simultaneously.

Split

Split refers to settings which cause different programs to sound depending on the keyboard location that is played.

Split:
Different programs will sound in different areas of the keyboard.

Velocity switch

Velocity Switch refers to settings which cause different programs to sound depending on the velocity (keyboard playing dynamics).
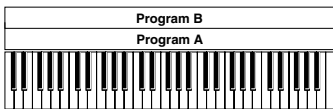

Velocity Switch:
Keyboard playing dynamics (velocity) switches between different programs.

On the TRITON, you can use a different program for each of up to eight timbres, and combine two or more of the above methods to create even more complex set-ups.
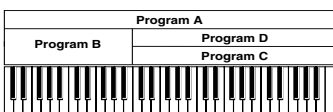

Example:
B and C/D are split. In the lower keyboard range, A and B are layered. In the higher keyboard range, C and D are switched by velocity and layered with A.

As an additional possibility, you can set the slope for a key zone or velocity zone so that the volume diminishes gradually. This lets you change a split into a **keyboard crossfade**, or a velocity switch into a **velocity crossfade**.
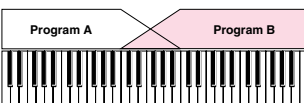
Keyboard X-Fade (keyboard crossfade):
As you play from low notes to high notes, the volume of A will fade out, and the volume of B will fade in.
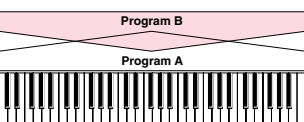
Velocity X-Fade (velocity crossfade):
As you play with increasingly stronger velocity, the volume of A will fade out, and the volume of B will fade in.

. . . .

The Compare function

When P1–P9 are displayed, you can press the [COMPARE] key to make the LED light. This will recall the combination that had been written before you began editing. When you press the [COMPARE] key once again the LED will go dark, and you will return to the sound that you had been editing. Use this when you wish to compare the edited sound with the un-edited sound.

✎ If you continue editing when the [COMPARE] key LED is lit, the LED will go dark, and the current sound will now be the sound that is recalled when the [COMPARE] key LED is dark.

. . . .

P1: Edit-Program/Mixer Timbre 1–8 program, pan and volume

Here you select a program for each timbre 1–8, and set its pan and volume. These are the same parameters as in P0: Play, and can be edited from either page.
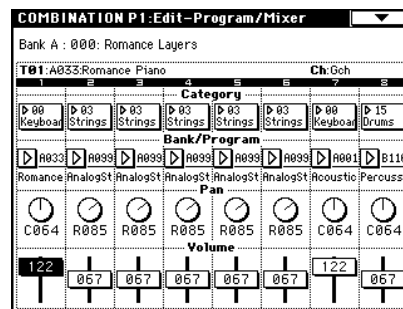
Category, Bank/Program

Select the program for each timbre.

✎ Selection of programs via MIDI program change is disabled in this page.

✎ If a program currently being edited in Program mode is used in a combination, the combination will use the sound that is being edited.

Pan

Specify the panning (stereo location) for each timbre. A setting of **C064** will reproduce the oscillator pan setting of the program. Moving this to left or right will move the sound to left or right while preserving the pan relationship between the oscillators. A setting of **L000** is far left, and **R127** is far right. (☞p.31 in the *Parameter Guide*.)

Volume

Adjust the volume of each timbre 1–8.
Create the overall sound by adjusting the volume balance between timbres. The "Volume" setting is an important aspect of creating the sound, and this setting will have a significant effect on the overall impression produced by the combination.

P2: Edit-Trk Param
Settings for status, MIDI channel, and playing mode

MIDI Channel tab
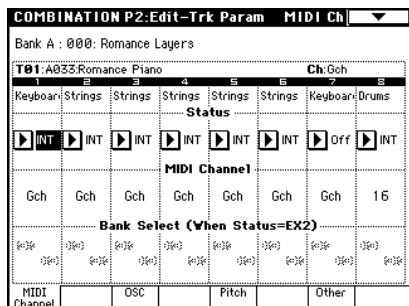
Status

Select a "Status" of **INT** for all timbres that you wish to use. Select **Off** for unused timbres.
Timbres that are set to **INT** will sound the TRITON's internal tone generator. Timbres set to **Off**, **EXT**, or **EX2** will not sound. Timbres set to **EXT** or **EX2** can control an external tone generator connected via MIDI.

MIDI Channel

Timbres that you wish to play from the TRITON's keyboard must be set to the global MIDI channel. Your playing on the keyboard is transmitted on the global MIDI channel, and will sound any timbre that matches this channel. Normally you will set this to **Gch**. When this is set to **Gch**, the MIDI channel of the timbre will always match the global MIDI channel, even if you change the global MIDI channel.

On some preset combinations that use the arpeggiator, timbres assigned to the arpeggiator may not have a "Status" of **INT** and "MIDI Channel" of **Gch**.
The reason for this is that these settings are for timbres that sound only when the arpeggiator is on. This is a very useful technique for creating combinations that use the arpeggiator. Refer to "Dual arpeggiator editing" (☞p.104) and to "7–1b" (☞p.39) in the *Parameter Guide*, and study the relationship between arpeggiator assignments, "Status," and "MIDI Channel."

Bank Select (when Status = EX2)

This setting is valid when "Status" is set to EX2. It specifies the Bank Select message that will be transmitted from the TRITON.

OSC tab
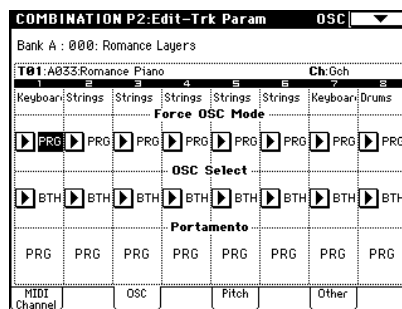
Force OSC Mode

Normally you will set this to **PRG**.
If you wish to force a polyphonic program to sound monophonically, set this either to **MN (Mono)** or **LGT (Legato)**. Conversely, set this to **Poly** if you wish to force a monophonic program to play polyphonically (☞p.33 in the *Parameter Guide*).

OSC Select

Normally you will set this to **BTH (Both)**.
If the timbre is using a program whose "OSC Mode" is **Double**, and you want only OSC1 or OSC2 (not both) to sound, set this to **OS1** (only OSC1 will sound) or **OS2** (only OSC2 will sound).

Portamento

Normally you will set this to **PRG**.
If you want the portamento setting specified for the program of the timbre to be forced off, set this parameter to **Off**. Conversely, if you want to forcibly turn the portamento on, or to change the portamento time, set this to a value of **001–127** to specify the portamento time.

Pitch tab

Transpose, Detune

These parameters adjust the pitch of the timbre.

- In a layer-type combination, you can set two or more timbres to the same program, and create a richer sound by using "Transpose" to shift their pitch apart by an octave or by using "Detune" to create a slight difference in pitch between the two.
- In a split-type combination, you can use "Transpose" to change the pitch of the program in each key zone in steps of an octave.
- If you wish to change the playback pitch of a drum program, use "Detune." If you change the "Transpose" setting, the correspondence between notes and drum sounds will change.

Other tab

Delay [ms]

Specify the timing of the delay before each timbre sounds.

Select the preset combination **A127: One FingerTVShow**, and play a single note. Timbres will sound consecutively, according to their Delay setting. If you select **KeyOff** for this parameter, the timbre will sound when the note is released.

P3: Edit-MIDI Filter
MIDI filter settings

For each MIDI Filter item, you can specify whether or not the corresponding MIDI message will be transmitted and received. The **checked** items will be transmitted and received.
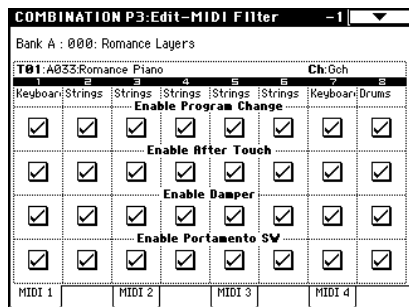
For example, suppose that you have a split combination in which timbre 1 uses a bass program and timbre 2 uses a piano program.
You could **uncheck** "Enable Damper" for timbre 1, and **check** "Enable Damper" for timbre 2.
With these settings, pressing a damper pedal connected to the [DAMPER] jack would apply the damper effect only to the piano program of timbre 2.

For details on each MIDI filter item, refer to p.35 in the *Parameter Guide*.

The MIDI Filter settings do not switch the corresponding function on/off, but merely specify whether or not that MIDI message is transmitted and received. For example if portamento is on, portamento will be applied to the sound of the TRITON even if the "Enable Portamento SW" is unchecked.

P4: Edit-Zone/Ctrl
Layer, split, and velocity switch settings

You can make most of the settings necessary for creating layers, splits, velocity switches, keyboard crossfades, and velocity crossfades.

Key Zone tab (key zone settings)

For each timbre, you can specify the range of notes for which it will sound. Each area that sounds a timbre is referred to as a **Key Zone**. By setting key zones, you can create a combination in which different programs sound in different areas of the keyboard.
By combining key zones specified for each timbre, you can create **layered** or **split** combinations.
The upper and lower limits for the key zone of each timbre are set by the "Top Key" and "Bottom Key" respectively. For example in the following diagram, timbres 1–3 are set to create a layered and split combination. This is specified by the key zone settings. Timbres 2 and 3 create a layer. Timbre 1 and timbres 2/3 are split between the B3 and C4 note numbers.
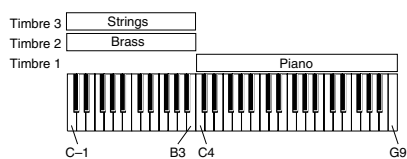
① **To create a combination like the one shown above, first use the P0: Play or P1: Edit-program/Mixer page to select a program for each timbre 1–3.**

Select a piano program for timbre 1.
Select a brass program for timbre 2.
Select a strings program for timbre 3.

② **In P2: Edit-Trk Param, select the MIDI Channel tab. Set each timbre you wish to use to a "Status" of INT, and a "MIDI Channel" of Gch or the global MIDI channel. ("G" will be displayed following the channel number.)**

③ **In P4: Edit-Zone/Ctrl Key Zone tab, set the "Top Key" and "Bottom Key."**

Set timbre 1 to a "Top Key" of **G9** and a "Bottom Key" of **C4**. Set timbres 2 and 3 to a "Top Key" of **B3** and a "Bottom Key" of **C–1**.

You can also input the value by holding down the [ENTER] key and playing a note.
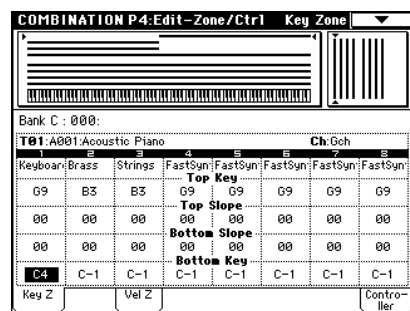
As an option, you could specify the range velocities, so that a portion of timbre 1 overlapped with timbres 2 and 3 (creating a layer), and setting "Top Slope" and "Bottom Slope" so that the volume would change gradually between **B3** and **B4**. This would avoid an abrupt change in sound between the two keyboard areas.

Vel (Velocity) Zone tab (Velocity zone settings)

For each timbre, you can specify a range of velocities for which it will sound. The range of velocities for which a timbre will sound is called the **Velocity Zone**. By setting a velocity zone, you can set up a timbre which will be sounded only by notes played at a certain strength, and not by stronger or weaker notes. By combining timbres that have differing velocity zone settings, you can create **velocity switched** combinations.

The upper and lower limits of the velocity zone of each timbre are determined by the "Top Velocity" and "Bottom Velocity" respectively. The following diagram shows an example of a velocity switched combination in velocity will switch between timbres 1 and 2 to play different programs. Such combinations are created by setting the velocity zone.

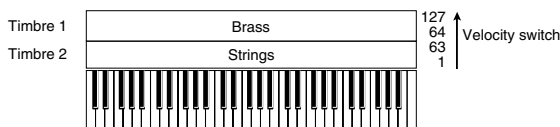① **To create a combination such as shown above, first use P0: Play or P1: Edit-program/Mixer to select the program that each timbre 1 and 2 will use.**

Select a brass program for timbre 1.
Select a strings program for timbre 2.

② **In P2: Edit-Trk Param, select the MIDI Channel tab. Set each timbre you are using to a "Status" of INT, and a "MIDI Channel" of Gch or the global MIDI channel. ("G" will be displayed after the channel number.)**

③ **In P4: Edit-Zone/Ctrl Vel Zone tab, set the "Top Velocity" and "Bottom Velocity."**

Set timbre 1 to a "Top Velocity" of **127** and a "Bottom Velocity" of **64**.
Set timbre 2 to a "Top Velocity" of **63** and a "Bottom Velocity" of **1**.

You can also input the value by holding down the [ENTER] key and playing a note on the keyboard.

As an option, you could specify the range velocities, so that a portion of the two timbres overlapped, and set "Top Slope" and "Bottom Slope" so that the volume would change gradually within that area. This would avoid an abrupt change in sound between velocities **63** and **64**.

Controller Setup tab

For each combination, you can specify the functions of the [SW1] and [SW2] keys, and the B-mode functions of REALTIME CONTROLS knobs [1]–[4] (☞p.127). (☞p.38, 217, 218 in the *Parameter Guide)*

P7: Edit-Arpeggiator
Arpeggiator settings

Make settings for the arpeggiator (☞p.98).

P8: Edit-Insert Effect
Insert Effect settings

Select insert effects, and make settings for them. Here you can also set the oscillator routing (send levels to the insert effects, master effects, and individual outputs) (☞p.108).

P9: Edit Master Effect
Master Effect settings

Select master effects, and make settings for them. Here you can also make master EQ settings (☞p.108).

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Sequencer mode

The TRITON contains a 16-track MIDI sequencer. This sequencer is the center to which the TRITON's numerous functions are integrated, allowing it to be used in a variety of situations including music production and live performance.

⚠ When you turn off the power, the settings made in Sequencer mode and the song data, cue list data, and user pattern data that you recorded are not backed up. If you wish to keep this data, you must save it on a floppy disk or external SCSI device (if the separately sold EXB-SCSI option is installed) before turning off the power, or perform a MIDI data dump to save the data on an external data filer etc.
If you wish to save the programs, track parameters and effects etc. selected for a song as a template song, use the page menu command "Save as User Template Song."
Immediately after the power is turned on, the TRITON will not contain any cue list data or song data, so if you wish to playback a song on the sequencer, you must first load data from floppy disk or receive a MIDI data dump from an external MIDI sequencer (☞p.40, 92). (☞p.119 in the *Parameter Guide*)

Features of the sequencer

- The sequencer lets you record a **maximum of 200,000 events** (note data etc.), up to **200** songs, and as many as **999** measures per song.
- Up to **20 cue lists** can be created.
  A cue list is an arrangement of up to 99 songs that will be played as a chain. You can specify the number of times that each song will repeat. Songs in a cue list can also be converted into a single song.
- The **RPPR (Realtime Pattern Play/Recording) function** can be used for playback or recording.
- The **dual polyphonic arpeggiator** can be used for playback or recording.
- **Sixteen different template songs** are built-in, and contain program and effect settings suitable for various musical styles. Up to sixteen original templates that you create can be registered as user template songs.
- **Five stereo insertion effects**, **two master effects**, and a **stereo master EQ** can be used for each song.
- Sample waveforms that you sampled in Sampling mode or loaded in Disk mode can be converted into programs and used in a song.
- If the separately sold EXB-MOSS option is installed, **MOSS tone generator programs can be played multi-timbrally.** (For example, you could use two bass voices and four electric piano voices. However, effect settings cannot be made separately.)
- Timing **resolution is a maximum** of ♩/192.

- **Sixteen tracks** are provided for musical data, and a **master track** contains time signature and tempo data that controls the playback.
- A **track play loop function** lets you loop specified measures independently for each track.
- **150 preset patterns** ideal for drum tracks are built in. In addition, you can create up to 100 user patterns for each song. These patterns can be used as musical data within a song, or can be played by the RPPR function.
- Various methods of recording are supported, including **realtime recording** in which your performance on the keyboard and controllers (including MIDI control events) is recorded just as you play, and **step recording** in which the timing, length, and velocity of each note can be specify in the LCD as you input the pitches from the keyboard.
- The musical data and control events that you recorded can be edited in various ways (including event editing and many other edit commands).
- When the "Status" of a track is set to INT or BTH, an external sequencer can be used to play the TRITON as a **multi-timbral tone** generator.
  When the "Status" of a track is set to BTH, EXT, or EXT2, the sequencer of the TRITON can **play external tone** generators.
- Playback can be **synchronized with an external** MIDI device.
- The TRITON's **AMS (Alternate Modulation)** capability lets you use control changes for realtime control of the parameters of the programs used in a program. Its **MIDI Sync. functionality** lets you synchronize the LFO speed to changes in the tempo.
- **Dmod (Dynamic Modulation) functionality** lets you control effect parameters in realtime. You can also use **MIDI Sync.** to synchronize the LFO speed or delay time to changes in the tempo.
- You can assign names not only to the song, but also to each pattern and track.
- Combination settings can be copied to a song.
- Sequencer data such as a song or cue list that you create can be saved in the TRITON's native format, or transmitted as a MIDI data dump.
- Programs or sample files can be linked and saved on external media. This data can be loaded when desired.
- A song you created can be converted into SMF (Standard MIDI File) data and saved on external media. SMF songs can also be loaded.
- The PLAY/MUTE/REC buttons and SOLO buttons let you instantly play/mute any desired track.
- You can rewind or fast-forward while listening to the sound.
- The [LOCATE] key lets you move quickly to a desired location.

- The Track **BPM Adjust function** (playback pitch adjust) can automatically change the pitch of a sample/multisample that was sampled in Sampling mode or loaded in Disk mode so that it matches the tempo.

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About song data

The following two types of song data can be loaded from floppy disk or other external media into the TRITON's sequencer.

• **Song data saved in the TRITON's own format**
This data cannot be loaded by another device, but the playback will faithfully reproduce the detailed settings unique to the TRITON. We recommend that song data intended for playback on the TRITON be saved in this format.

• **Standard MIDI Files**
This format is not able to provide a totally faithful reproduction of the performance on the TRITON in the way that the TRITON's own format does (although there will be no problem for normal playback), but does provide compatibility with other SMF-compatible devices.

To load song data from floppy disk or save song data to floppy disk, use Disk mode. (☞p.40, p.92)

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Memory Protect

Before you record a track or pattern, or edit the musical data, you will need to turn off the memory protect setting in Global mode. (☞p.37)

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The Compare function

When you perform realtime recording, step recording, or track editing, this function allows you make before-and-after comparisons. (☞p.14)

⚠ If you continue editing when the [COMPARE] key LED is lit, the LED will go dark. That musical data will now be the data that is selected when the [COMPARE] key LED is dark.

Operations for which Compare is available

• **Recording to a track**
• **Track Edit**
All commands other than P5: Page menu commands "Memory Status," "FF/REW Speed," and "Set Location"
• **Recording to a pattern**
• **Pattern Edit**
All commands other than P6: Page menu commands "Memory Status" and "FF/REW Speed"
• **Song Edit**
P: 0, 2, 3, 4, 7: Page menu commands "Delete Song" and "Copy From Song"
P1: Page menu commands "Convert to Song" and "Copy Song"

In general, track and pattern event data can not be returned to its original state.
Comparing song parameters is possible only during song editing (when executing a page menu command).

Operations for which Compare is not available

• **Editing song parameters**
(Including "Track Name" and "Pattern Name")
• **Page menu commands other than those listed above (in Operations for which Compare is available)**

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About MIDI

Synchronizing the sequencer with an external MIDI device

The record/playback tempo of the TRITON's sequencer can be synchronized to an external MIDI device such as a sequencer or rhythm machine (☞p.122).

Track status settings in Sequencer mode

You can make settings for the TRITON's sequencer to specify whether it will sound the internal tone generator or an external tone generator.

When Track Status is set to **INT**, operating the TRITON's keyboard and controllers will sound and control the TRITON's own tone generator.
When Track Status is set to **EXT**, **EX2** or **BTH**, operating the TRITON's keyboard and controllers will sound and control the external tone generator. (The MIDI channel of the external tone generator must match the "MIDI Channel" of the track that is set to **EXT**, **EX2** or **BTH**.) With a setting of **BTH**, both the external tone generator and the TRITON's tone generator will sound and be controlled.

If you wish to use the TRITON's Sequencer mode as a 16-timbre (16-track) tone generator, set each track to either **INT** or **BTH** (☞p.55 in the *Parameter Guide).*

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About each page in Sequencer mode

○ **For details on how to access each page or modes, refer to "Basic operation of the TRITON" (☞p.12).**

P0: Play/REC	Play and record songs, and make related settings. Select the program for each track, and set pan and level.
P1: Cue List	Play, create, and make settings for cue lists.
P2: Trk Param	Parameter settings for each track of a song. MIDI, OSC, Pitch, etc.
P3: MIDI Filter	MIDI message transmission/reception filter settings for each track of a song.
P4: Zone/Ctrl	Key Zone and Velocity Zone settings for each track of a song. Controller settings. If the separately sold EXB-MOSS expansion is installed, settings for related parameters.
P5: Track Edit	Edit musical data for song tracks. Specify track names.
P6: Pattern/RPPR	Record and edit patterns for a song. Specify pattern names. RPPR function settings for a song.
P7: Arpeggiator	Arpeggiator settings.
P8: Insert Effect	Select and make settings for insert effects. Set the routing, insert effects, master effects, and individual output send amounts for each track of the song.
P9: Master Effect	Select and make settings for the master effects. Master EQ settings.

![note icon] If the separately sold EXB-MOSS option is installed, bank F programs can also be used in Sequencer mode. For details on the parameters of bank F programs, refer to the EXB-MOSS owner's manual.

The structure of Sequencer mode

Sequencer mode consists of the following pages.

Songs

A song consists of tracks 1–16, a master track, song parameters such as the song name, effect, arpeggiator and RPPR parameters, and 100 user patterns.
A maximum of 200 such songs can be created on the TRITON.

Tracks 1–16 and the master track each consist of **setup parameters** located at the start location, and **musical data** within the track.

● ●

Setup parameters	Musical data
Tracks 1–16	Tracks 1–16
Bank/Program No. *	Note On/Off
PLAY/MUTE/REC	Program Change (including Bank Select)
Pan *	Pitch Bend
Volume *	After Touch (Poly After)
Track Play Loop	Control Change
Loop Start Measure	Pattern No.
Loop End Measure	
Status	
MIDI Channel	
Bank Select (When Status=EX2)	
Force OSC Mode	
OSC Select	
Portamento *	
Transpose **	
Detune **	
Bend Range **	
Delay	
Use Program's Scale	
MIDI Filter	
Key Zone	
Velocity Zone	
Track Name	
Arpeggiator Assign	
IFX/Indiv.Out BUS Select	
Send1(MFX1) *	
Send2(MFX2) *	

Master track	
Time signature *	
Tempo *	

*   When you change the setting during realtime-recording, this will be recorded as musical data. This allows the starting settings to be modified during the playback.

** Musical data (MIDI RPN data) can be used to change the starting settings during playback.

For details on control changes, refer to p.223 in the *Parameter Guide.*

Patterns

There are two types of patterns: preset patterns and user patterns.

- **Preset patterns:** Patterns suitable for drum tracks are preset in internal memory, and can be selected for any song.
- **User patterns:** Each song can have up to 100 patterns. When using a pattern in a different song, use the page menu commands "Copy Pattern" or "Copy From Song" etc. to copy the pattern. The pattern length can be specified in units of a measure.

Each pattern consists of musical data for one track. It is not possible to create patterns that contain multiple tracks.

These patterns can be used as track musical data by being **placed in a track** (page menu command "Put to Track") or **copied to a track** (page menu command "Copy to Track"). Alternatively, you can use a pattern with the **RPPR function of a song**.

As track musical data of a song

Phrases that are used repeatedly in a song can be recorded as patterns.
When you **place** ("Put to Track") such a pattern in a song, the musical data of that pattern will be recalled and played when playback reaches the measure in which the pattern was played. When using a phrase or rhythm that occurs repeatedly, you can make more efficient use of memory by creating a pattern and placing it in multiple locations of the song, rather than actually recording the same data directly to each location of the song. However, be aware that if you modify the pattern itself, the playback will be affected for all measures at which the pattern had been placed.

If you **copy** ("Copy to Track") a pattern to a track of the song, the playback data will be recorded on the track just as if you had recorded it onto the track in the first place. This will occupy more memory than if you use "Put to Track," but you will be able to edit each location of data independently without affecting other locations, just as when editing normal track data.

The RPPR (Realtime Pattern Play/Recording) function:

For each song, you can assign patterns to each note of the keyboard, and play notes on the keyboard to playback or record patterns in realtime.

Cue List

A cue list allows you to playback multiple songs in succession. The TRITON allows you to create 20 cue lists. Each cue list allows you to connect a maximum of 99 songs in any order, and to specify the number of times that each song will repeat.
Each unit in a cue list is called a "step," and each step contains a song number and the number of repeats.

For example, a song consisting of an introduction, melody A, melody B, bridge, solo backing, and ending could be created using a separate song for each unit. Then you could use a cue list to play the introduction twice, melody A four times, melody B four times, the break twice, melody A four times, ... etc. to create the completed song. When you will need to change the structure of the song, the cue list function provides an efficient way to do so.

The page menu command "Convert to Song" lets you convert the two or more songs in a cue list into a single song. This allows you to use a cue list to create the backing, then convert the cue list into a song and add solo phrases on unused tracks.
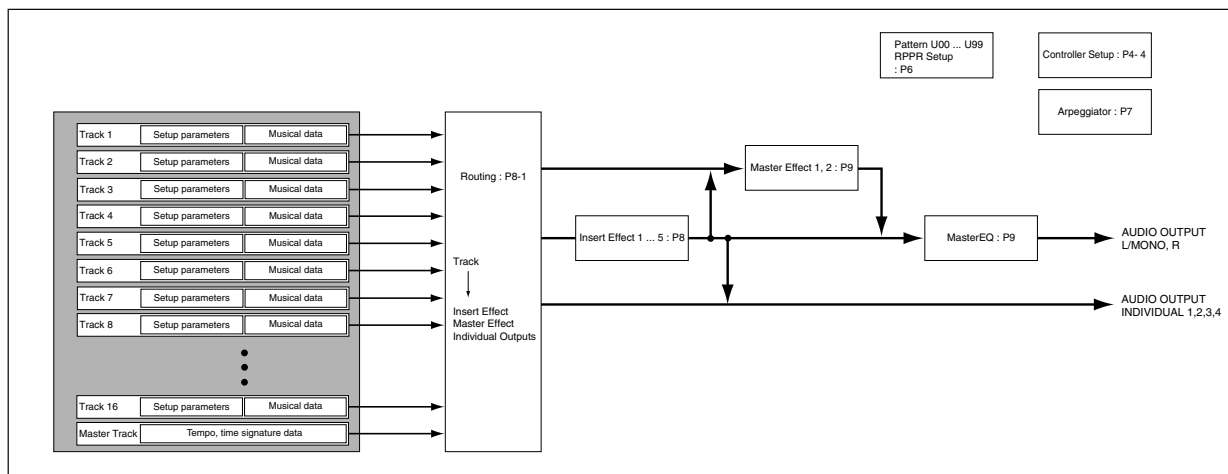
Playback

Playing a song (Play)

When you wish to playback song data on the sequencer, you must first record song data, or load or dump song data into the TRITON.
To load song data from a floppy disk etc., use Disk mode.

① **In Sequencer mode, press P0: Play/REC.**

② **Use "Song No. and name" to select the desired song (☞p.64).**

③ **Press the [START/STOP] key.**

   The song you selected in step ② will begin playing.

✎ Pressing the [START/STOP] key in pages other than Sequencer mode P1: Cue List or P5: Pattern/RPPR will start song playback. When the [START/STOP] key is pressed in P1: Cue List, the currently selected cue list will begin playing. When the [START/STOP] key is pressed in P5: Pattern/RPPR, the currently selected pattern will begin playing.

④ **If you press the [START/STOP] key during playback, the playback will stop.**

   Press the [START/STOP] key once again, and playback will resume from where it had been stopped.

- **Pressing the [LOCATE] key will move to the specified location.**
- **Pressing the [PAUSE] key will resume playback.**
- **Pressing the [<<REW], [FF>>] keys will rewind or fast-forward. These can be used during playback or when paused.**
   The speed of rewind and fast-forward is set by the "FF/REW Speed" page menu command.

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Mute/Solo function

You can use the **PLAY/MUTE/REC buttons** and **SOLO ON/OFF buttons** in the Program Select tab of P0: Play/REC to hear or mute a desired individual track 1–16. For example, this can be used when you wish to record new tracks while listening only to the rhythm section of the previously recorded tracks.

You can use the page menu command "Solo Selected Track" to hear only the currently selected tracks. It is convenient to use this while setting track parameters or effect settings (☞p.47 in the *Parameter Guide*).

Make sure that page P0: Play/Rec is opened.

① **Press the [START/STOP] key to playback the song.**

② **Press the Prog. 1–8 tab.**

③ **Press the track 1 PLAY/MUTE/REC button once.**

   The display will change to "MUTE," and the playback of track 1 will no longer be heard. In this way,

the "**mute**" function allows you to silence a specified track.

Press the track 2 PLAY/MUTE/REC button once.

The display will change, and the playback of track 2 will also be muted.

To cancel muting, press the **PLAY/MUTE/REC button** once again so that the display changes to **PLAY**. Each time you press the button, the display will alternate between **MUTE** and **PLAY**.

④ **Next press the track 1 SOLO button once.**

The display will change, and now only the track 1 playback will be heard. In this way, the **Solo** function lets you hear only a specified track. (If both Mute and Solo are used, the Solo function will be given priority.)

Press the track 2 SOLO button once.

The display will change, and only the playback of tracks 1 and 2 will be heard.

To turn off the Solo function, press the SOLO button once again. Press the track 1 and 2 SOLO buttons once each.

The display will change, and the playback of tracks 1 and 2 will be muted. If the Solo function is turned off for all tracks, playback will be according to the **PLAY/MUTE/REC button** settings.

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[LOCATE] settings

These settings are made by the page menu command "Set Location." You can also set the location during playback by holding down the [ENTER] key and pressing the [LOCATE] key (☞p.48 in the *Parameter Guide*). Normally you will set this to **001:01.000**. You will return to the beginning of the song.
When you select a song, the [LOCATE] setting will automatically be set to 001:01.000.

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Other playback

In Sequencer mode, you can also use playback functions such as Loop All Tracks, play Patterns (using the RPPR function), Track Play Loop, and Cue List.

Recording

The process by which your playing on the TRITON's keyboard and controllers is captured on the tracks or patterns of a song as data is called "**recording**."

Recording on a track, and recording on a pattern

Recording on a track

There are two ways to record on a track: **realtime recording** and **step recording**. You can choose from a further six types of realtime recording.

In addition, you can use **event editing** to modify data that has been recorded or to insert data, and use **track editing** operations such as **Create Control Data** to insert data such as bend, after touch, and control changes.

Recording on a pattern

There are two ways to record on a pattern: **realtime recording** and **step recording**. For realtime recording, only one recording type (loop) is available.

In addition, you can use **event edit** operations to modify data that has been recorded or to insert data.

The page menu command "Get From Track" can be used to take musical data from a desired area of a track, and use it as the musical data for a pattern. Conversely, the page menu commands "Put to Track" and "Copy to Track" can be used to place or to copy the musical data of a pattern in a track.

⋅ ⋅

Realtime recording

This is a method of recording in which your playing on the keyboard and your operations of controllers such as the joystick are recorded in realtime.
This method of recording is normally used one track at a time, and is called **single track recording**.
As an alternative, **multitrack recording** allows you to simultaneously record multiple channels of data onto multiple tracks. This is the method you will use when using the RPPR function to record multiple tracks of musical data at once, or when you playback existing sequence data on an external sequencer and record it onto the TRITON's sequencer in realtime (☞p.64, p.66, p.73).

- **Overwrite**
  With this method, the musical data previously on the track is overwritten by the newly recorded data. When you perform overwrite recording on a previously-recorded track, its musical data will be replaced by the newly recorded data.
  Normally you will use this method to record, and then modify the results by using other types of realtime recording or event editing.

- **Overdub**
  With this method, the newly recorded musical data is added to the existing data.
  When you perform overdub recording on a previously-recorded track, the newly recorded data will be added to the previously-recorded data.
  It is best to select this method when you wish to add control data, or to record tempo data onto the master track. This lets you record data without erasing the existing data.

- **Manual punch-in**
  With this method, the musical data previously on the track is overwritten by the newly recorded data. While the song is playing, you can press the [REC] key or a connected pedal switch at the desired location to start or stop recording.

- **Auto punch-in**
  With this method, the musical data previously on the track is overwritten by the newly recorded data. First you must specify the area that will be re-recorded. Then playback the song, and recording will occur automatically at the specified area.

- **Loop All Tracks**
  This method lets you continue recording as you add musical data.
  Recording will occur repeatedly over the specified area.

- **Multi**
  Multitrack recording allows you to simultaneously record onto multiple tracks, each with a different channel. This method can be used with overwrite, overdub, manual punch-in, and auto punch-in recording.

⋅ ⋅

Step recording

This is a method of recording where you specify the note timing, note length, and velocity etc. in the LCD screen, and use the keyboard to input the pitches. Only note-on/off data can be recorded with this method.

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Event Edit and Create Control Data

Note data is the only type of data that can be recorded in step recording. However as ways to record other types of data outside of realtime, you can use the Event Edit and Create Control Data functions.

Event Edit is intended as a way to edit previously-recorded data, but you can also use it to modify program numbers or insert control changes.

Create Control Data is a function that lets you create and insert controller data that changes smoothly between two specified values over the specified length of time. This is used to input bend, after touch, and control change data etc.

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Realtime recording on a track

Preparations for recording

Before you begin recording, you need to make track settings.

⚠️ Be sure to turn off the Global mode protect setting (☞p.37).

Song No. and name
Track Select
Category
Bank/Program

① **In Sequencer mode, select P0: Play/REC, and select the Program T01–08 tab (or Program T09–16 tab).**

② **Press "Song No. and name," and select the song that you wish to record.**

Use numeric keys [0]–[9] to enter the song number, and press the [ENTER] key. If you press the popup button, you can select from the popup menu.
If you select a song number that has not yet been recorded, the Create New Song dialog box will appear. Press the **OK button**.

To set the song name, use the page menu command "Rename Song." (☞p.38 "Assigning a name (Rename)").

③ **Use "Track Select" to select the track that you wish to record.**

④ **Use "Bank/Program" or "Category" to select the program for the track you wish to record.**

Use the Prog.1–8 tab to select a program for tracks 1–8, and the Prog.9–16 tab to select a program for tracks 9–16.

📝 You may find it convenient to use the page menu command "Load Template Song" and use the settings from a template song (☞p.67).

If necessary, select the Mixer tab and set the pan and volume. The status and MIDI channel of each track are set by P2: Trk Param MIDI Ch tab "Status" and "MIDI Channel."

📝 It is a good idea to set tracks 1–16 to "MIDI Channel" 1–16 respectively. (This is the default.) Tracks that are set to the same MIDI channel will sound simultaneously when either track is recorded or played.
Make sure that "Status" is **INT** or **BTH**.

⑤ **Press the [REC/WRITE] key.**

The TRITON will enter record-standby mode. The **PLAY/MUTE/REC button** of the track(s) you specified in step ③ will change from **PLAY** to **REC**.

The metronome will begin sounding. If it does not, use the Preference tab "Metronome Setup" to make metronome settings. The default values are "Sound" **Only REC**, "BUS Select" **L/R**, "Level" **127**, and "Precount" **2**. With these settings, there will be a two-measure pre-count, the metronome sound will be output at the maximum level from the L/MONO and R jacks (and from the headphones), and will be heard only during recording.

⑥ **Set "Tempo Mode" to Manu (manual), and as you listen to the metronome, use "♩ =" to set the tempo.**

⑦ **Set "Meter" to the desired time signature.**

⑧ **If necessary, set "Reso" (resolution) to the desired realtime quantize setting (☞p.68).**

This completes preparations for recording. The recording procedure will depend on the "Overwrite" – "Multi (multitrack recording)" setting explained below. Press the [REC/WRITE] key to temporarily cancel record-standby mode, and try out the various recording methods described below.

⚠️ The time signature will be recorded when you actually begin recording. If you cancel recording during recording-standby or during the precount, the time signature specified in ⑦ will not be recorded.

Overwrite

Use this method when recording for the first time.

① **Make the necessary settings in "Preparations for recording."**

② **In the Preferences tab "Recording Setup," select Over Write.**
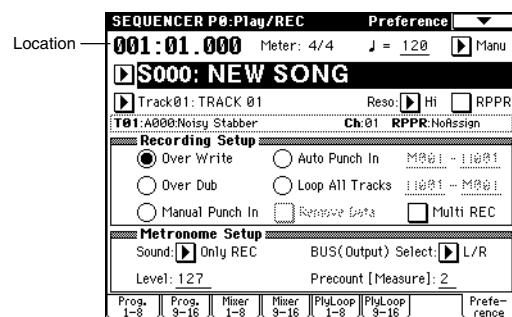
Location

③ **In "Location," specify the location at which you wish to begin recording.**

If no musical data has been recorded it will not be possible to change the location, so proceed to step ④.

④ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

If "Metronome Setup" has the default settings (refer to "Preparations for recording" step ⑤), the metronome will sound for a two-measure pre-count, and then recording will begin. Play the keyboard and move controllers such as the joystick to record your performance.

⑤ **When you finish playing, press the [START/STOP] key.**

Recording will end, and the location will return to the point at which you begin recording.

At this time if you press the [PAUSE] key instead of the [START/STOP] key, recording will pause. When you press the [PAUSE] once again, recording will resume. When you are finished, press the [START/STOP] key to stop recording.

Overdub

① **Make the necessary settings in "Preparations for recording."**

② **In the Preferences tab "Recording Setup," select Over Dub.**

③ **For the rest of the procedure, refer to steps ③–⑤ of "Overwrite" (☞p.64).**

Manual punch-in

① **Make the necessary settings in "Preparations for recording."**

② **In the Preferences tab "Recording Setup," select Manual Punch In.**

③ **In "Location," specify a location several measures earlier than the point at which you wish to begin recording.**

④ **Press the [START/STOP] key.**

Playback will begin.

⑤ **At the point at which you wish to begin recording, press the [REC/WRITE] key.**

Recording will begin. Play the keyboard and operate controllers such as the joystick to record your performance.

⑥ **When you finish recording, press the [REC/WRITE] key.**

Recording will end (playback will continue).

Instead of pressing the [REC/WRITE] switch in steps ⑤ and ⑥, you can use a foot switch connected to the [ASSIGNABLE SWITCH] jack. Set the Global

P2: Controller "Foot Switch Assign" to **Song Punch In/Out (☞p.125)**.

⑦ **Press the [START/STOP] key.**

Playback will stop, and you will return to the location that you specified in step ③.

Auto punch-in

① **Make the necessary settings in "Preparations for recording."**

② **In the Preferences tab "Recording Setup," select Auto Punch In.**

③ **In "M__–M__" specify the area that you wish to record.**

For example if you specify **M005–M008**, recording will occur only from measure 5 to measure 8.

④ **In "Location," specify a location several measures earlier than the point at which you wish to begin recording.**

⑤ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

Playback will begin.

When you reach the starting location you specified in step ④, recording will begin. Play the keyboard and operate controllers such as the joystick to record your performance. When you reach the ending location you specified in step ④, recording will end. (Playback will continue.)

⑥ **Press the [START/STOP] key.**

Playback will stop, and you will return to the location you specified in step ④.

Loop All Tracks

① **Make the necessary settings in "Preparations for recording."**

② **In the Preferences tab "Recording Setup," select Loop All Tracks.**

However since multitrack recording is not possible, the "MultiRec" check box must be **unchecked**.

③ **In "M__–M__" specify the area that you wish to record.**

For example if you specify **M004–M008**, recording will occur repeatedly (as a loop) from measure 4 to measure 8.

④ **In "Location," specify a location several measures earlier than the point at which you wish to begin recording.**

⑤ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

Playback will begin. When you reach the starting location you specified in step ③, recording will begin. Play the keyboard and operate controllers such as the joystick to record your performance. When you reach the ending location you specified in step ③, you will return to the starting location, and continue recording.

The musical data that is loop-recorded will be added to the previously-recorded data.

⑥ **During loop recording, you can press the [REC/WRITE] key or check the "Remove Data" check box to erase the specified musical data.**

If you press the [REC/WRITE] key during loop recording, all musical will be removed from the currently selected track as long as you continue pressing the key.

By **checking** the "Remove Data" check box you can erase only the specified data. During loop recording, press the note that you wish to delete, and only the data of that note number will be deleted from the keyboard as long as you continue pressing that note.

Similarly, bender data will be deleted as long as you tilt the joystick in the X (horizontal) direction, and after touch data will be deleted as long as you apply pressure to the keyboard.

When you are once again ready to record musical data, **uncheck** the "Remove Data" check box.

⑦ **Press the [START/STOP] key.**

Playback will end, and you will return to the recording start location that you specified in step ④.

✍ If Loop All Tracks is selected, normal playback will be looped as well.

Multi (multitrack recording)

Multitrack recording can be used with **overwrite**, **overdub**, **manual punch-in**, or **auto punch-in** recording methods. Here we will explain the procedure for overwrite recording, which is the most commonly used method. Multitrack recording will record multiple tracks at once.

When simultaneously recording multiple tracks of MIDI data from an external sequencer, etc.

① **Set the MIDI Clock (Global P1: MIDI "MIDI Clock") to External MIDI or External PCI/F, so that the TRITON will synchronize to the MIDI clock of the external sequencer (☞p.122).**

② **Make settings as described in "Preparations for recording" (☞p.64).**

MIDI data of the corresponding MIDI channel will be recorded on each track whose "PLAY/MUTE/REC" button is set to **REC**. (This has no relation to the settings in "Preparations for recording" step ③.)

When using multitrack recording, refer also to "Multi Rec" (☞p.50) of the *Parameter Guide*.

③ **In the Preference tab "Recording Setup," select Over Write.**

④ **Check the "Multi REC" check box.**

⑤ **Press the Program T01–08 tab and Program T09–16 tab.**

The "PLAY/MUTE/REC" button display of all tracks will read **REC**. Press the "PLAY/MUTE/REC" button to change **PLAY** to **MUTE** for any tracks that you do not wish to record.

⑥ **In P2: Trk Param MIDI Ch tab "MIDI Channel," specify the MIDI channel for each track.**

The specified channel of musical data will be recorded on that track. It is a good idea to set tracks 1–16 to MIDI channels 1–16. (This is the default setting.) Also make sure that "Status" is set either to **INT** or **BTH**.

⑦ **In "Location," specify the location at which recording will begin.**

It will not be possible to change the location if the song is being recorded for the first time, so proceed to step ⑧.

⑧ **Press the [REC/WRITE] key.**

You will be in recording-standby condition.

⑨ **Start the external sequencer.**

The TRITON's sequencer will receive the MIDI Start message transmitted by the external sequencer, and will automatically begin recording.

⑩ **When the song ends, stop the external sequencer.**

The TRITON's sequencer will receive the MIDI Stop message transmitted by the external sequencer, and will automatically stop recording. You can also press the [START/STOP] key on the TRITON itself to stop recording.

When simultaneously recording multiple tracks using the RPPR function

You can use multitrack recording to simultaneously record the playback of multiple tracks that are being triggered by the RPPR function. For the procedure, refer to "Realtime recording an RPPR performance" (☞p.73).

Using the Track Play Loop function to record

The **Track Play Loop function** lets you specify a range of measures over which each track 1–16 will loop repeatedly during playback.

As an example, we will describe how you can use the Track Play Loop function to efficiently record tracks. This is a convenient way to create a basic rhythm section.

Here we will explain the procedure of using the Track Play Loop function to playback a drum track and a bass track, while you record synth phrases.

① **Record a drum phrase on track 1.**

Select a drum program for track 1. Set "Track Select" to **Track 01**, and record a rhythm pattern of four measures or more in realtime. Alternatively, you can place or copy one of the preset patterns.

② **When you are finished recording, press the Ply Loop tab. For track 1, check "Track Play Loop." Set "Loop Start Measure" to 001, and "Loop End Measure" to 004.**

Track Select

Press the [START/STOP] key to playback, and track 1 will continue repeating measures 1–4.

note In this case, playback will end with the measures recorded in step 1. This is because the current length of the song is the number of measures that were recorded in step 1. The measure at which recording ended will be the current length of the song.

In some cases you will probably want to continue looping during playback, so that you can rehearse the phrase that you will record next. In this case, you will need to specify the length of the song. You can do this by executing the P5: Track Edit page menu command "Insert Measure" before you perform step ①. For example if you execute this command with the settings shown below, the song length will be 64 measures. (If you continue recording for longer than 64 measures, the song length will be updated to the measure at which you stopped recording.)

③ **Record a bass phrase on track 2.**

Select a bass program for track 2. In "Track Select," chose **Track 02**, and use realtime recording. During recording, track 1 will continue repeating measures 1–4. While listening to the drum phrase, record (for example) an eight-measure bass phrase.

④ **When you are finished recording, check "Track Play Loop" for track 2 also, as you did in step ②. Set "Loop Start Measure" to 001, and "Loop End Measure" to 008.**

⑤ **Next we will record synth brass riffs on track 3.**

Select a synth brass program for track 3. Use "Track Select" to select **Track 03**, and use realtime recording. During recording, track 1 will continue repeating measures 1–4, and track 2 will continue repeating measures 1–8.

note Track Play Loop will continue repeating for the length of the song. If you wish to specify the number of times that playback will repeat, or to place different musical data (drum fill-in, etc.) in the track, the song will have to be expanded as musical data. To specify the number of times that playback will repeat, execute the P5: Track Edit page menu command "Repeat Measure."

In the above example, musical events (32 measures of data) will be created out of measures 1–4 which were being repeatedly played as a loop by track 1.

Recording the arpeggiator

If arpeggiator A or B is assigned to a track selected by "Track Select," and the arpeggiator is running, the performance of the arpeggiator will be recorded on the track. For details on arpeggiator settings (☞p.98, ☞p.105). (☞p.73 in the *Parameter Guide*)

Template Song

The TRITON contains sixteen template songs. These provide program and effect settings etc. that are suitable for various styles of music. When preparing to record, you can load a template into your song to quickly and easily make appropriate settings.
For details on loading, refer to "Load Template Song" (☞p.48) in the *Parameter Guide*.

You can also make changes to a template song that you loaded, and save frequently used settings as a User Template Song.
For the saving procedure, refer to "Save Template Song" (☞p.48) in the *Parameter Guide*.

⚠ Musical data will not be saved in the user template song.

Copying combination sounds to multiple tracks

You can copy a combination sound to multiple tracks to record it.

For the copy procedure, refer to "Copy From Combination" (☞p.48) in the *Parameter Guide.*

If you wish to use the arpeggiator settings of a copied combination and record the arpeggiator performance in realtime, use "Track Select" to choose a track that uses the global MIDI channel. When you play the keyboard, it will sound in the same way as for the combination. When you perform multitrack recording, the multiple channels that are sounded by the arpeggiator will be recorded in the same way.

However, in the case of multi-track recording when multiple tracks are set to the same MIDI channel, this musical data will be combined.

Quantize

The TRITON provides a **realtime quantize "Reso"** (resolution) setting (see step ⑧, ☞p.64) that lets you correct the timing of musical data as it is being recorded, and a **"Quantize"** function (a P5: Track Edit page menu command) that lets you correct the timing of musical data that has already been input.

For example, suppose that during realtime recording you intended to play eighth notes, but that the rhythm was slightly inaccurate, as shown in figure 1 below. In such cases, you could set "Reso" (resolution) to ♪, so that when you realtime-record, the notes will automatically be adjusted to the correct timing as shown in figure 2.

Alternatively, if data that was recorded without using realtime quantize plays back as shown in figure 1, you could select the P5: Track Edit page menu command "Quantize," set its "Resolution" parameter to ♪, and press the **OK button** to correct the timing as shown in figure 2.
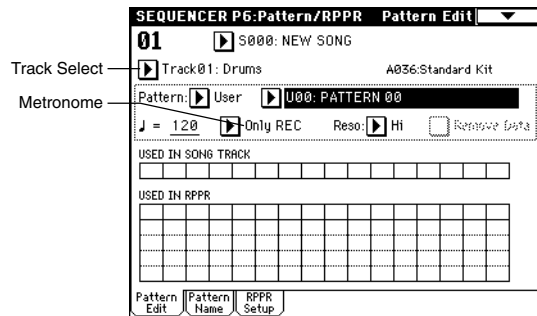

Realtime recording to a pattern

Before you begin recording a pattern, turn off the protect setting in Global mode (☞p.37).

When realtime-recording a pattern, a pattern of the specified number of measures will playback repeatedly, allowing you to continue adding musical data to it.

① **In Sequencer mode P6: Pattern/RPPR, select the Pattern Edit tab.**

② **Use "Track Select" to select the track.**

The pattern will sound with the program and settings of that track.

③ **In "Pattern," select the user pattern number U00–U99 that you wish to record.**

④ **If necessary, set "Metronome" and "Reso" (resolution).**

⑤ **Select the "Pattern Parameter" page menu command.**

A dialog box will appear.

⑥ **In "Length," specify the length of the pattern. In "Meter," specify the time signature.**

⑦ **Press the OK button.**

This completes preparations for recording.

⑧ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

Pattern recording will begin. Play the keyboard and operate the joystick or other controllers to record your performance.

If arpeggiator A or B is assigned to the track selected in "Track Select" and the arpeggiator is running, the performance of the arpeggiator will be recorded in the pattern. For details on arpeggiator settings (☞p.98, ☞p.105). (☞p.73 in the *Parameter Guide*)

note If you want the arpeggio to start at the moment that recording begins, turn off ARPEGGIATOR [ON/OFF], hold down a chord on the keyboard, and then start recording. The arpeggiator will start at the moment that recording begins, and the arpeggio will be recorded.

When you record to the end of the pattern, you will return to the beginning of the pattern and continue recording.

The musical data that is recorded will be added to the previously-recorded data.

⑨ **During pattern recording, you can erase unwanted musical data by pressing the [REC/WRITE] key, or by checking the "Remove Data" check box.**

For details refer to "Loop All Tracks," step ⑥ (☞p.66).

⑩ **Press the [START/STOP] key.**

Pattern recording will end.

To use a user pattern that was recorded in this way (or a preset pattern), you can execute "Put to Track" to assign the pattern to a track (☞p.70 in the *Parameter Guide*).

A pattern can also be used in the RPPR Setup tab (☞p.73). (☞p.71 in the *Parameter Guide*)

In the LCD screen, "USED IN SONG TRACK" indicates how that pattern is assigned to the tracks. "USED IN RPPR" indicates how that pattern is used in RPPR Setup (i.e., the keys and tracks to which the pattern is assigned).

⚠ Although you may operate controllers etc. to record control data in a pattern, you should restore the control data to its normal value within the pattern. If you fail to restore the normal value, unnecessary control data may remain in a "stuck" position when you place the pattern in a song or use the RPPR function to play the pattern. However, the following control data will be automatically reset to the following values when the song or RPPR function finishes playing the pattern, or when playback is halted.

Controller	Reset value
Modulation 1 (CC#01)	00 (zero)
Modulation 2 (CC#02)	00 (zero)
Expression (CC#11)	127 (max)
Ribbon controller (CC#16)	64 (center)
Damper switch (CC#64)	00 (zero)
Sostenuto switch (CC#66)	00 (zero)
Soft switch (CC#67)	00 (zero)
EG sustain level (CC#70)	64 (center)
Resonance level (CC#71)	64 (center)
EG release time (CC#72)	64 (center)

EG attack time (CC#73)	64 (center)
Low pass filter cutoff (CC#74)	64 (center)
EG decay level (CC#75)	64 (center)
LFO1 speed (CC#76)	64 (center)
LFO1 depth (pitch) (CC#77)	64 (center)
LFO1 delay (CC#78)	64 (center)
Filter EG intensity (CC#79)	64 (center)
SW1 modulation (CC#80)	00 (zero)
SW1 modulation (CC#81)	00 (zero)
Channel after touch	00 (zero)
Pitch bender	00 (zero)

Step recording on a track or pattern

To step record on a track, use the P5: Track Edit "Track Edit" tab page menu command "Step Recording." To step record on a pattern, use the P6: Pattern/RPPR "Pattern Edit" tab page menu command "Step Recording."

For details on step recording on a track or pattern, refer to p.61, 69 in the *Parameter Guide*.

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Editing

Track editing

Track editing is performed using the page menu commands of P5: Track Edit.

Event Edit allows you to modify previously-recorded data or to insert new data. **Track Edit** commands such as **Create Control Data** allow you to insert bend, after touch, and control change data, and to **delete**, **copy**, **insert** and **move** tracks (☞p.62 in the *Parameter Guide*).

Pattern editing

Using the page menu commands of the P6 Pattern Edit tab and the Pattern Name tab, you can use **event editing** to modify the recorded data or insert new data, and execute commands to **delete**, **copy**, or **bounce** patterns (☞p.69 in the *Parameter Guide*).

Song editing

The page menu commands of P0, 2, 3, 4, and 7 allow you to **rename**, **delete**, and **copy** songs (☞p.47 in the *Parameter Guide*).

Creating and playing a Cue List

A cue list allows you to play multiple songs in succession. For example you can create a separate song for each portion (introduction, melody A, melody B, bridge, and ending) of a composition, and use the cue list to specify the order of each portion and the number of times that it will be repeated to complete the song. You can also use this as a jukebox function that will playback completed songs in the order you specify.

As an example, we will explain the procedure for creating individual songs for the introduction, melody A, bridge, and ending, and then using a cue list to bring these songs together to form a complete song.

① **Create separate songs for the introduction, melody A, bridge, and ending.**

S000: Intro (4 measures)
S001: A (8 measures)
S002: Bridge (8 measures)
S003: Ending (4 measures)

Record the songs.

When doing so, first create the program settings, track settings, and effect settings for one song (e.g., S000), and then use the P0 page menu command "Copy From Song" to copy these settings to the other songs (S001–S003).

⚠ Keep the track settings unified as far as possible. After the cue list is completed, you can convert it into a song. When this is done, the track settings of each song (program, pan, volume etc.) will be converted into musical data and reproduced, but unless the MIDI channel settings are the same, the resulting song may not be the same as the cue list playback.

② **Select Sequencer mode P1: Cue List.**

With the default settings, song **S000** will be selected for "Step" **01**, and **End** will be selected for "Step" **02**.

③ **Press the Insert button three times. Steps 01–04 will become active.**

④ **Select a song for each "Step" 01–04.**

Select **S000: Intro** for "Step" **01**, **S001: A** for "Step" **02**, **S002: Bridge** for "Step" **03**, and **S003: Ending** for "Step" **04**.

⑤ **In "Repeat," specify the number of times that the song at each step will repeat.**

Set "Step" **01** to **02**, "Step" **02** to **04**, "Step" **03** to **02**, and "Step" **04** to **01**.

⑥ **If necessary, check the "Load FX?" check box.**

This specifies whether or not the effect settings will also be changed when the song at that step is played. If you want the effect settings to change, check this box. For this example, **check "Step" 01**.

⚠ Depending on the effect settings, a certain amount of time may be required for the effects to be switched. If this occurs, the playback will not be smoothly connected from song to song.
To ensure a smooth transition from song to song, check "FX Load?" for "Step" 01. Do not check "FX Load?" for the remaining steps. This way, the effect settings will be made before playback begins, and there will be no time lag when cue list playback is started or when switching from song to song. Although it will not be possible to change effect types within the cue list, you can use dynamic modulation or MIDI control changes such as Effect Control to control the effects within the cue list, for example applying reverb more deeply on certain songs, or raising the LFO speed for a specific song. We recommend this method if you will be using a cue list to construct the song. When you execute the "Convert to Song" page menu command, the effect settings of the "Step" 01 song will be specified for the song that results from the conversion.

Even if "Load FX?" is not checked, there may be cases in which a time lag in the transition between songs, depending on the musical data of the song. Also, there may be cases in which the musical data is not played at the correct timing at the transition between songs. If this occurs, you can edit the musical data of the song, or convert the cue list to a song for playback. If you use "Convert to Song" to convert the cue list to a song, there will be no time lag during playback at the transition between songs, and the musical data will be played at the correct timing.

- "Step": The arrow will indicate the currently playing step. ▶ indicates the currently selected "Step." If you set "Current Step" while stopped, the display will change.
- "Measure": Indicates the starting measure of that step.
- "Meter": Indicates the currently-playing time signature. This cannot be changed.

⑦ **This completes the settings. Press the [START/STOP] key to begin playback from the step specified in "Current Step."**

Intro (measures 1–4) → Intro (measures 5–8), A (measures 9–16) → A (measures 17–24) → A (measures 25–32) → A (measures 33–40) → Bridge (measures 41–48) → Bridge (measures 49–56) → Ending (measures 57–60)

- The name of a cue list can be specified by the "Rename Cue List" page menu command.
- If you wish to use the tempo that is specified by the song of each step, set "Tempo Mode" to **Auto**. If this is set to **Manu** (manual), playback will use the tempo that you specify in "♩=".
- If you specify **Continue to Step01** for the last step, the cue list will continue playing back repeatedly.
- If you set "Repeat" to **FS**, a foot switch connected to the [ASSIGNABLE SWITCH] jack will control the timing at which the song stops repeating. Set "Foot Switch Assign" (Global P2: Controller) to **Cue Repeat Control**.
- When you play the keyboard, the program of the track selected by "Track Select" will sound. If a different program is selected for each song, the program specified for the currently playing song will sound.

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Converting a cue list to a song

Although it is not possible to record additional material onto tracks in a cue list, you can convert a cue list to a song, and then record solos etc. to vacant tracks. You will also need to convert a cue list to a song if you wish to save it on a floppy disk as SMF data.

○ **Select the "Convert to Song" page menu command.**
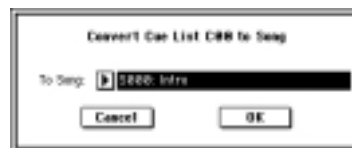
In "To Song," specify the destination song number for the converted data. The cue list name will automatically be assigned as the song name of the converted data. (For details and cautions regarding "Convert to Song," refer to p.53 in the *Parameter Guide*.)

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RPPR (Realtime Pattern Play/ Recording) function

For details on the RPPR function, refer to "Playing with the RPPR function" (☞p.33). Here we will give an example of how to make RPPR settings, and how to playback and record.
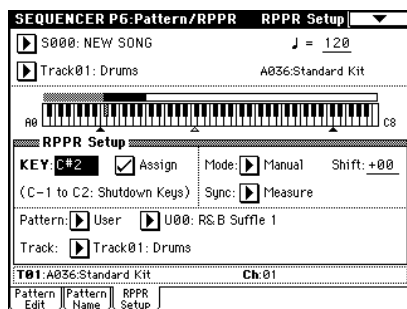
RPPR settings

RPPR settings are made individually for each song. To use RPPR playback, check the "RPPR" check box. If this is **checked**, the RPPR function will be turned on, and playing the keyboard will cause patterns to playback according to the RPPR settings. If the "RPPR" check box is **not checked**, the song will play normally even if RPPR settings have been made.

① **Make track settings just as when preparing to record tracks.**

Use steps ①–④ of "Preparations for recording" (☞p.64) to specify the program for the track.

② **In Sequencer mode P6: Pattern/RPPR, select the RPPR Setup tab.**

In this page, the RPPR function will automatically be on.

```
SEQUENCER P6:Pattern/RPPR     RPPR Setup    ▼
  ▶ S000: NEW SONG                    ♩ = 120
  ▶ Track01: Drums              A036:Standard Kit

  A0 ▏▎▏▎▏▎▏▎▏▎▏▎▏▎▏▎▏▎▏▎▏▎▏ C8
  ▁▁RPPR Setup▁▁
  KEY: C#2   ☑ Assign   Mode: ▶ Manual    Shift: +00
  (C-1 to C2: Shutdown Keys)   Sync: ▶ Measure
  Pattern: ▶ User   ▶ U00: R&B Suffle 1
  Track: ▶ Track01: Drums
  T01:A036:Standard Kit          Ch:01
  Pattern  Pattern  RPPR
   Edit     Name    Setup
```

③ **Use "KEY" to select the key to which you wish to assign a pattern.**

You can also select a key by holding down the [ENTER] key and playing a note. **Check** the "Assign" check box. (You can make assignments for keys C#2–C8. Keys C2 and below are used for stopping the pattern playback, and cannot be assigned.)

④ **Select the pattern that will playback when you press the key selected in step ③.**

Use "Pattern" to select the pattern type (either **Preset** or **User**), and use "Pattern Select" to select the pattern. A user pattern selected here must have already been recorded or copied in the Pattern Edit tab.

⑤ **Select the track that will play this pattern.**

The pattern will play according to the program and other settings of the track you select here.
If you wish to play a drum pattern, choose a track for which a drum program is selected. If you wish to play a bass pattern, select a track for which a bass program is selected.

⑥ **Set "Mode," "Shift" and "Sync" to specify how the pattern will play, and how it will synchronize.**

When you press the key to which the pattern is assigned, the pattern will begin playing. The method of stopping playback will depend on the "Mode" setting, but pressing the **C2** or lower key will stop all patterns.
For details on these parameters and on how to stop the playback, refer to p.71 in the *Parameter Guide*. The assigned keys will be shown as a keyboard graphic in the LCD screen.

note Unassigned keys can be used for normal keyboard performance. Use "Track Select" to select the track that will be played from the keyboard. For example you might assign backing patterns such as drums and bass to the **C#2–B2** keys and use these keys to control pattern playback, and use keys **C3** and above to play solos in realtime. It is a good idea to keep the assigned keys together in this way.

P6: Pattern/RPPR page RPPR Setup tab
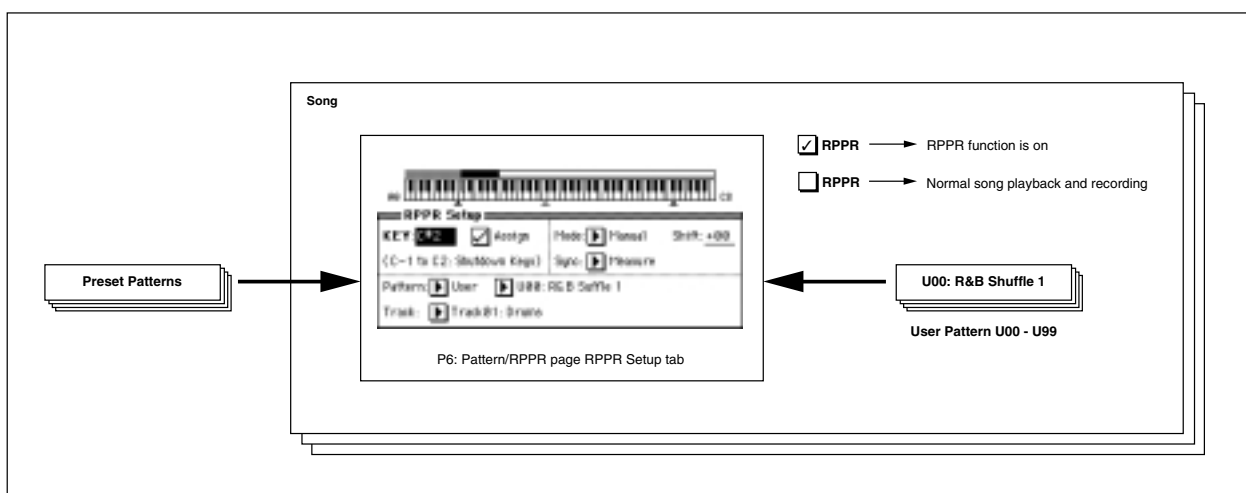
RPPR playback

Here's how you can use the RPPR function to perform in the P0: Play/REC page. You can also playback a song while you perform with the RPPR function.

① **In Sequencer mode, select P0: Play/REC.**

② **Check the "RPPR" check box. The RPPR function will be turned on. The on/off setting is memorized for each song.**

③ **Play the keyboard, and patterns will begin playing according to the RPPR settings.**

note Keys to which no pattern is assigned can be used for normal keyboard performance. (When you change "Track Select," the track played by the keyboard will change.)

note If you wish to trigger the RPPR function from an external MIDI device, use the MIDI channel that is selected for "Track Select."

④ **To turn off the RPPR function, uncheck the RPPR check box.**

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RPPR performance techniques

• Pattern playback for a key with a "Sync" setting of **Beat** or **Measure** will synchronize to the pattern playback of the first key. (For details refer to "Sync" on p.71 in the *Parameter Guide*.)

• Pattern playback for a key with a "Sync" setting of **SEQ** will synchronize to the playback of the song. Start song playback, and then press the key. The pattern playback will start in synchronization with the measures of the song.

⚠ Synchronization will be lost if you use the [<<REW] or [FF>>] keys while a song is playing.

note If you want RPPR pattern playback to begin at the moment that song playback begins, it is a good idea to insert an empty measure containing no musical data before the song playback begins.

note If the song is stopped, the pattern will synchronize to the timing of the arpeggiator.

• If you are playing the pattern in synchronization (when "Sync" is **Beat**, **Measure**, or **SEQ**), the pattern will start accurately if you play the note slightly earlier than the timing of the beat or measure. Even if you play the note slightly later than the beat or measure (but no later than a 32nd note), it will be considered to have started at the beat or measure, and the beginning of the pattern will be compressed so that the remainder of the playback will be correct.

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Realtime recording an RPPR performance

Multitrack recording

You can use multitrack recording to simultaneously record the performance of multiple tracks played by the RPPR function.

The pattern will be recorded as musical data on the track used by RPPR.
RPPR settings for recording are made in the P6: Pattern/RPPR tab RPPR Setup. Here if you set "Sync" to **SEQ**, the pattern playback will be recorded in synchronization with the sequencer. For details on how the "Sync" setting will affect the start timing of the pattern playback (☞p.71 in the *Parameter Guide*).
With a setting of **SEQ**, patterns played by the RPPR function while the sequencer is playing or recording will start in synchronization with the measures of the sequencer. The pattern of a key pressed during the pre-count before recording begins will start simultaneously with the beginning of recording, and will be recorded.

⚠ When recording the playback of patterns triggered by RPPR, the timing of the recorded events may be slightly skewed. If this occurs, try setting "Reso" (Realtime Quantize Resolution) to a setting other than **Hi**.

① **Using the procedure described in "Preparations for recording" (☞p.64), make the necessary settings.**

Your keyboard performance on keys that are not assigned to the RPPR function will be recorded on the track specified by "Track Select."

② **In the P0: Play/REC tab Preference, set "Recording Setup" to Over Write.**

⚠ Multitrack recording can be used in **Over Write**, **Over Dub**, **Manual Punch In**, and **Auto Punch In recording modes**. Here we will describe the procedure for the most commonly used overwrite recording.

③ **Check the "Multi REC" check box.**

④ **Press the Program T01–08 or Program T09–16 tab. The "PLAY/MUTE/REC" button of each track will indicate REC. For the tracks that you do not wish to record, press the "PLAY/MUTE/REC" button to select either PLAY or MUTE.**

You will record all tracks played by RPPR and the keyboard performance track selected by "Track Select."

For example if you are using tracks 1 and 2 for RPPR playback and using track 3 for keyboard performance, you would set **REC** only for tracks 1, 2, and 3 as shown below.

⑤ **Check the "RPPR" check box.**

The RPPR function will be on.

⑥ **In "Location," specify the point at which recording will begin.**

It will not be possible to change the location if you are recording the song for the first time, so proceed to step ⑦.

⑦ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

Recording will begin.
When you press a key to which a pattern is assigned, that pattern will begin playing. Keys to which no pattern has been assigned will sound as usual for the track specified by "Track Select," and will be recorded.

✍ If you want a pattern to begin playing at the moment that recording begins, press the key during the pre-count. (Make sure that the RPPR "Sync" is set to **SEQ**.)

⑧ **Press the [START/STOP] key.**

Recording will end, and the location will return to the point at which you began recording.

⑨ **To cancel multitrack recording, uncheck the "Multi REC" check box in step ③.**

Single track recording

You can also use single track recording to record an RPPR performance.

① **Make track settings in the same way as for multi-track recording.**

② **In P0: Play/REC, check the RPPR check box.**

The RPPR function will be turned on.

③ **In the same way as for single track recording of a normal song, use "Track Select" to select the track that you wish to record.**

④ **In "Location," specify the point at which recording will begin.**

It will not be possible to change the location if you are recording the song for the first time, so proceed to step ⑤.

⑤ **Press the [REC/WRITE] key, and then press the [START/STOP] key.**

Recording will begin.

✍ In the case of single track recording, only the track specified by "Track Select" will actually be recorded even if the RPPR performance consists of multiple tracks. Of the patterns that are assigned by the RPPR settings, only the performance of the patterns whose track matches will be recorded.

⑥ **Press the [START/STOP] key.**

Recording will end, and the location will return to the point at which recording began.

Sampling mode

The TRITON provides high-performance mono/stereo sampling.

⚠️ None of the multisample or sample data in Sampling mode is backed up when the power is turned off. If you wish to keep this data, you must save it on a floppy disk or external SCSI device (if the separately sold EXB-SCSI option is installed) before turning off the power.
Immediately after the power is turned on, the TRITON will contain no multisample or sample data. If you wish to playback or edit data, you must first load previously-saved data from floppy disk or an external SCSI device.

Features of sampling mode

- **48 kHz 16 bit linear mono/stereo sampling**.
- **16 Mbytes** of sample (waveform) data memory is standard, allowing you to sample for approximately 2 minutes 54 seconds in monaural, or approximately 1 minute 27 seconds in stereo. By installing 72 pin SIMM modules, you can expand the memory to a **maximum of 64 Mbytes**, which will allow you to record up to four 2 minute 54 second samples in mono (or four 1 minute 27 second samples in stereo), for a maximum total of approximately 11 minutes 39 seconds of sampling time. (For details on expansion, refer to p.237 in the *Parameter Guide*.)
- A **maximum of 1,000 multisamples and 4,000 samples** can be created.
- In Disk mode you can load multisample/sample data from a floppy disk or SCSI media (when the separately sold EXB-SCSI option is installed).
- Korg format or AKAI (S1000/S3000) format sample data, or AIFF or WAVE files can be loaded. (When this data is loaded into the TRITON, it will all be handled as Korg format sample data.)
- The external audio source that you are sampling can be processed by the **five insertion effects** to apply effects such as compressor, EQ, or lo-fi. The LFO frequency or delay time of the effect can be specified as a BPM value, which is highly effective when sampling phrase loops etc.
- Both **auto sampling** and **manual sampling** can be performed. With auto sampling, recording will begin automatically when the input level exceeds a specified threshold. In either method of sampling, you can make pre-trigger settings.
- The audio input supports both mic and line level signals.
- Data that is sampled can be immediately played from the keyboard. It can also be **converted into a program by a simple operation**, and used as an element of the TRITON's HI synthesis system. Multisamples/samples that have been converted

into a program can be used in a combination or song.
- The waveform can be viewed in the LCD screen, and edited by a variety of waveform editing commands that include **rate convert** (down-sampling) and reverse playback.
- Start, loop start, and end addresses can be specified in units of a single sample. Loop tune, **reverse playback**, and **loop lock functions** are also supported.
- The **Use Zero function** automatically detects zero cross points, making it easy to find the beginning or end of the sample, or click-free locations.
- The **grid function** displays a BPM-based grid on the waveform display, helping you to create loops or make waveform edits that match the desired BPM.
- Each multisample allows you to create up to **128 indices**. Each index consists of a sample assignment, a key zone, an original key, a playback pitch, and settings such as level.
- The "Keyboard & Index" display lets you edit a multisample while viewing the assignments and zones of each sample.
- The playback pitch of each index can be matched to a desired BPM value by using the **BPM Adjust function** (playback pitch adjust) to set the loop frequency.
- Sample names and multisample names of up to 16 characters can be assigned. Sample names and multisample names can also be viewed in Disk mode (☞p.132 "Translation" in the *Parameter Guide*).

Pages in Sampling mode

○ **For the procedure of entering each page or modes, refer to "Basic operation of the TRITON" (☞p.12).**

P0: Recording	Record samples. Select the sample or multisample to record, make various recording settings and AUDIO INPUT settings. View the memory status.
P1: Sample Edit	Perform waveform editing etc. on samples that were sampled or loaded in Disk mode.
P2: Loop Edit	Set sample playback parameters: Start, Loop Start, End Address, Loop on/off, and Reverse on/off.
P3: Multisample	Edit multisamples. Set and edit the sample assignments, zone, and original key etc.
P4: Controller Setup	Controller settings.
P5:	---
P6:	---
P7:	---
P8: Insert Effect	Select and make settings for the insert effects used in sampling.
P9:	---

note Sampling can be performed in any page P0–P8 of Sampling mode by using the [REC/WRITE] key and the [START/STOP] key. Recording-related settings such as input level are made by the parameters of P0: Recording, and these settings are valid for the other pages as well.

note The selected multisample or sample can be played from the keyboard in any page, allowing you to hear the results of your editing in each page.

How Sampling mode is organized

In Sampling mode

• An external audio signal from an external audio device or microphone connected to the AUDIO INPUT 1 and 2 jacks is passed through an analog/ digital convertor, and recorded (sampled).
• You can edit the waveform and loop settings etc. of sample data that you sampled or that you loaded from a floppy disk, CD-ROM etc., in Disk mode.
• You can assign samples to the keyboard to create a multisample. These samples and multisamples can be easily converted to a program using the "Convert MS to Program" page menu command, and these programs can be used immediately in a combination or song.

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Sampling frequency and bit resolution

As shown in the diagram, sampling reads the level of the analog signal at fixed intervals along the time axis, and stores the levels in memory as digital data.
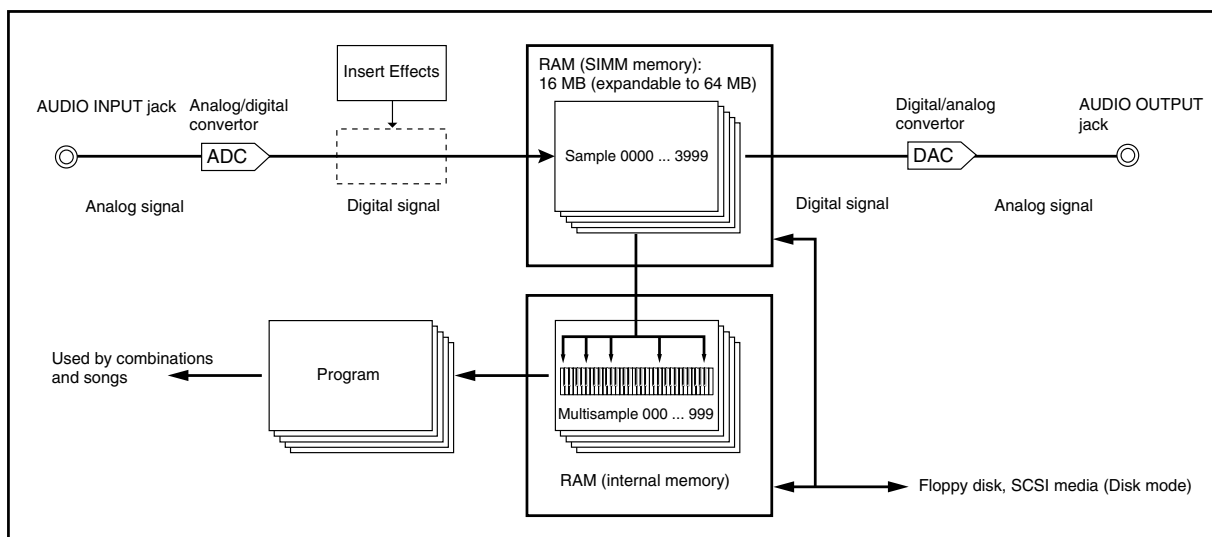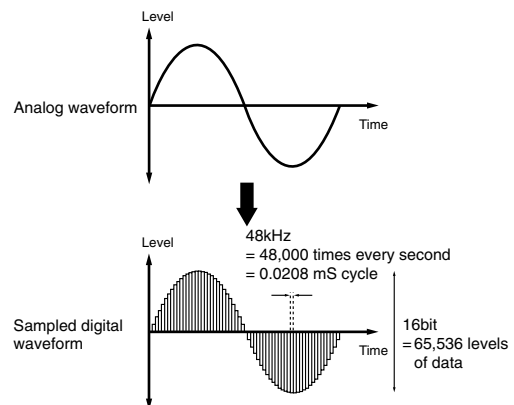
The "fixed intervals" mentioned above are generally expressed as the "sampling frequency." 48 kHz (kilohertz) means that sampling is performed 48,000 times each second, and that the interval is 1 (second)/48,000 (times) = approximately 0.00002083 (seconds) = approximately 0.02083 mS (millisecond).
The higher the sampling frequency is, the closer to the original analog signal the waveform in memory will be.

Each level is read, and converted into digital data. The accuracy at this time is determined by the bit resolution. The infinite number of levels in the analog signal are converted into digital data with a finite number of levels. With 16 bit resolution, each level is indicated in 65,536 steps (the sixteenth power of two).
The greater the bit resolution is, the closer to the original analog signal the waveform in memory will be.

48 kHz 16 bit sampling is the same quality as in audio devices such as DAT. A CD uses 44.1 kHz 16 bit sampling, which is a slightly lower sampling frequency.

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Samples and Multisamples

Samples

The data that is recorded (sampled) into internal memory or loaded from a file is referred to as a sample or sample file. Samples consist of the actual waveform data, and parameters that specify how the data will be played back, such as Start, Loop Start, and End Address.
Samples can be used by multisamples and drum kits.
The TRITON can hold a maximum of 4,000 samples in its internal memory.

note The TRITON can share a single waveform among multiple samples. This allows you to create multiple samples with different playback addresses from the same waveform without wasting internal memory. For example, suppose that you have waveform data that records a voice saying "One-Two-Three." This single piece of waveform data could be shared by three samples, with the playback of sample A producing "One-Two-Three," sample B producing "One-Two," and sample C producing "Two-Three." Refer to "Copy Sample" (p.83) in the *Parameter Guide.*

Multisamples

A multisample consists of settings that make one or more samples sound in different areas of the keyboard. A multisample consist of between one and 128 "indexes." Each index contains parameters that specify the sample that will playback, the zone for which it will playback, the original pitch key, the playback pitch, and level etc.

● ●

Using multisamples

When sampling an instrument that is able to produce a wide range of pitches, such as a piano, recording just one sample and using it (playing it back) over the entire pitch range will not produce a natural-sounding result. By using a multisample and assigning a separately recorded sample to each portion of the pitch range, you can produce a more natural sound. For example, you might record one sample per octave, and assign each of these samples to an index (keyboard area). All of the instrumental sounds in the TRITON's internal preset ROM multisamples are constructed in this way.

You can use a multisample to arrange multiple phrase samples or rhythm loops across the keyboard, and play two or more samples simultaneously. Since a different phrase could be assigned to each key, you can perform just as though you were using a pad-type sampler. Alternatively, these samples could be assigned at one-octave intervals, and played as phrase variations with different playback pitches.

The TRITON can hold a maximum of 1,000 multisamples in its internal memory.
A multisample can be selected as the oscillator for a program, and played as a program. In a combination, they can be combined with preset programs, and used in a song. They can be used with the arpeggiator to produce interesting results (for example, by using the arpeggiator to automatically play sound effects or spoken samples).
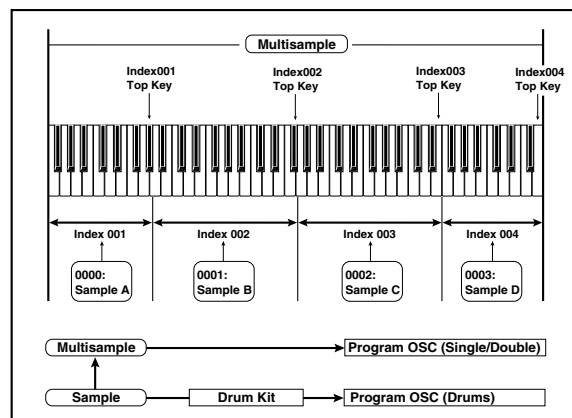
# Sampling (recording a sample)

Preparations for sampling

Connections and settings for a monaural source

When sampling in monaural from a mic, the output of an external audio device or mixer, or an instrumental sound such as guitar or synthesizer, connect the source to the AUDIO INPUT 1 or 2.

note Guitars etc. with active pickups can be input directly, but instruments with passive pickups (i.e., without internal preamps) cannot be sampled at an appropriate level, due to impedance mismatching. When connecting such instruments, use a preamp or effect device.
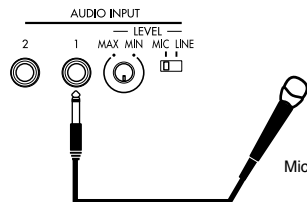
① **Connect the mic or external audio device to the AUDIO INPUT 1 jack.**

② **Set the AUDIO INPUT [MIC-LINE] switch to match the input source. For input sources with a low input level, such as a microphone, select the MIC position. For other sources, select the LINE position.**

The AUDIO INPUT [MIC-LINE] switch affects both the AUDIO INPUT 1 and 2 jacks.

③ **The AUDIO INPUT [LEVEL] knob will be adjusted later. For now, set it near the center.**

④ **In Sampling mode P0: Recording, select the Input/ Setup tab.**
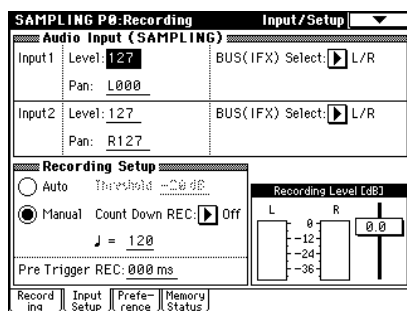
⑤ **In "Audio Input (SAMPLING)," set various parameters that specify how the signal from the AUDIO INPUT jack will be received.**

• "Level" adjusts the volume. Normally you will set this to **127**.
• "Pan" adjust the panning. For this example set it to **L000**.

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• Set "BUS (IFX) Select." If you wish to use the TRITON's insert effects to process the incoming sound, select **IFX1–5** here. For this example, select **L/R**. The input sound will be sampled just as it is.

Be aware that when you change the setting from **Off** to **L/R** or **IFX1–5**, the volume level in the AUDIO OUT L/MONO and R jacks and in the headphones may rise excessively.

"Input 1" controls the AUDIO INPUT 1 jack, and "Input 2" controls the AUDIO INPUT 2 jack.
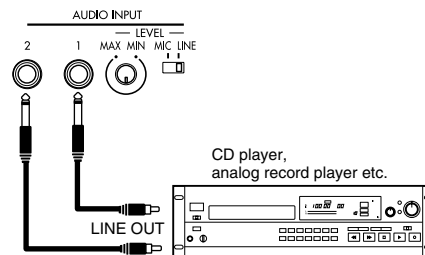
The settings up to this point will cause the sound from the AUDIO INPUT 1 jack to be output from the AUDIO OUT L/MONO jack and from the L channel of the headphones.

⑥ **Use the AUDIO INPUT [LEVEL] knob to set an appropriate level.**

If the level is excessive at the TRITON's input stage, the display will indicate "ADC OVERLOAD !!" (analog/digital converter is overloaded). Adjust the AUDIO INPUT [LEVEL] knob or the output level of the external audio device just low enough so that the "ADC OVERLOAD !!" does not appear (i.e., the maximum level that does not cause an overload).

Connections and settings for a stereo source

When sampling in stereo from a stereo mic, the output of an external audio device or mixer, or synthesizer, connect the source to the AUDIO INPUT 1 and 2 jacks.

① **Connect the L source to AUDIO INPUT jack 1, and the R source to jack 2.**

② **Make the settings described in steps ②–④ of "Connections and settings for a monaural source."**

③ **In "Audio Input (SAMPLING)," set various parameters that specify how the signal from the AUDIO INPUT jacks will be received.**

• "Level" adjusts the volume. Set both Input 1 and Input 2 to **127**.
• "Pan" adjust the panning. Set Input 1 to **L000**, and Input 2 to **R127**.
• Set "BUS (IFX) Select." For this example, select **L/R** for both Input 1 and Input 2.

The settings up to this point will cause the sound from the AUDIO INPUT 1 and 2 jacks to be output in stereo from the AUDIO OUT L/MONO and R jacks and from the headphones. The sound of AUDIO INPUT 1 will be output from the left, and AUDIO OUTPUT 2 from the right.

④ **Use the AUDIO INPUT [LEVEL] knob to adjust a suitable input level. (Refer to step ⑥ of "Connections and settings for a monaural source")**

The AUDIO INPUT [LEVEL] knob adjusts both AUDIO INPUT 1 and 2.

Using an insert effect

The TRITON's insert effects can be applied to the sound that is being input from the AUDIO INPUT 1 and 2 jacks, allowing you to record a sample with effects applied. As an example, we will explain the procedure for applying an insert effect to a stereo source and sampling the result.

① **Make the settings of step ① and ② in "Connections and settings for a stereo source."**

② **Set the "Audio Input (SAMPLING)" parameters.**

- Set "BUS (IFX) Select" to **IFX1** for both Input 1 and 2.
- Set "Level" and "Pan" to the same settings as in step ③ of "Connections and settings for a stereo source." With these settings, the stereo source will be sent to insert effect 1 (IFX 1).

③ **Use the AUDIO INPUT [LEVEL] knob to adjust a suitable input level. (Refer to step ⑥ of "Connections and settings for a monaural source.")**

④ **In P8: Insert Effect, select the Insert Fx tab.**
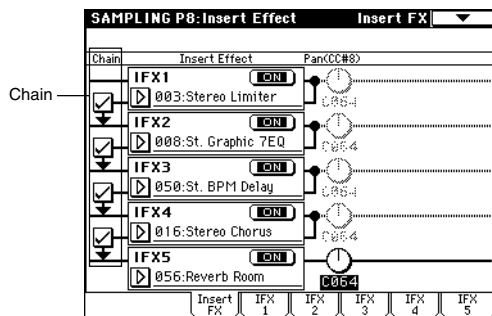
Up to five insert effects can be connected in series. Make settings for "Chain," "Insert Effect," and the "Pan" of the sound after it has passed through the insert effect. For details on the settings, refer to p.109, 107, and to p.26, 99 in the *Parameter Guide*.

Examples of settings using the insert effects are given in "Sample Mode" (p.82) in the *Parameter Guide*.

Manual sampling

There are two methods of sampling: **manual** and **auto**.

In **manual** mode, sampling is started by pressing the [START/STOP] key from the recording standby condition (entered by pressing the [REC/WRITE] key once). For the sampling procedure in **auto** mode, refer to "Auto sampling" (☞p.80).

① **In P0: Recording, select the Input/Setup tab.**

② **Use the "Recording Setup" radio buttons to select Manual.**

This will select manual recording mode.
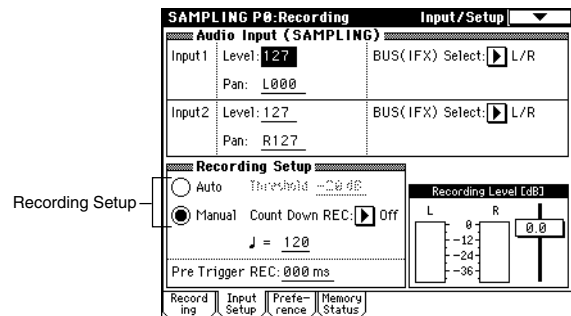
③ **In P0: Recording, select the Recording tab.**
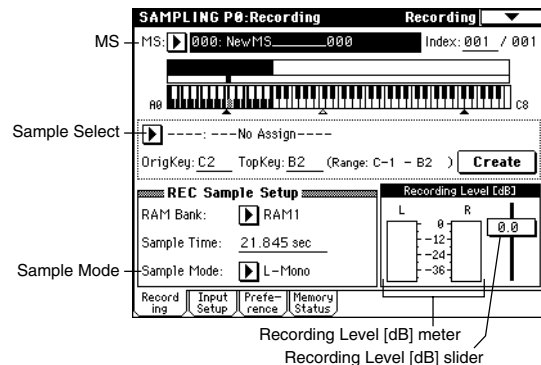
④ **Select "MS" the multisample (MS). For this example, select 000: NewMS_____000.**

Immediately after the power is turned on, **000: NewMS_____000** will be created automatically. Use the numeric keys [0]–[9] to input the multisample number that you wish to record, and press the [ENTER] key. Alternatively, you can press the popup button and select a multisample from the popup menu. If you select a new number, the Create New Multisample dialog box will appear. Press the **OK button**.

To specify the name, use the "Rename MS" page menu command.

⑤ **In "Sample Select," select the sample that you wish to record. For this example, select ----: ---No Assign----.**

Immediately after the power is turned on, this will be set to **----: ---No Assign----**. You may sample even in this condition. The sample will be automatically recorded to a vacant sample number.
If you wish to first specify a sample number to which the sample will be recorded, use the numeric keys [0]–[9] and [ENTER] key or the popup menu to select the number.

A sample will be created automatically when you record.
A sample name such as **0000: NewSample_0000** will be assigned automatically. This name can be edited using the "Rename Sample" page menu command.

If you execute sampling when an existing sample such as **0000: NewSample_0000** is selected, the new sample will be sampled to a vacant sample number. You do not need to be concerned with this setting even when you continue recording successive samples.

⑥ **Select the "Sample Mode."**

Monaural source: If the "Audio Input (SAMPLING)" setting "Pan" is **L000**, set "Sample Mode" to **L-Mono**. If "Pan" is **R127**, set "Sample Mode" to **R-Mono**.
Stereo source: Set the "Sample Mode" to **Stereo**.

⑦ **Press the [REC/WRITE] key.**

If an input signal is present, the Recording Level [dB] meter will move according to the Pan setting in "Audio Input (SAMPLING)." This is the recording-standby condition.

In the case of "Connections and settings for a monaural source," the L meter will move. In the case of "Connections and settings for a stereo source," the L and R meters will move.

Use the "Recording Level [dB]" slider to adjust the level. For this example, set the slider to the **0.0** setting (☞p.82 in the *Parameter Guide*).

⑧ **At the moment that you wish to begin sampling, press the [START/STOP] key.**

Sampling will begin.

⑨ **Sampling will stop when you press the [START/STOP] key once again.**

✍ Sampling will stop automatically when the remaining amount of memory reaches zero.

⑩ **Play the C2 note on the keyboard.**

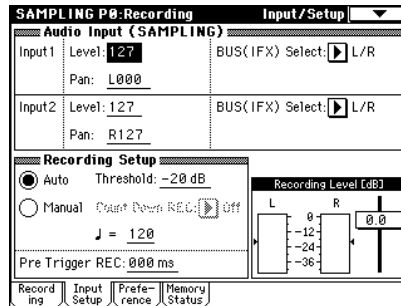The sample you recorded will play back.

If you wish to continue recording samples, repeat steps ⑥–⑨.

Auto sampling

There are two ways to record a sample: **manual** and **auto**.

With **auto**, sampling will begin when the input signal exceeds the specified threshold level. For details on **manual** sampling, refer to "Manual sampling" (☞p.79).

① **In the P0: Recording, select the Input/Setup tab.**

② **Use the "Recording Setup" radio buttons to select Auto.**

This will select auto recording mode.

③ **Set the "Threshold."**

When the input signal exceeds the "Threshold" level, sampling will begin automatically. The black triangles at both sides of the Recording Level [dB] meter display will indicate the specified level.

📝 When you use auto sampling, the attack portion of the sampled input sound may be lost, depending on the "Threshold" setting. If this occurs, you can use "Pre Trigger REC" to sample the sound that occurs before sampling actually begins. Normally you will set this to **0**, and use it only when necessary.

④ **In P0: Recording, select the Recording tab.**

⑤ **Select the "MS" (multisample) (refer to "Manual sampling" step ④).**

⑥ **Select the sample in "Sample Select" that you wish to record (refer to "Manual sampling" step ⑤).**

⑦ **Specify the "Sample Mode" (refer to "Manual sampling" step ⑥).**

⑧ **Press the [REC/WRITE] key.**

⑨ **Press the [START/STOP] key.**

When the input signal exceeds the "Threshold" level, sampling will begin automatically.

⑩ **Sampling will stop when you press the [START/STOP] key once again.**

✍ Sampling will end automatically if the remaining amount of memory reaches zero.

⑪ **Play the C2 note on the keyboard, and you will hear the sound that you sampled.**

Creating multisample indexes and sampling
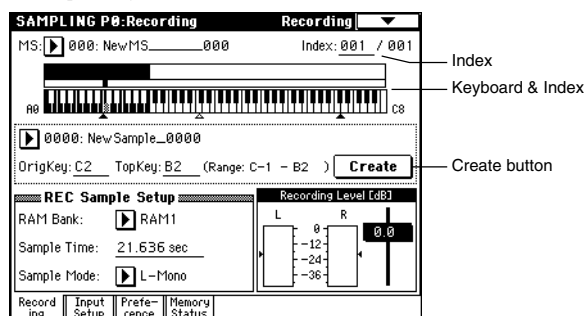
Here's how to create indexes for a multisample, and assign a sample to each index.

If desired, you can first create several indexes for a multisample, and then record a sample for each index.

① **In P0: Recording, select the Recording tab.**

② **Select the "MS" (multisample) (refer to "Manual sampling" step ④).**

③ **Press the Create button to create an index.**

Immediately after the power is turned on, the "Index" will be indicated as **001/001**. This means that there is only one index. The range that is highlighted in the keyboard & Index is the range of the selected index.

Press the **Create button** several times. Each time you press it, an index will be created. The keyboard display will indicate the zone and original key location of each index. The highlighted area is the currently selected index.

note The index that is created when you press the **Create button** is created according to the "Create Zone Preference" settings of the Preference tab. For details refer to p.87 and "Create" (p.81), both in the *Parameter Guide*.
Immediately after the power is turned on, "Position" will be **Right**, "Zone Range" will be **12Keys**, and "Original Key Position" will be **Bottom**, so that indexes will be created as shown below.
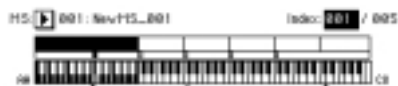
note If you set "Zone Range" to **1Key**, an index will be created for each note of the keyboard and a sample assigned to in index. You can then continue sampling. It is convenient to use 1Key when you wish to sample numerous takes in succession, such as when recording phrases or rhythm loops.
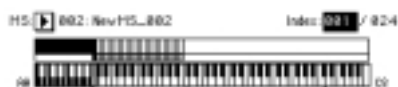
④ **Select "Index."**

"Index" can also be selected by holding down the [ENTER] key and playing a note on the keyboard. For this example, select **001**.

⑤ **If you have been sampling previously and one or more samples already exist, use "Sample Select" to select the sample that you wish to assign.**

Repeat steps ④ and ⑤ to assign a sample to each index. Complete the multisample in this way.

When you play the keyboard in the area of an index to which a sample has been assigned. that sample will play back.

⑥ **If you wish to first create two or more indexes for the multisample before you start sampling, and then continue sampling for each of these indexes, select the index for sampling in step ④, and use either manual sampling or auto sampling to record a sample for that index (☞"Manual sampling" or "Auto sampling").**

Create a multisample by selecting an index and then sampling.

note The number and order of the indexes in the multisample, the zone of each index, and the original key location can be edited later if desired (☞p.84 "Multisample editing").

Loop settings

With the default settings after the power is turned on, the sounds you sample will automatically be looped (P0: Recording page Preference tab "Auto Loop On.") To edit the loop and other playback address settings for the sample, use the P2: Loop Edit page.

① **Select P2: Loop Edit.**

- Keyboard & Index
- Sample Select
- ZOOM button
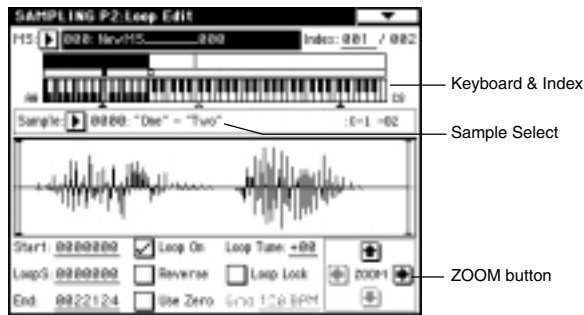
The waveform data for the currently selected sample will be displayed. It will play back "Keyboard & Index" when you play the highlighted in the Keyboard when you play the highlighted in the area. You can use "Sample Select" to select the sample that you wish to edit. When you do so, the assignment to the index will also change. When you change indexes, the waveform data for the sample assigned to that index will appear.

⚠ Waveform data for a sample that was sampled with a "Sampling Mode" of **Stereo** will be displayed in two lines. The upper line is the waveform display for the L channel, and the lower line is for the R channel.

② **Specify the start address in "Start," the loop start address in "LoopS," and the end address in "End."**

Press "Start" (it will be highlighted), and use the [VALUE] controllers to change the setting. The corresponding vertical line will move. Set "LoopS" and "End" in the same way. In the example shown below, "Start" is immediately before the first waveform, "LoopS" is immediately before the second waveform, and "End" is set to an arbitrary location.

Start   LoopS   End
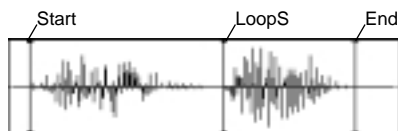
note By using the **ZOOM buttons** you can change the range that is displayed. When "Start" is highlighted, zoom will be performed from the start address (☞p.88 in the *Parameter Guide*).

note If the "Use Zero" check box is **checked**, only those addresses where the waveform data **crosses the zero level** will be found automatically when searching, and can be set. This lets you easily make address settings where noise is less likely to occur when looping.

③ **Use the "Loop On" check box to turn loop playback on/off. When the box is checked, looping will be on.**

Loop On: "Start" → "End" → "LoopS" → "End" → ("LoopS" → "End") repeated

Loop Off: "Start" → "End"

④ **If necessary, use the page menu command "Truncate" to delete unwanted data that falls outside the start (or loop start) and end addresses.**
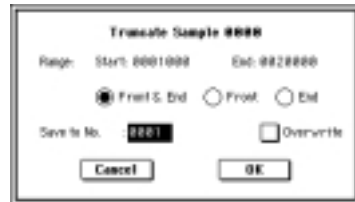
Set the parameters, and press the OK button to execute the operation.

☞p.95 in the *Parameter Guide*

⚠ For cautions regarding "Save to No." and the "Overwrite" check box (☞p.83 "A note on saving samples").

The grid display

The page menu command "Grid" overlays the waveform display with a grid based on the BPM tempo value. This makes it easy to make loop settings that are synchronized to the tempo.

note In the same way, the grid display can also be used in P1: Sample Edit. The grid can help you to edit the waveform in synchronization with the tempo.

① **Select the page menu command "Grid."**

Turn the radio button **On**, set the "Resolution" as desired, and press the **OK button**. A dotted grid will be displayed.
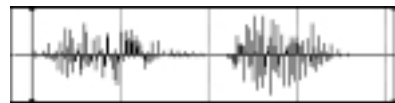
② **Set "Grid" to the desired BPM tempo value.**

③ **Set the end address so that it coincides with a dotted line of the grid.**

This will cause the loop interval to be the same length as the BPM value.

The grid display will be based at "LoopS" if looping is on. If looping is off, the grid will be based at "Start."

④ **To cancel the grid display, select the "Grid" page menu command, set the radio buttons Off, and press the OK button.**

The grid is displayed according to the playback pitch of the base key (the key shown in gray in the "Keyboard & Index" area).
You can select the base key by holding down the [ENTER] key and playing a note on the keyboard.

Sample (waveform data) editing

Editing the waveform data of the sample is done in P1: Sample Edit. You can use commands such as cut, copy, and normalize to edit the waveform data.

① **Select P1: Sample Edit.**
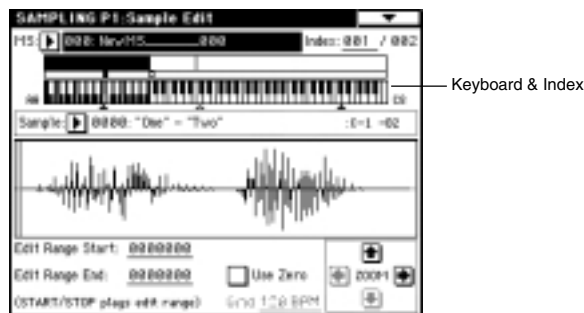
— Keyboard & Index

The waveform data of the currently selected sample will be displayed. It will play back when you play the keyboard (in the highlighted region in the "Keyboard & Index").
You can use "Sample Select" to select the sample that you wish to edit.
When you change indexes, the waveform data of the sample specified for that index will be displayed.

Sample waveforms that were recorded with a "Sampling Mode" of **Stereo** will be shown in two lines. The upper line is the L channel waveform, and the lower line is the R channel waveform.

② **Use "Edit Range Start" and "Edit Range End" to specify the range that you wish to edit.**

The selected range will be highlighted.
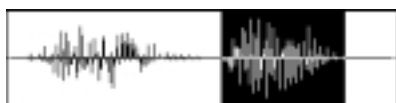
If you wish to audition the selected range, press the [START/STOP] key.
The waveform will play back at the pitch of the base key (the key shown in gray in the keyboard display). You can select the base key by holding down the [ENTER] key and playing a note on the keyboard.

note The **ZOOM buttons** and the "User Zero" check box can be used in the same way as in P2: Loop Edit.

③ **From the list of page menu commands, select the desired editing command. Make the appropriate settings in the dialog box, and press the OK button to execute.**

For details on each command (☞p.89 in the *Parameter Guide*).

• •

A note on saving samples

In the dialog boxes of some page menu commands, there is a "Save to No." setting that lets you specify the sample number to which the edited sample will be saved. At this time, a vacant sample number will be selected automatically, so you will change the setting only if you want to specify the save destination number.

If you **check** "Overwrite" in the dialog box of the command, the data prior to editing will be deleted, and will be overwritten by the edited data. Normally, you will leave this **unchecked**, so that the data prior to editing will be preserved as you edit. Samples that are no longer needed when you have completed your editing can be deleted by the "Delete Sample" page menu command.

In Sampling mode, there is no Compare function that lets you compare the data before and after editing.
If you wish to preserve the unedited state of the multisample or sample, use "Copy MS" or "Copy Sample" (☞p.83, 84 in the *Parameter Guide*) to copy the multisample or sample before you begin editing it.
For some page menu commands in P1 or P2, you can execute without **checking** the "Overwrite" setting in the dialog box, so that the sample data previous to editing will be preserved.

• •
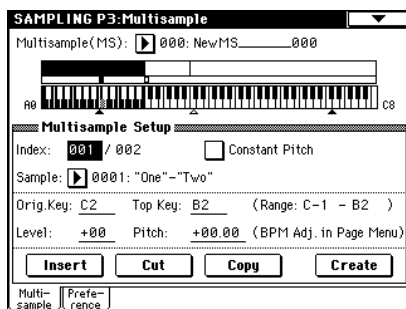
Multisample editing

Editing a multisample consists of creating indexes for the multisample and assigning a sample to each index (these basic settings can also be performed in P0), editing operations such as deleting, copying, and inserting indexes, and detailed settings such as sample level and pitch for each index.
Multisample editing is performed in P3: Multisample.

Editing the indices

To change the number or order of the indexes, use the **Insert**, **Cut**, **Copy**, and **Create buttons**.

① **Press P3: Multisample.**

```
SAMPLING P3:Multisample                    ▼
Multisample(MS): ▶ 000: NewMS_____000
A0 ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ C8
═══Multisample Setup═══
Index:  001 / 002        ☐ Constant Pitch
Sample: ▶ 0001: "One"-"Two"
Orig.Key: C2    Top Key: B2     (Range: C-1 - B2  )
Level:  +00     Pitch:  +00.00  (BPM Adj. in Page Menu)
[ Insert ]  [ Cut ]  [ Copy ]  [ Create ]
─────────
Multi- ‖ Prefe-
sample ‖ rence
```

② **Use Multisample (MS) to select the multisample that you wish to edit.**

③ **Select the "index."**

You can also select an index by holding down the [ENTER] key and playing a note on the keyboard.

④ **Press the buttons to modify the number or order of the indices, and edit them.**

To delete the selected index, press the **Cut button**. The **Insert button** is used in conjunction with the **Cut** and **Copy buttons**. The contents of the index that was Cut or Copied will be inserted.
The **Create button** has the same function as the **Create button** in P0: Recording (☞p.81 "Creating multisample indexes and sampling").

Modifying the settings of an index

① **Make the settings described in steps ①–③ of "Editing the indexes."**

② **Set parameters for the selected index.**

For details on each parameter, refer to p.96 in the *Parameter Guide.*

- Changing the "Top Key" will change the upper limit of the zone. Simultaneously, the lower limit of the next-numbered index will also change.
- If you **check** "Constant Pitch," all notes in the index zone will sound the sample at its original pitch.

- "Pitch" adjusts the sample pitch for each index. You can use the "Pitch BPM Adjust" page menu command to set the loop interval to a desired BPM value (☞p.97 in the *Parameter Guide).*

Converting a multisample to a program

In pages P0–P4, you can select and execute the "Convert MS To Program" page menu command. When you execute this command, the settings of the currently selected multisample will be converted into a program. In Program mode you can make filter, amp and effect settings etc., and play the sample as a program. The resulting program can be used in a combination or song.

For details on the "Convert MS To Program" page menu command (☞p.84 in the *Parameter Guide).*

Song Play mode

In Song Play mode you can read **Standard MIDI Files (SMF)** directly from a floppy disk and play them. If you simply want to play an SMF without editing it, it will be convenient to select this mode.

The pages in Song Play mode

○ **For details on how to access these pages or modes, refer to "Basic operation of the TRITON" (☞p.12).**

P0: Program/Mix	Play SMF data and make settings. Specify the program, pan, and level for each track.
P1: Track	Make MIDI and scale settings for each track. If the separately sold EXB-MOSS option is installed, set related parameters.
P2: Controller Setup	Controller settings.
P3: Select Directory/ Jukebox	Select the directory that contains the desired SMF, and select the playback order of SMF files. Create jukebox lists.
P4:	---
P5:	---
P6:	---
P7:	Arpeggiator settings
P8: Insert Effect	Select and make settings for insert effects. Make settings for the routing, insertion effects, master effects, and individual output assignments of each track in the song.
P9: Master Effect	Select and make settings for the master effects. Master EQ settings.

If the separately sold EXB-MOSS is installed, the special bank F can be used in Song Play mode as well. For details on the bank F parameters, refer to the EXB-MOSS owner's manual.

The parameter settings of Song Play mode are not backed up when the power is turned off. If you wish to save the program, track parameter, and effect settings of the song, use the page menu command "Save Template Song" to save them. If you wish to play SMF song data, you must first load it from external media such as a floppy disk.

The structure of Song Play mode

As shown in the diagram below, Song Play mode consists of tracks 1–16, effects and arpeggiator.

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About SMF

SMF data in **format 0** or **format 1** can be played back in Song Play mode.
The TRITON recognizes only files with an extension of **.MID** as SMF data. Be sure that the filename extension is **.MID**.

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About MIDI

Track status settings in Song Play mode
You can select whether the musical data played by a track, or the data produced by operating the TRITON's keyboard and controllers will sound the TRITON's internal tone generator, and/or will sound an external tone generator.

When the "Status" of a track is set to **INT**, the data played back by that track and the data produced by operating the keyboard or controllers of the TRITON will play and control the TRITON's internal tone generator.
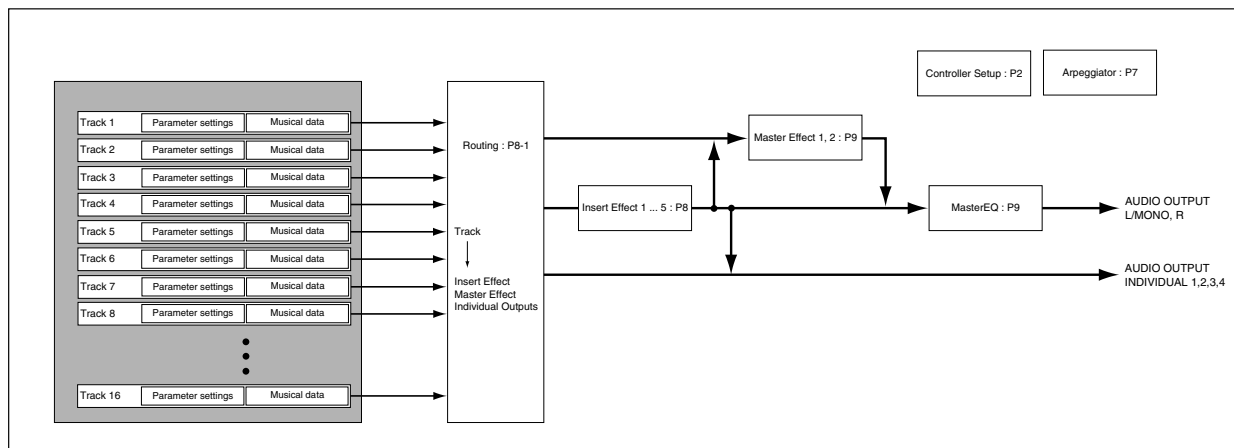
When the "Status" of a track is set to **EXT** or **BTH**, the data played back by that track and the data produced by operating the keyboard or controllers of the TRI-TON will play and control an external tone generator. (The MIDI channel of the external tone generator must match the "MIDI channel" of the TRITON track that is set to **EXT** or **BTH**.) With a setting of **BTH**, the external tone generator and the TRITON's own tone generator will be played and controlled simultaneously. (☞p.104 in the *Parameter Guide* "Status")

GM/GS/XG playback

When you wish to playback SMF data that is compatible with the GM/GS/XG standards, set "Bank Map" (Global P0: System Pref. tab) to **GM(2)** (☞p.123). (☞p.115 in the *Parameter Guide*).

Synchronization with external devices

In Song Play mode, the TRITON will be the master (the controlling device) regardless of the MIDI Clock setting (Global P1: MIDI "MIDI Clock") (☞p.122).

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Mute/Solo function

In P0: Play/Mix, the Program T01–08 and T09–16 tabs provide **PLAY/MUTE buttons** and **SOLO ON/OFF buttons** that allows you play and mute tracks 1–16 in the same way as in Sequencer mode.
You can use these when you wish to mute the melody track and play the part yourself on the keyboard ("minus-one play"), or when you wish to audition a track (☞p.62).

You can use the "Solo Selected Track" page menu command to audition only the currently selected track. This provides a convenient way to hear the parameter settings and effect settings of a track (☞p.47, 102 in the *Parameter Guide)*.

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Insert effects and master effects

Refer to "About effects" (☞p.108) (☞p.109 in the *Parameter Guide*).

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Playing SMF data

Direct playback from external media such as a floppy disk

✎ When you wish to playback SMF data that is compatible with the GM/GS/XG standards, set "Bank Map" (Global P0: System Pref. tab) to **GM(2)**.

① **Press the [S.PLAY] key to enter Song Play mode.**

② **Insert a floppy disk containing SMF data into the TRITON's disk drive.**

When the separately sold EXB-SCSI option is installed. If you wish to load data from external SCSI media such as a hard disk, refer to the EXB-SCSI owner's manual, and make sure that the external SCSI drive etc. is connected. Also make sure that the media contains SMF data.

③ **Press either the [LOCATE], [START/STOP], or [PAUSE] key.**

Data will be loaded from the media.

If you press the [START/STOP] key, the data will be loaded and playback will begin (the same as in step ⑥).

④ **"File Select" will show the SMF filenames.**

If there is no SMF data in the floppy disk, or if there is no SMF data in the currently selected directory, no filename will be displayed (as shown below).
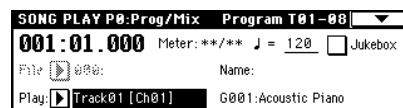
If no jukebox list has been created, no filenames will be displayed if the "Jukebox" check box is checked. Uncheck the "Jukebox" check box.

To move to a directory that contains SMF data, press the [MENU] key, and then press "P3: Select Directory" to display P3: Select Directory.
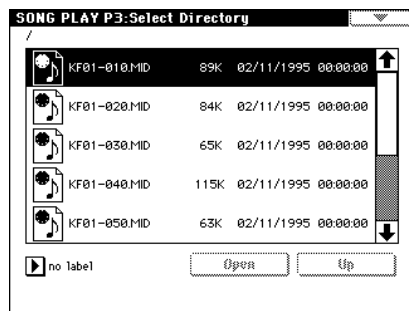
If the separately sold EXB-SCSI option is installed and a hard disk etc. is connected, press the drive select button to select the drive that contains the desired data.

Then press the **Open button** or **Up button** to move between levels, and find the desired SMF.

When the SMF file (make sure that the extension is .SMF) appears in the LCD screen, press the [EXIT] key, and move to P0: Prog/Mix.

⑤ **Press the "File Select" popup button. From the file list, choose the filename that you wish to play back.**


⑥ **Press the [START/STOP] key.**

Playback will begin. At this time, all songs displayed in the "File Select" popup button will playback consecutively (if "Auto Start" is checked).

⑦ **Press the [START/STOP] key once again to stop playback.**

∙ ∙

Starting/stopping playback for each song

In the P0 Preference tab, **uncheck** "Chain to next file" or "Auto Start," and press the [START/STOP] key. Playback will begin, and will stop when each song ends. For details on these settings, refer to p.103 in the *Parameter Guide*.

∙ ∙
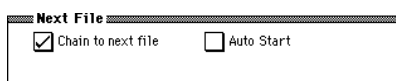
Playback using the Jukebox function

The TRITON provides a Jukebox function that can be used to playback SMF data.
This function allows you to specify the order in which files in the same directory will be played.

⚠ A jukebox list you create will be erased when the power is turned off, and can not be recovered. If you wish to keep your jukebox list, refer to the section "Saving a Jukebox list" (next page), and save it on external media.

① **Check the "Jukebox" check box.**
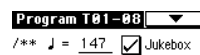
② **Select P3: Jukebox.**
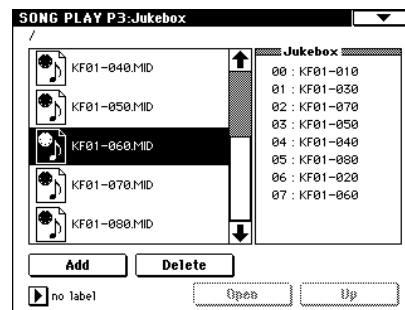
If the separately sold EXB-SCSI option is installed and a hard disk etc. is connected, press the drive select button to select the drive that contains the data you wish to play back.

③ **Use the scroll bar to display the SMF (filename extension .MID) that will be played first, and select that file.**

④ **Press the Add button.**

The filename you specified in step ③ will appear in the Jukebox list.

⑤ **Select the file that will be played second, and press the Add button.**

Add files to the Jukebox list in the order that they will be played. A maximum of 100 files (00–99) can be registered in the Jukebox list.

To delete a file from the Jukebox list, press the **Delete button**.

⑥ **Press the [EXIT] key to display P0: Play/Mix.**

⑦ **Press the [START/STOP] key.**

The files will playback in the order in which they were registered.

⑧ **Press the [START/STOP] key once again to stop playback.**

⚠ Only files in the same directory can be registered in a jukebox list.
If you perform the following operations while creating a jukebox list, the jukebox list will be lost.

- Change the directory
- Remove the floppy disk
- Change drives

Saving a Jukebox list

Saving procedure

① **Use the procedure described above to create a jukebox list.**

② **If the separately sold EXB-SCSI option is installed and you wish to save the list on a hard disk etc., use the P3: Jukebox drive select button to select the drive in which you wish to save the data.**

③ **In P3: Jukebox, select the "Save Jukebox List" page menu command.**

```
                Save Jukebox List

    To:    [T] MY_LIST       .JKB

           [ Cancel ]        [   OK   ]
```
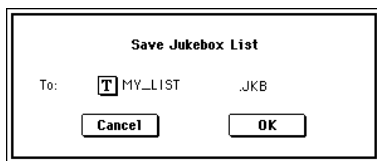
④ **Use the text edit button to enter a name for the jukebox list (☞p.38).**

⑤ **Press the OK button.**

The jukebox list will be saved to the media.

Loading procedure

① **In the Jukebox page, select a jukebox list (filename extension .JKB).**

② **Press the "Load Jukebox List" page menu command.**

The jukebox list will be loaded into the TRITON.

Playing along with SMF data

Minus-one play

You can enjoy "minus-one" play by playing back SMF data, muting a specific part, and playing that part yourself.

① **Playback the SMF data, identify the track whose part you wish to play, and stop playback (☞p.86).**

② **In P0: Prog/Mix, select the Prog. 1–8 tab or Prog. 9–16 tab.**

③ **Use "Play Track Select" to select the track for the part that you want to play from the keyboard.**

When you play the keyboard, the program of the selected track will be heard.

④ **Press the "PLAY/MUTE" button to set the track selected in step ③ to MUTE.**

If you want the musical data of the track to playback in addition to your own playing on the keyboard, set "Play/Mute" to **PLAY**.

⑤ **Press the [START/STOP] key to begin playback, and play along on the keyboard with the song.**

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Arpeggiator

During "minus-one" play, you can use the arpeggiator for your keyboard performance (☞p.98). (☞p.107 in the *Parameter Guide*)

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Global mode

In Global mode you can make settings that affect the entire TRITON, such as user scales, category names, drum kits, and user arpeggio patterns.

This chapter will describe the procedure for editing a drum kit. For the procedure of editing an user arpeggio pattern, refer to "Arpeggiator settings" (☞p.96). For details on the parameters of other pages (☞p.125). (☞p.113 in the *Parameter Guide*)

⚠ When you play the keyboard in Global mode, the TRITON will sound as in the previous mode in which you were previously. Be aware that if you moved from Sampling mode to Global mode in a state where the sampling memory contained no data (such as immediately after the power is turned on), playing the keyboard will not produce sound.

⚠ When you move from Sequencer or Song Play mode to Global mode, playing the keyboard will sound the program or arpeggiator that corresponds to the global MIDI channel (set in Global P1: MIDI page).

⚠ The settings that you edit in Global mode are preserved as long as the power remains on, but will be lost when the power is turned off. The data handled in Global mode can be classified into three types: **drum kit settings** (P5), **user arpeggio pattern settings** (P6), and all other **global settings** (P0–P4). Each of these three types of data can be written into the memory area. In Disk mode, this data can also be saved on external media such as a floppy disk (☞p.39).

⚠ Global mode does not provide a Compare function that lets you make before-and-after comparisons of your editing. Before editing global settings, drum kits, or user arpeggio patterns, you may wish to use "Copy Drum Kit" or "Copy Arpeggio Pattern" to copy the drum kit or user arpeggio pattern to an unused number.

About the pages in Global mode

○ **For details on how to enter each page or modes, refer to "Basic operation of the TRITON" (☞p.12).**

P0: Basic Setup	Basic settings for the entire TRITON. Audio input settings for use outside of Sampling mode.
P1: MIDI	MIDI-related settings for the entire TRITON.
P2: Controller	Controller settings for the pedals etc. connected to the rear panel.
P3: User Scale	User registered scale settings. Specify 16 octave scales, and one all-note scale.
P4: Category Name	Edit category names for programs and combinations.
P5: Drum Kit	Edit drum kits.
P6: User Arpeggio	Edit user arpeggio patterns.
P7:	---
P8:	---
P9:	---

Basic functions

Global mode

Creating a drum kit

About drum kits

A drum kit assigns a drumsample (PCM waveform data for a drum) to each key, and specifies adjustments in pitch and level etc. for each sample.

The TRITON contains **73** drum kit memory areas. With the factory settings, **00–15 (A/B)** contain preset drum kits suitable for various styles of music. ROM memory areas **64–72 (GM)** contain nine different drum kits compatible with the GM2 sound map.
For the factory preset drum kits, refer to the separate *Voice Name List*.

In Global P5: Drum Kit you can modify these preset drum kits, or create your own original drum kit from an initialized condition. You can also create original drum kits using sample waveforms that you sampled in Sampling mode or loaded into memory in Disk mode.
A drum kit that you edit or create can be written into one of the drum kit memory areas **00–63**. In Disk mode, you can save drum kits on external media such as a floppy disk (☞p.39, p.40).

✎ **16(C)–31 and 32(D)–47(D)** are provided for the preset patterns of separately sold EXB-PCM series option boards. Please use 48–63 (User) to write the drum kits that you create.

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Multisample programs and drum kit programs

There are two types of programs: those whose oscillator uses a **multisample**, and those whose oscillator uses a **drum kit**.
This selection is made by the Program P1: Program Basic tab "OSC Mode" setting. To use a **multisample** for the program, set "Oscillator Mode" to **Single** or **Double**. To use a drum kit, set "Oscillator Mode" to **Drums**.

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About program parameters

Just as the character and effect processing of a melodic instrument such as piano, organ, trumpet, and strings is fundamentally different from that of percussion instruments such as drums or timpani, the program parameter structure of a multisample program ("Oscillator Mode" to **Single** or **Double**) is fundamentally different from that of a drum kit program ("Oscillator Mode" to **Drums**).
Since it is difficult to convert multisample program parameters for use as a drum kit (because the filter and amp settings etc. are made with a multisample program in mind), it is best to first select a drum kit program in Program mode, and then edit it in Global mode.

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Editing a drum kit

✎ Before editing a drum kit, **uncheck** the Memory Protect (☞p.37).

① **In Program mode P0: Play, select the program that you wish to use while editing the drum kit.**

Select a drum kit program from the preset programs etc. If the drum kit that you will be editing is already being used by a program, select that program. (In the separate *Voice Name List*, programs that use a drum kit are marked by a ⓓ symbol.)

✎ When you wish to edit a drum kit, first use Program mode to select a program that uses a drum kit (whose "Oscillator Mode" is **Drums**), and then move to this page. A program that uses a drum kit will have filter, amp, and effect parameter settings etc. suitable for drum sounds (☞"About program parameter").

✎ Set "Octave" to **+0 [8']**. With a setting other than **+0 [8']**, the relation between the keys and the sounds will be incorrect (☞p.6 in the *Parameter Guide*).

✎ The effects will sound using the settings of the last-selected program.

✎ When you edit a drum kit, all programs that use that drum kit will be affected.

② **In P5: Drum Kit, select the Sample Setup tab.**
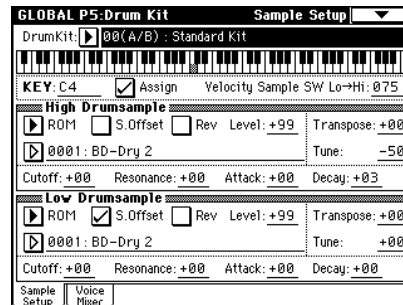
③ **In "Drum kit Select," select the drum kit that you wish to edit.**

If necessary, use the "Copy Drum Kit" page menu command to copy settings from a preset drum kit or a GM drum kit.

✎ GM drum kits **64–72 (GM)** cannot be selected here. (It is not possible to edit or write a GM drum kit.) If you wish to modify the settings of one of the drum kits **64–72 (GM)**, you can use "Copy Drum Kit" to copy it to **00–63**, and then edit the copy.

④ **Press "KEY."**

⑤ **Select the note number that you wish to edit.**

You can select a note number by the [VALUE] controllers and also, holding down the [ENTER] key and playing a note on the keyboard.
The parameter settings for the drumsample of the selected note number will appear.

⑥ **Refer to the explanations below for the "Sample Setup tab" and "Voice/Mixer tab," and make the desired settings.**

The parameters are located in the Sample Setup tab and the Voice/Mixer tab.

⑦ **As necessary, repeat steps ④–⑥ to set the parameters for each key.**

To change the drum kit name, use the "Rename Drum Kit" page menu command (☞p.38).

⑧ **If you wish to save the edited drum kit into internal memory, be sure to Write the drum kit.**

If you turn off the power without writing, your edits will be lost (☞p.39).

Sample Setup tab

Assign

Normally you will **check** this. The settings of each parameter will be valid. If this is **unchecked**, drumsample parameters will not be assigned to that key. Playing that key will sound the settings of the key to its right, at a pitch one semitone lower. Use this when you wish to play a tom or cymbal with the same settings but with a different pitch.

Velocity Sample SW Lo → Hi

You can specify different drumsamples for High Drumsample and Low Drumsample, and use velocity (keyboard playing dynamics) to switch the drumsample that will sound. This is referred to as **velocity drumsample switching**.

☞ This function is similar to the velocity multisample switching of a program (☞p.46 "About High/ Low").

✍ If you are not using this function, set the "Velocity Sample SW Lo → Hi" value to **001**. When you play, only the High Drumsample will sound.

Bank

ROM: Select drumsamples from the TRITON's internal ROM memory.
RAM: Select samples that were sampled in Sampling mode or loaded in Disk mode.
EXB*: Select drumsamples from a separately sold EXB-PCM series option board.

✍ Some EXB-PCM series boards do not contain drumsamples.

○ ○

About ROM drumsamples

The TRITON contains 413 drumsamples in its internal ROM memory.

When you press the popup button, the ROM drumsamples will be displayed in 15 different categories. You can use the tabs located at the left and right to select a category, and choose drumsamples from the selected category in the LCD screen.
For the drumsample names, refer to the separate *Voice Name List*.

○ ○

Voice/Mixer tab

Exclusive Group

Make this setting when you want to group related drumsamples together.
For example if the "KEY" to which a open hi-hat and a closed hi-hat drumsample are assigned are set to the same exclusive group number, they will be grouped so that the open hi-hat and closed hi-hat can not be sounded simultaneously, ensuring that the hi-hat performance will sound natural.

BUS Select (IFX Indiv.Out Assign)

The drumsample assigned to the "KEY" can be sent to an insert effect or to one of the AUDIO OUTPUT (INDIVIDUAL) 1–4 jacks.
For example you can specify **IFX1** for snare drums and **IFX2** for kick drums, so that different types of drums are sent to insert effects 1 and 2. Alternatively, you can set this to **1–4**, **1/2** or **3/4** so that only specific drum sounds are sent to the AUDIO OUTPUT (INDIVIDUAL) 1–4 jacks.
These settings are valid if "Use DKit Setting" (Program P8: Routing tab) is **checked** in the Routing tab of Program P8 for the program that uses this drum kit (☞p.24, 147, 148 in the *Parameter Guide*).

Pan

This sets the panning. This setting is valid if "Use DKit Setting" (Program P4: Amp1 Lvl/Pan tab) is **checked**.

Send 1 (MFX1), Send 2 (MFX2)

These set the send levels to the master effects. This setting is valid if "Use DKit Setting" (Program P8: Routing tab) is **checked**.

Other parameters

The parameters in the Sample Setup tab are set independently for the High Drumsample and the Low Drumsample. The parameters in the Voice/Mixer tab apply to both the High and Low Drumsamples.
If you wish to use the settings from another "KEY," you can use the "Copy Key Setup" page menu command. For details on each parameter (☞p.123 in the *Parameter Guide*).

Disk mode

How Disk mode is organized

In Disk mode you can use floppy disks or a connected external SCSI device (if the separately sold EXB-SCSI is installed) to save or load various types of data. You can also make settings related to saving and loading functionality.

For details on connecting an external SCSI device and setting the ID etc., refer to the owner's manual for the separately sold EXB-SCSI option.

The pages of Disk mode

Load	Load the selected file or directory into internal memory.
Save	Save data from internal memory to external media such as a disk.
Utility	Rename, copy, or delete a disk or file, create new directories, and set the date and time.
Media Information	View information for the selected media.

Types of media that can be used

Floppy disks

The TRITON can use **MS-DOS format 3.5 inch 2HD** or **2DD** floppy disks. The capacity of a floppy disk after formatting will be 1.44 MB (18 sectors/track) for a 2HD disk, or 720 KB (9 sectors/track) for a 2DD disk. (☞For details on formatting, refer to p.142 of the *Parameter Guide*.)

note We recommend that you use **2HD** floppy disks.

External SCSI storage media (when the separately sold EXB-SCSI option is installed)

If the separately sold EXB-SCSI option is installed, the TRITON can save data on external SCSI media (maximum 4 GB) such as a hard disk, Zip, Jaz, or MO drive. When the EXB-SCSI option is installed, an external SCSI device of up to 4 GB can be formatted.

This format cannot be executed for media that is not 512 bytes/block (such as 640 MB MO disks etc.).

Loading data

Types of data that can be loaded

The various types of data that can be loaded from external media (floppy disk etc.) are shown in the illustration on the following page. For details on each type of data, refer to p.132 in the *Parameter Guide*.
If the separately sold EXB-SCSI option is installed, data can also be loaded from media such as a hard disk or CD-ROM.

Data loading procedure

Loading Programs, Combinations, Drum kits, User arpeggio patterns, and Global settings (loading a .PCG file)

As an example, we will explain how to load a .PCG file. A .PCG file contains programs, combinations, drum kits, user arpeggio patterns, and global settings (refer to the lower diagram on the following page).

You will select a .PCG file for loading when you wish to re-load a set of programs and combinations etc. that you created and saved by the "Save All" or "Save PCG" command, or when you wish to restore the pre-loaded data (factory settings) from the included floppy disk. You will normally use this method to **load a .PCG file from a floppy disk that was included with the separately sold EXB-PCM series option or EXB-MOSS option**.

Before loading programs, combinations, songs, drum kits, and user arpeggio patterns, you must turn off memory protect in Global mode (☞p.37).

① **If you will be loading data from a floppy disk, insert the floppy disk into the TRITON's floppy disk drive.**

Please be sure to read "Cautions when handling floppy disks" for details on handling floppy disks (☞p.95).

(If the separately sold EXB-SCSI option is installed) Before loading from external SCSI media such as a hard disk, refer to the EXB-SCSI owner's manual, and make sure that the external SCSI drive is connected correctly and that the media contains the file that you wish to load.

② **Press the [DISK] key. You will enter Disk mode.**

Drive select button
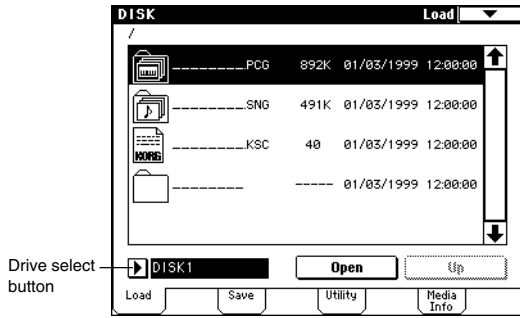
③ **Press the Load tab.**

The screen will appear, and file information will be displayed.

④ **If you are loading from external SCSI media, press the drive select button to select the drive that contains the data to be loaded.**

⑤ **Select a .PCG file.**

The display will be highlighted.
If the file to be loaded is located in a level above or below the current directory, use the **Open button** or **Up button** to display the file so that it can be selected.

✍ When you load a .PCG file, the data in the TRITON's internal memory will be replaced by the data in that .PCG file (programs, combinations, drum kits, user arpeggio patterns, global settings). If you wish to keep the data that is currently in

internal memory, use "Save All" or "Save PCG" to save it.

⑥ **Press the page menu button, and press the "Load Selected" page menu command.**
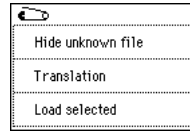

A dialog box will appear. The display and settings of the dialog box will depend on the type of file to be loaded. For details on each type of file, refer to p.132 in the *Parameter Guide*.
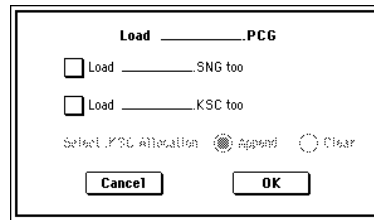
⑦ **If "Load ********.SNG too" is checked when you load the data, the .SNG file will also be loaded at the same time that the .PCG file is loaded.**
If "Load ******.KSC too" is checked when you load the data, the .KSC file will also be loaded at the same time that the .PCG file is loaded.**

⑧ **Press the OK button and the date will be loaded.**

✍ Never attempt to remove the media while data is being loaded.
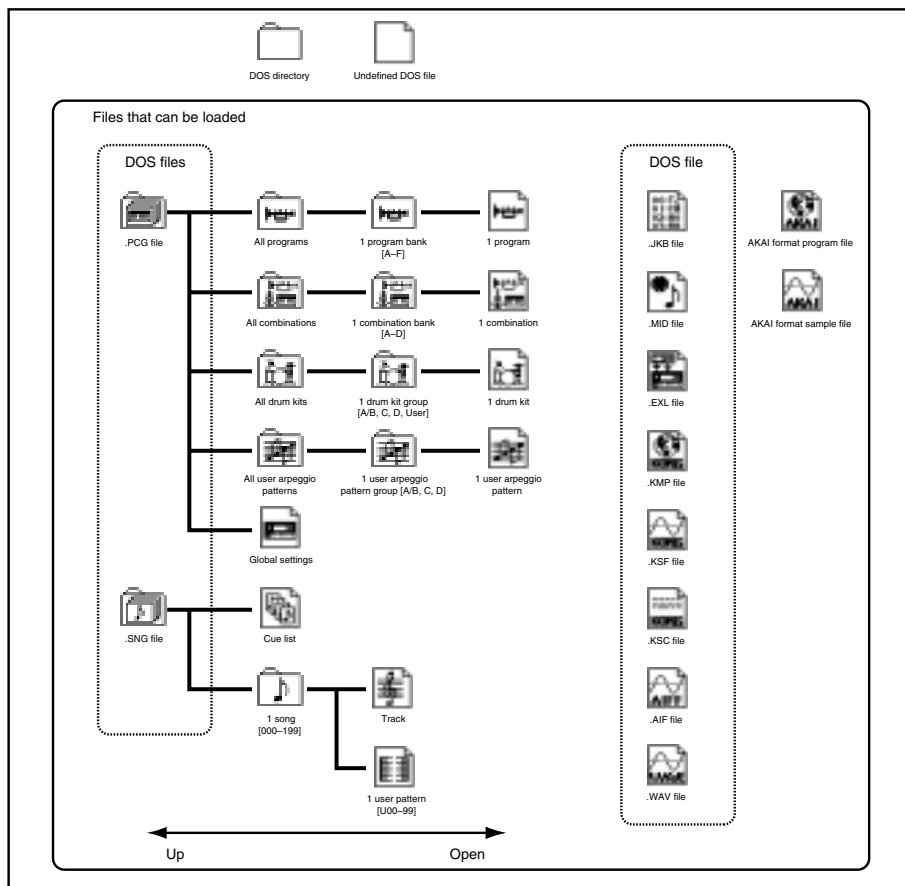
Loading a .PCG file from the floppy disk included with a separately sold EXB-PCM series option

When loading EXB-PCM series programs and combinations, use the following procedure. When doing so, you will specify the loading destination bank (C, D) in step ⑤.
To load the data into bank C, select "**C_BANK.PCG.**"
To load the data into bank D, select "**D_BANK.PCG.**"

When you load "**C_BANK.PCG,**" the programs and combinations of banks A, B, and C, all drum kits, all user arpeggio patterns, and global setting data will be loaded into the internal memory area of the TRITON, and any prior data will be overwritten.

When you load "**D_BANK.PCG,**" the programs and combinations of banks A, B, and D, all drum kits, all user arpeggio patterns, and global setting data will be loaded into the internal memory area of the TRITON, and any prior data will be overwritten.

If you wish to keep the data that is in the internal memory area, use "Save All" or "Save PCG" to save it before loading other data.

Saving data

For the procedure of saving data to a floppy disk or to external SCSI media, refer to "Saving on external media" (☞p.40).

Types of data that can be saved

The following types of data can be saved on external media (floppy disk etc.). If the separately sold EXB-SCSI option is installed, data can also be saved on high-capacity media such as a hard disk.

- **.PCG files**
  Programs, combinations, global settings, drum kits, user arpeggio patterns (the data specified by the check boxes when saving will be saved).

- **.SNG files**
  Songs and cue lists

- **.KSC files**
  Script file (KSC files) listing the multisamples and samples created in Sampling mode, with multisamples (KMP files) and samples (KSF files)

- **Standard MIDI files (SMF)**
  Sequencer mode songs can be saved as SMF data.

- **System exclusive data**
  System exclusive data received by the TRITON from an external MIDI device (the TRITON can be used as a data filer).

note For the icons associated with each file, refer to the lower diagram on the preceding page.

Formatting media

The TRITON can format a floppy disk or external SCSI media.

Newly purchased media or media that has been used by another device cannot be used as it is. Such media must be formatted before using it on the TRITON for the first time.

For the formatting procedure, refer to p.143 in the *Parameter Guide.*
In the case of a floppy disk, the formatting operation can be performed on a MS-DOS compatible computer. In the case of SCSI media, you must use the TRITON to format the media.

This format cannot be executed for media that is not 512 bytes/block (such as 640 MB MO disks etc.).

Cautions when handling floppy disks

When handling floppy disks, please observe the following points. Data loss may occur if a floppy disk is handled improperly.

Floppy disk type and format

The TRITON can use 2HD or 2DD 3.5 inch floppy disks.

Floppy disk handling

- Do not open the shutter of a floppy disk or touch the magnetic surface inside the disk. If the magnetic disk becomes soiled or scratched, it will no longer be possible to read data.
- Never transport the TRITON with a floppy disk in the disk drive. Vibration may cause the disk drive heads to scratch the floppy disk, making it unusable.
- Do not allow a floppy disk to be placed near a device that emits a magnetic field, such as a television, computer, computer display, speaker, or power supply transformer. This can erase data on the disk.
- Do not use or store floppy disks in locations of excessive temperature or humidity, in direct sunlight, or in dusty or dirty locations.
- Do not place objects on top of a floppy disk.
- While the disk drive is operating, do not attempt to remove the floppy disk, and do not subject the TRITON to physical shock.

Floppy disk write protect

Floppy disks have a small write protect hole that can be used to prevent data from being erased or rewritten accidentally.
After saving data to disk, move the write protect tab so that the hole is uncovered. This will prohibit writing to the disk, and will prevent the data from being destroyed accidentally.

Write prohibit: Move the tab so that the write protect hole is open.

Write permit: Move the tab so that the write protect hole is covered.
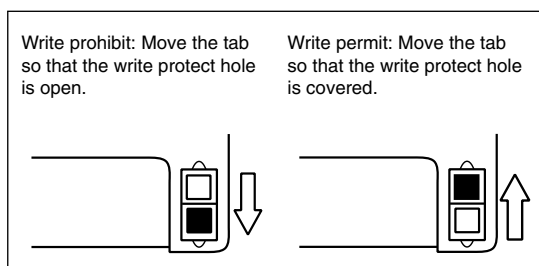
Inserting a floppy disk

With the label of the floppy disk facing upward, insert it into the disk drive. Press the disk inward until it clicks into place.
Malfunctions will occur if you use excessive force to insert the disk. Disks must be inserted gently, and straight in.

Disk access indicator
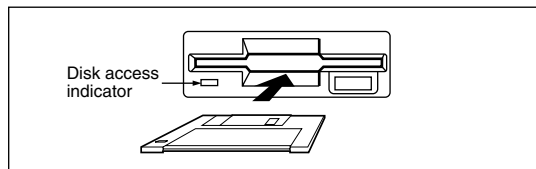
Removing a floppy disk

To remove a floppy disk, first make sure that the disk access indicator is dark. Then press the eject button and remove the disk.
If the disk does not come out when you press this button, do not attempt to remove the disk by force. Please contact your dealer.

Disk access indicator

Eject button
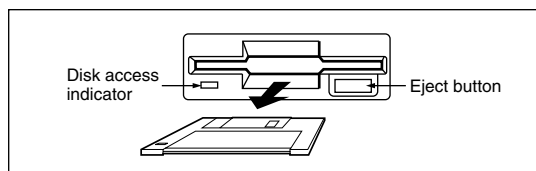
Head cleaning

If the heads of the disk drive are soiled, errors may occur during saving or loading. It is important to clean the heads regularly using a commercially available wet-type 3.5 inch double-sided head cleaning disk. For the cleaning procedure, refer to the owner's manual for your cleaning disk.

Arpeggiator settings

This chapter describes the procedure for making arpeggiator settings in each mode. For details on the arpeggiator function, refer to "Using the arpeggiator while you play" (☞p.29).

Arpeggiator settings for a program

Arpeggiator on/off

Each time you press the ARPEGGIATOR [ON/OFF] key, the arpeggiator will be switched on or off. When on, the LED will light. When you play the keyboard, an arpeggio will play according to the selected arpeggio pattern.

note The on/off setting is stored when the program is written.

Arpeggiator settings

① **In Program P7: Edit-Arpeggiator, select the Arpeg.Setup tab.**
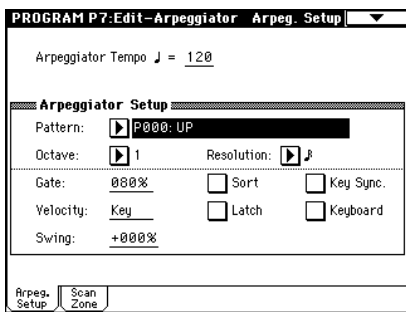
② **In "Arpeggiator Tempo," set the tempo.**

You can also rotate the ARPEGGIATOR [TEMPO] knob to adjust this. The LED will blink at the specified timing.

If "MIDI Clock" (Global P1: MIDI) setting is set to **External MIDI** or **External PCI/F**, this setting will be displayed as "♩=" **EXT**. This allows the tempo to synchronize to an external MIDI device. In this case, it is not possible to adjust the tempo on the TRITON.

③ **In "Pattern," select the arpeggio pattern.**

Select from preset arpeggio patterns **P000–P004** and user arpeggio patterns **U000–231**. You can use numeric keys [0]–[9] to select user arpeggio patterns **U000–231**.

The way in which the pattern is played will depend on settings such as "Octave" and "Sort." **P000–P004** in the following diagrams show how the arpeggio will be played when "Octave" is set to **1**, and "Sort" is **checked**. **P004: RANDOM** is one possibility.
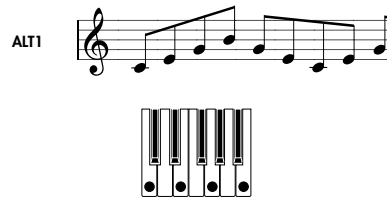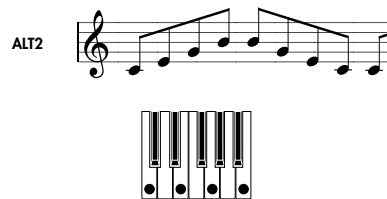
P000: UP
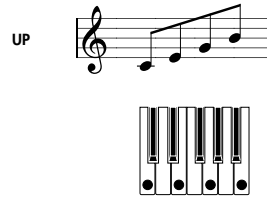
P001: DOWN
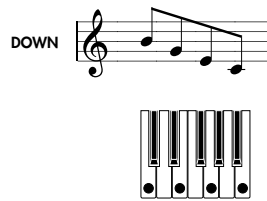
P002: ALT1

P003: ALT2

P004: RANDOM
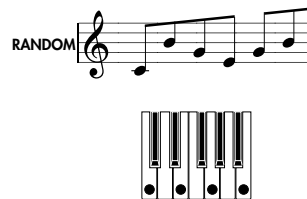
U000(A/B)–U199 (A/B)

With the factory settings, various arpeggio patterns are preset. These include a variety of patterns such as drum or bass phrases, or guitar or keyboard backing riffs.
Arpeggio pattern names are listed in the separate *Voice Name List*.

U200–U215 (C)/U216–U231 (D)

With the factory settings, these do not contain patterns.
If certain separately sold EXB-PCM series option boards are installed and the included disk is loaded,

other arpeggio patterns will be added to U200–U215(C)/U216–U231(D).

④ **Make settings for the various parameters.**
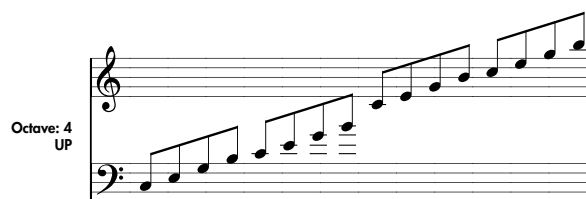
"Octave": Select the octave range in which the arpeggio will be played.

Octave: 4 UP

📖 If a user arpeggio pattern is selected, the "Octave Motion" setting (Global P6: Pattern Setup tab) will affect the way in which the arpeggio is played.

"Resolution": Specify the spacing of the arpeggio notes over a range of ♪₃ – ♩.

"Gate": Specify the length (gate time) of each note in the arpeggio. If a user arpeggio pattern is selected, you can set this to **Step**. In this case, the value of the "Gate" setting for each step (Global P6: Pattern Edit tab) will be used.

📖 This is the setting that will apply when the ARPEGGIATOR [GATE] knob is in the center position (12 o'clock). When setting this parameter, make sure that the knob is in the center position.

"Velocity": Specify the velocity of the notes in the arpeggio. If this is set to **Key**, the velocity with which you actually played the note will be used. If a user arpeggio pattern is selected, you can set this to **Step**. In this case, the value of the "Velocity" setting for each step (Global P6: Pattern Edit tab) will be used.

📖 This is the setting that will apply when the ARPEGGIATOR [VELOCITY] knob is in the center position (12 o'clock). When setting this parameter, make sure that the knob is in the center position.

📝 When a preset user arpeggio pattern is selected, setting the **"Gate"** or **"Velocity"** to **Step** will add a sense of groove to the arpeggio pattern.

"Swing": This adjusts the timing of the even-numbered notes in the arpeggio (counting from the first note), to give the pattern a sense of "swing."

"Sort": If this is checked, the notes of the arpeggio will be sounded in the order of their pitch, regardless of the order in which the notes were actually played on the keyboard (ON).

If this is **unchecked**, the notes of the arpeggio will be sounded in the order in which they were actually played on the keyboard (OFF).

Sort
OFF, UP

Sort
ON, UP

"Latch": If this is **checked**, the arpeggio will continue playing when you remove your hand from the keyboard.
If this is **unchecked**, the arpeggio will stop when you remove your hand from the keyboard.

"Key Sync.": If this is **checked**, the arpeggio pattern will start from the beginning when you play a note after having released all notes. This setting is suitable when you are playing in realtime, and want the arpeggio to start at the beginning of the measure.
If this is **unchecked**, the arpeggio pattern will always be synchronized to the tempo of the MIDI clock. For details on synchronization, refer to "About arpeggiator synchronization" (☞p.105).

"Keyboard": If this is **checked**, the notes you play on the keyboard will be heard as well as the arpeggiated notes.
If this is **unchecked**, only the arpeggiated notes will be heard.

These are linked to the identically-named parameters in the P0: Arpeggio tab. They can be edited in the same way from either location.

📝 You can use the "Copy Arpeggiator" page menu command to copy arpeggiator settings from another program or combination (☞p.23 in the *Parameter Guide*).

⑤ **In the Scan Zone tab, specify the range in which the arpeggiator will operate.**
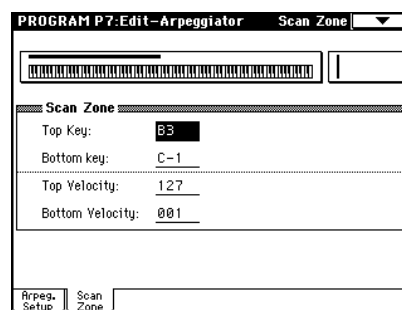
"Top Key," "Bottom Key": The arpeggiator will operate when you play keys within the specified range. Keys outside of this range can be played in the normal manner, and will not be affected by the arpeggiator on/off.

note For example, suppose that you set "Pattern Select" to **P0: UP**, **check** "Latch," set "Top Key" to **B3** and "Bottom Key" to **C–1**. The arpeggiator will operate when you play keys in the range of **B3** and below. Since "Latch" is on, the arpeggio will continue playing even after you release your hand from the keyboard. You can use the keys above **B3** to play normally in realtime, to the accompaniment of the arpeggio. To change the chord that is being arpeggiated, play a different chord in the range below **B3**.

"Top Velocity," "Bottom Velocity": The arpeggiator will operate when you play notes with a velocity (playing strength) that is within the specified range. Notes played with a velocity outside this range will be sounded normally, without regard to the arpeggiator on/off.

⑥ **If you wish to save the edited program settings to internal memory, turn off memory protect in Global mode (☞p.37), and write the program (☞p.38).**

Linking the arpeggiator to a program

If you want the arpeggiator settings written in a program to be selected when that program is selected, check **Program** for "Auto Arpeggiator" (Global P0: Basic tab).

Arpeggiator settings in Combination, Song, and Song Play modes

In Combination, Sequencer, and Song Play modes, the TRITON provides dual arpeggiator functionality that lets you use two arpeggio patterns simultaneously. The settings in each of these modes are made in the similar way.

As an example, the following explanation shows how to make settings in Combination mode. For a detailed explanation and example settings (☞p.39, 73, 107 in the *Parameter Guide*).

The dual arpeggiator functionality lets you do the following things.

• Assign an arpeggiator for each timbre. Choose from **Off**, (arpeggiator) **A**, or (arpeggiator) **B**.
                                          ☞step⑤
• Independently specify whether A and B will operate.   ☞step⑥
• Select an arpeggio pattern and set parameters independently for **A** and **B**.   ☞step⑦
• Make Scan Zone settings so that you can use keyboard range or playing velocity to switch between normal playing and arpeggiated playing, or to switch between arpeggiators **A** and **B**.
                                          ☞step⑧
• Make settings for timbres that will be silent when the arpeggiator is not operating, and will sound only when the arpeggiator is operating.   ☞step⑩

Arpeggiator on/off

Each time you press the ARPEGGIATOR [ON/OFF] key, the arpeggiator will be switched on or off. When on, the LED will light. The selected arpeggio pattern will begin when you play the keyboard. The on/off setting is saved when the program is written into memory.

⚠ When "Arpeggiator Assign" is **Off**, turning it on will not make the arpeggiator operate if "Arpeggiator Run are **unchecked**.

Arpeggiator settings

Select any desired programs for the timbres 1–4 that we will be using as an example here.

① **Select Combination P1: Edit-Program/Mixer.**

Select any desired programs for the timbres 1–4 that we will be using as an example here.

② **In Combination P2: Edit-Trk Param, select the MIDI Channel tab.**

For the timbres that you will be using, set "Status" to **INT**, and set "MIDI Channel" to **Gch** or to the global MIDI channel (set in Global P1: MIDI "MIDI Channel").

For this example, set timbres 1–4 to a "Status" of **INT**, and timbres 5–8 to a "Status" of **Off**. Set the "MIDI Channel" of timbres 1–4 to **Gch**.
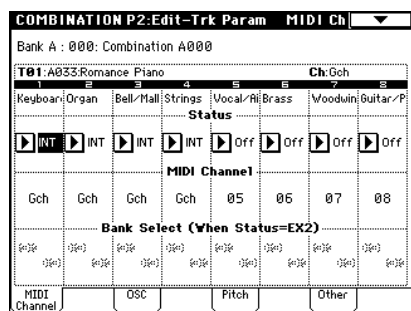
③ **In Combination P7: Edit-Arp., select the Setup tab.**
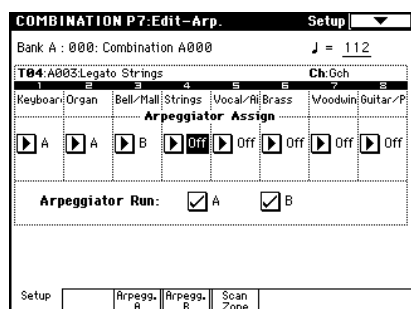
④ **Set the ARPEGGIATOR [TEMPO] knob to specify the tempo.**

This is the same as for a program (☞p.96). However, the tempo is shared by both arpeggiators A and B.

⑤ **Make "Arpeggiator Assign" settings.**

Assign arpeggiator A or B to the desired timbres. Each timbre will be played by the arpeggiator that has been assigned to it.
In the example shown in the illustration, arpeggiator A is will play timbres 1 and 2, and arpeggiator B will play timbre 3.

⑥ **Make "Arpeggiator Run" settings.**

Check the arpeggiator(s) that you want to operate. The arpeggiator(s) checked here will run when the ARPEGGIATOR [ON/OFF] key is turned on.

With the settings shown in the LCD screen for steps ② and ③, turning the ARPEGGIATOR [ON/OFF] key on will cause arpeggiator A to operate for timbres 1 and 2, and arpeggiator B to operate for timbre 3. When the ARPEGGIATOR [ON/OFF] key is turned off, timbres 1–4 will sound as a layer.
If all timbres "Arpeggiator Assign" are **Off**, or if neither "Arpeggiator Run" **A** or **B** is **checked**, the arpeggiator will not function.

⑦ **In the Arpeggiator A and Arpeggiator B tabs, set the parameters for arpeggiators A and B.**

The parameters for A and B are the same as for a program (☞p.96).

⑧ **In the Scan Zone tab, specify the range in which arpeggiators A and B will operate.**

The parameters for A and B are the same as for a program (☞p.97).

You can use keyboard ranges or playing velocity to operate the arpeggiator, or to switch between arpeggiators A and B. By setting the Key Zone tab and Vel Zone tab parameters of Combination P4: Edit-Zone/Ctrl to set keyboard ranges and velocity ranges in conjunction with each other, you can create even more variations.

⑨ **If you wish to save the edited combination settings in internal memory, turn off memory protect in Global mode (☞p.37), and write the combination. (☞p.38).**

⑩ **The "Status," "MIDI Channel" and "Arpeggiator Assign" settings shown in the LCD screen of steps ② and ③ can be made so that certain timbres will sound only when the arpeggiator is running, and will be silent when the arpeggiator is not running.**

Although this is a somewhat sophisticated editing technique, we will describe the settings of one of the preset combinations as an example.

● ●
Combination A003: Drum'n'Bass Kit

Select combination **A003: Drum'n'Bass Kit**, and play it.

Before you play, make sure that the global MIDI channel (Global P1: MIDI "MIDI Channel") is set to **01**.

• Arpeggiator A is assigned to **T** (timbre) **7** and **8**. When you play the keyboard, only the **T8** program **B068: Drum'n'Bass Kit** will be sounded by the **U158 (A/B): Drum'n'Bass 6** arpeggio pattern.
• The arpeggio pattern will use the "Arpeggio Tone Mode" (Global P6: User Arpeggio, Pattern Setup tab) **Fixed Note**, as appropriate for a drum arpeggio performance. With this setting, the arpeggio pattern will always be played with the specified pitches, regardless of the note numbers played on the keyboard (☞p.127 in the *Parameter Guide*).
• The A "Top Key" and "Bottom Key" (Combination P7: Scan Zone tab) are set so that arpeggiator **A** will operate only for notes **B3** and lower.
• Arpeggiator **A** is also assigned to **T7**, but this is so that the **T8** program **B068: Drum'n'Bass Kit** will sound only when the arpeggiator is on.

Notice the timbre settings for T7 and T8

	Status	MIDI Channel	Arpeggiator Assign
T7	Off	Gch	A
T8	INT	02	A

• When the arpeggiator is off, playing the keyboard will sound timbres that are set to **Gch** or the global MIDI channel (in this example, **01**). **T8** will not sound since its "MIDI Channel" of **02**. **T7** will not sound since its "Status" is **Off**, even if **T7** is set Gch.
• The arpeggiator will be operated by any MIDI channel assigned to a timbre. In this example, these are MIDI channels **02** and **Gch** (global MIDI

99

channel). When the arpeggiator is on, playing the keyboard will cause arpeggiator **A** (which is assigned to **T7** (**Gch**)) to run. **T8** will be sounded by arpeggiator A. **T7** will not sound since its "Status" is **Off**.

- In this example, the "Status" of **T7** is **Off**, so it will not sound regardless of whether the arpeggiator is on or off. It is a "dummy" timbre that is used to make **T8** sound only when the arpeggiator is on.

● ●

Combination B86: [<Moon Jam>]

Select and play combination **B86: [<Moon Jam>]**.

Before you play, make sure that the global MIDI channel (Global P1: MIDI "MIDI Channel") is set to **01**.

- Arpeggiator **A** is assigned to **T3**, and arpeggiator **B** is assigned to **T6** and **7**. When you play the keyboard, the **T3** program **A012: Smooth Sine Lead** will be sounded by the arpeggio pattern **P000: UP**. The **T6** program **A020: House Kit** will be sounded by the arpeggio pattern **U161: House 2 BD&SD**.
- The A and B "Top Key" and "Bottom Key" (Combination P7: Scan Zone tab) are set so that arpeggiators A and B will operate only for the **C4** note and above.
- Arpeggiator **B** is assigned to **T7** as well, but this setting is so that the **T6** program **A020: House Kit** will sound only when the arpeggiator is on. Refer to the preceding section "Select and play Combination A003: Drum'n Bass Kit."

● ●

Linking the arpeggiator to the combination

If you want the arpeggiator settings of a combination to become active when that combination is selected, check **Combination** for "Auto Arpeggiator" in the Basic tab of Global P0: Basic Setup.

Creating an user arpeggio pattern

About user arpeggio patterns

The patterns that can be selected on the TRITON's arpeggiator are called "arpeggio patterns." There are two types of arpeggio patterns: preset arpeggio patterns and user arpeggio patterns.

Preset arpeggio patterns: There are five patterns; **UP**, **DOWN**, **ALT1**, **ALT2**, and **RANDOM**. The operation of these patterns is fixed, and cannot be edited. (☞p.29 "Using the arpeggiator while you play")
User arpeggio patterns: There are 232 patterns **U000(A/B)–U213(D)** which can develop chords or phrases in a wide variety of ways, based on the pitches that you play on the keyboard or the timing at which you play them. These patterns can be edited.
With the factory settings, **U000(A/B)—U199(A/B)** contain a diverse assortment of arpeggio patterns (☞the separate *Voice Name List*).

In Global P6: User Arpeggio you can modify these user arpeggio patterns, or create a new user arpeggio pattern from an initialized condition. Edited user arpeggio patterns can be written to internal memory areas **U000(A/B)–U231(D)**. In Disk mode, they can also be saved on external media such as a floppy disk. (☞p.39, p.40)

🎵 **U200 (C)–U215 (C) and U216(D)–U213(D)** are provided as preset arpeggio patterns for certain separately sold EXB-PCM series option boards.

Editing a user arpeggio pattern

🎵 When you wish to edit an user arpeggio pattern, first turn off memory protect by unchecking the Memory Protect "user arpeggio pattern" check box in the Preference tab of Global P0: Basic Setup.

If you move here from Program mode, your editing will apply to the arpeggio pattern specified for the selected program.

① **In Program mode, select a program for which the arpeggio pattern you wish to edit is selected, or a program that you wish to use as a basis for editing the arpeggio pattern.**

② **Press the ARPEGGIATOR [ON/OFF] key to turn on the arpeggiator (the LED will light).**

Even if you moved to Global mode from a program in which the arpeggiator was turned off, you can use the ARPEGGIATOR [ON/OFF] key to turn it on.

③ **In Global P6: User Arpeggio, select the Pattern Setup tab.**

```
GLOBAL P6:User Arpeggio    Pattern Setup ▼
Arpeggiator Select: ● A  ○ B      ♩ = 120
Pattern: ▶ U199(A/B):                    Length: 08

Octave:     ▶ 1        ☑ Sort      ☑ Key Sync.
Resolution: ▶ ♪        ☐ Latch     ☐ Keyboard
▓▓▓ Arpeggio Pattern Setup ▓▓▓
Arpeggio Tone Mode:  ● Normal    ○ Fixed Note
Arpeggio Type:      ▶ As Played
Octave Motion:      ▶ Up
Fixed Note Mode: ▶ Trigger As Played
Pattern  Pattern
Setup    Edit
```

④ **If you moved here from Program mode, A will automatically be selected for "Arpeggiator Select."**

⑤ **In "Pattern," select the arpeggio pattern that you wish to edit.**

For this example, select an empty user arpeggio pattern.

If you have moved from Program mode, the arpeggio pattern selected by the program will be displayed.

⚠ If a blank pattern is selected, playing the keyboard will not start an arpeggio. Although preset arpeggio patterns **P000–P004** can be selected, they cannot be edited.

⚠ When you edit a user arpeggio pattern, the changes will have an effect anytime that this pattern is used in Program, Combination, Sequencer, or Song Play mode.

⑥ **In "Length," specify the length of the pattern.**

After the pattern has played for the length specified here at the note interval specified by "Resolution," it will return to the beginning. This setting can also be changed during or after editing. For this example, set it to **8**.

note For the preset arpeggio patterns **U000(A/B)–U199(A/B)**, simply changing the "Length" can significantly change the character of the pattern. Try changing the length and listening to the result.

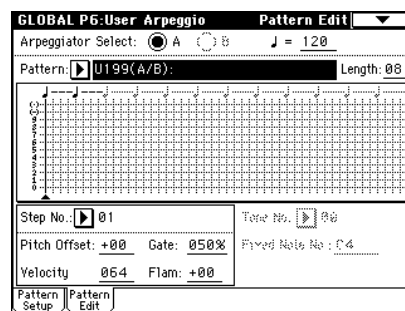⑦ **Make settings for the "♩," "Octave," "Resolution," "Sort," "Latch," "KeySync.," and "Keyboard" parameters.**

These are program parameters, but can be set from here as well.
If after moving here from Program mode, you modify these parameters and wish to keep your changes, return to Program mode and write the program. These parameters are not saved by "Write Arpeggio Pattern."

For this example, make the settings shown in the illustration ③.

⑧ **In Arpeggio Pattern Setup, make settings to specify how the arpeggio will be played.**

These settings can be changed during or after editing (☞p.127 in the *Parameter Guide*).

⑨ **Select the Pattern Edit tab.**

```
GLOBAL P6:User Arpeggio    Pattern Edit ▼
Arpeggiator Select: ● A  ○ B      ♩ = 120
Pattern: ▶ U199(A/B):                    Length: 08

Step No.: ▶ 01                Tone No. ▶ 00
Pitch Offset: +00   Gate: 050%   Fixed Note No : C4
Velocity     064    Flam: +00
Pattern  Pattern
Setup    Edit
```

A pattern consists of **Steps** and **Tones**.

- **Step:** A user arpeggio pattern can have a maximum of 48 steps. The arpeggiator will play from the first step, at intervals of the note value specified by "Resolution." The vertical lines of the grid shown in the center of the LCD screen indicate the steps.
  Use "Step No." to select the step. For each step, specify "Pitch Offset," "Gate," "Velocity" and "Flam."

- **Tone:** At each step, a chord consisting of up to 12 tones ("Tone No." **00–11**) can be sounded.
  To input tones, select "Step No." and then use numeric keys [0]–[9], [–], and [./10's HOLD] to input tones. The "Tone No." corresponds to the [0]–[9], [–], and [./10's HOLD] keys as shown below. Each time you press a [0]–[9], [–], or [./10's HOLD] key, the corresponding tone will be turned on/off. The horizontal lines of the grid shown in the center of the LCD screen indicate the tones.

  Tone00–09: [0]–[9] keys
  Tone10: [–] key
  Tone11: [./10's HOLD] key

Creating an example pattern

① **Set "Step No." to 01, and press the [0] key.**

② **Set "Step No." to 02, and press the [1] key.**

③ **Set "Step No." to 03, and press the [2] key.**

④ **Set "Step No." to 04, and press the [1] key.**

⑤ **Set "Step No." to 05, and press the [3] key.**

⑥ **Set "Step No." to 06, and press the [1] key.**

⑦ **Set "Step No." to 07, and press the [2] key.**

⑧ **Set "Step No." to 08, and press the [1] key.**

You can also select "Step No." by using the
[△][▽] keys, the [VALUE] slider, the [VALUE]
dial, or the popup menu.
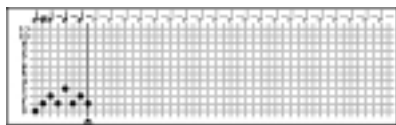
⑨ **When you play the keyboard as shown in the illustration, the arpeggiator will begin playing.**

Tone 0 corresponds to the pitch of the lowest key of chord you play on the keyboard. (If "Sort" is **unchecked**, it will correspond to the pitch of the first note you play.)

⑩ **For steps 01–08, make settings for "Pitch Offset," "Gate," "Velocity," and "Flam."**

"Pitch Offset": This offsets the pitch of the arpeggio note in semitones up or down. You can input the same tone for each step, and change the "Pitch Offset" value for each to create a melody using a single tone. (☞"Melody pattern")

"Gate": Specify the length of the arpeggio note for each step. With a setting of **Legato**, the note will continue sounding either until the next note of the same tone or until the end of the pattern. With a setting of **Off**, the note will not sound.

"Velocity": Specify the strength of the note. With a setting of **Key**, the note will sound at the strength with which it was actually played.

✍ The "Gate" and "Velocity" settings you make here will be valid if the "Gate" and "Velocity" parameters (Program P7: Edit-Arpeggiator, Arpeg. Setup tab) of the program selected in Program mode are set to **Step**. If these parameters have a setting other than **Step**, the "Gate" and "Velocity" that were specified for each individual step will be ignored, and all notes of the arpeggio will sound according to the settings in Program P7: Edit-Arpeggiator. Be sure to verify the settings of the program.

✍ Set the "Gate" and "Velocity" by using the ARPEGGIATOR [GATE] and [VELOCITY] knobs to the center position (12 o'clock).
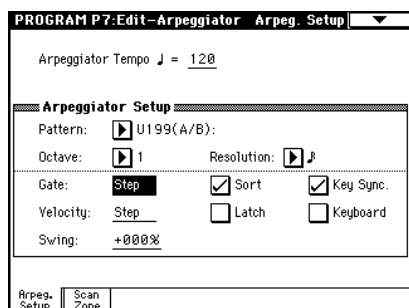

⑪ **To change the user arpeggio pattern name, use the "Rename Arpeggio Pattern" page menu command (☞p.38).**

⑫ **If you wish to save the edited user arpeggio pattern to internal memory, be sure to Write the user arpeggio pattern (☞p.39).**

If you turn off the power without writing, the edited contents will be lost.

⑬ **If you wish to save the state of the program at the same time, return to Program mode and write the program (☞p.38).**

• •

Other examples of creating a user arpeggio pattern

Melody pattern
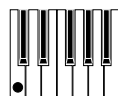
① **Set "Step No." to 01, and press the [0] key. Set "Pitch Offset" to +00.**

② **Set "Step No." to 02, and press the [0] key. Set "Pitch Offset" to +10.**

③ **Set "Step No." to 03, and press the [0] key. Set "Pitch Offset" to +00.**

④ **Set "Step No." to 04, and press the [0] key. Set "Pitch Offset" to +00.**

⑤ **Set "Step No." to 05, and press the [0] key. Set "Pitch Offset" to +12.**

⑥ **For "Step No." 06, do not enter a tone.**

⑦ **Set "Step No." to 07, and press the [0] key. Set "Pitch Offset" to +00.**

⑧ **Set "Step No." to 08, and press the [0] key. Set "Pitch Offset" to –02.**
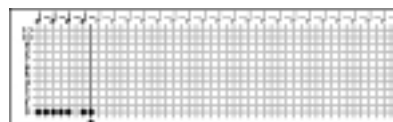
Chordal pattern

① **Set "Step No." to 01, and press the [0] key.**

② **For "Step No." 02, do not enter a tone.**

③ **Set "Step No." to 03, and press the [1], [2], [3], [4] keys.**

④ **Set "Step No." to 04, and press the [1], [2], [3], [4] keys.**

⑤ **For "Step No." 05, do not enter a tone.**

⑥ **Set "Step No." to 06, and press the [1], [2], [3], [4] keys.**
Set "Gate" to Legato.

⑦ **For "Step No." 07, do not enter a tone.**

⑧ **Set "Step No." to 08, and press the [1], [2], [3], [4] keys.**

In Program mode, select an acoustic guitar program, and then select the user arpeggio pattern you create here. In Program P7: Edit-Arpeggiator, choose the Arpeg.Setup tab and set "Gate" to **Step**.
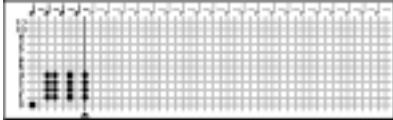
Return to the Pattern Edit tab of Global P6: User Arpeggio. Set "Flam" to **positive (+)** values for odd-numbered steps, and to **negative (–)** values for even-numbered steps. This will simulate the characteristic nuances of guitar chording.

Drum pattern

Here's how you can use the arpeggiator to play a rhythm pattern by using the "**Fixed Note**" setting that is ideal for a drum program.

① **In Program mode, select a drum kit program.**

For this example, select the preset program **A036: Standard Kit**.

② **In Global P6: User Arpeggio, select the Pattern Setup tab, and make Arpeggio Pattern Setup settings.**
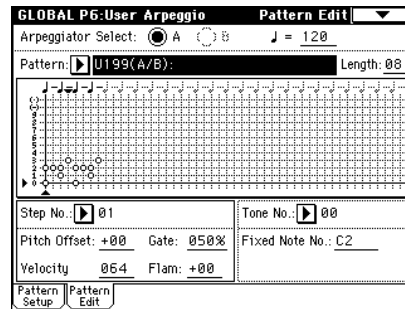
"**Arpeggio Tone Type":** Set this to **Fixed Note**. This will cause the tone to always sound at the specified pitch.

"**Fixed Note Mode":** If you set this to **Trigger All Tones**, playing a single note on the keyboard will sound all **tones**.
If you set this to **Trigger As Played**, the tones will be sounded according to the notes you play on the keyboard.
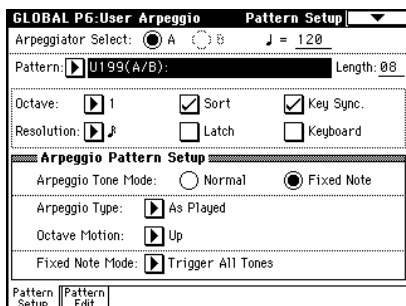
③ **Select the Pattern Edit tab.**

Each **Tone** in the display will be shown as a small circle.
Now you will can set "Tone No." and "Fixed Note No." Select "Tone No.," and set "Fixed Note No." to the note number that will be sounded by that tone. For each horizontal line (**Tone**) in the display, you will specify the drumsample (note number) of the drum kit.
Here, set "Tone No." and "Fixed Note No." as follows.

Tone00: C2 (kick)
Tone01: F2 (snare)
Tone02: F#3 (closed hi-hat)
Tone03: G#3 (open hi-hat)

The drumsamples that correspond to each note number will differ depending on the drum kit. You will find it convenient to audition the drum sounds from the keyboard, and then input the "Fixed Note No." by holding down the [ENTER] key and playing the desired note.

Creating a drum pattern
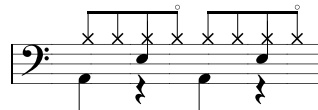
① **Input the kick (Tone00). Set "Step No." to 01, and press the [0] key. Then set "Step No." to 05, and press the [0] key.**

② **Input the snare (Tone01). Set "Step No." to 03, and press the [1] key. Then set "Step No." to 07, and press the [1] key.**

③ **Input the closed hi-hat (Tone02). Set "Step No." to 01, 02, 03, 05, 06, and 07, and press the [2] key for each.**

④ **Input the open hi-hat (Tone03). Set "Step No." to 04, and press the [3] key. Then set "Step No." to 08, and press the [3] key.**

You can also select "Step No." by using the [△][▽] keys, the [VALUE] slider, the [VALUE] dial, or the popup menu.

If "Fixed Note Mode" is set to **Trigger All Tones**, playing a single note on the keyboard will cause the rhythm pattern to play.

If "Fixed Note Mode" is set to **Trigger As Played**, playing a single note on the keyboard will cause only the kick (**Tone00**) to play. Playing two notes on the keyboard will cause only the kick (**Tone00**) and snare (**Tone01**) to play. In this way, the number of keys that you play will be played by the same number of **tones**.

⑤ **Set the parameters for each step.**

Use "Velocity" etc. to add accents to the rhythm pattern.

📖 The "Gate" and "Velocity" settings you make here will be valid if the "Gate" and "Velocity" parameters (Program P7: Edit-Arpeggiator, Arpeg. Setup tab) of the program selected in Program mode are set to **Step**. If these parameters have a setting other than **Step**, the "Gate" and "Velocity" that were specified for each individual step will be ignored, and all notes of the arpeggio will sound according to the specified gate and velocity.

📖 Set the ARPEGGIATOR [GATE] and [VELOCITY] knobs to the center position (12 o'clock).

Dual arpeggiator editing

Here we will use a combination as an example in our explanation.
For details on how the arpeggiator operates differently in Sequencer and Song Play modes than in Combination mode, refer to the following section "note."

If you have moved from Combination mode, the arpeggio pattern selected by the combination will be affected by your editing.

① **In Combination mode, select a combination that uses the arpeggio pattern you wish to edit.**

For this example, select a combination to which arpeggiators A and B is assigned.

② **Press the ARPEGGIATOR [ON/OFF] key to turn on the arpeggiator (the LED will light).**

Even if the arpeggiator had been turned off when you moved here, you can use the ARPEGGIATOR [ON/OFF] key to turn it on. However, if "Arpeggiator Run" **A** or **B** are not checked, and if no timbres have been assigned in "Arpeggiator Assign," then the arpeggiator will not operate.

③ **In Global P6: User Arpeggio, select the Pattern Setup tab.**

④ **If you moved here from Combination mode, use the "Arpeggiator Select" radio buttons A and B to select the arpeggiator that you wish to edit.**

If this is **A**, your editing will apply to the parameters and user arpeggio pattern of arpeggiator A.

If this is **B**, your editing will apply to the parameters and user arpeggio pattern of arpeggiator B.

⑤ **Switch between arpeggiators A and B, and edit their respective user arpeggio patterns.**

If you wish to stop one of the arpeggiators, return to Combination mode, and in P0: Play, select the Arpeggio Play tab and **uncheck** the "Arpeggiator Run" check box.

⑥ **To modify the name of a user arpeggio pattern, use the page menu command "Rename Arpeggio Pattern" (☞p.38).**

⑦ **If you wish to save the edited user arpeggio pattern in internal memory, you must write the user arpeggio pattern.**

In this case, both user arpeggio patterns will be written simultaneously. If you turn off the power without writing, the edited contents will be lost (☞p.39).

⑧ **If you wish to save the state of the combination at the same time, return to Combination mode and write the combination (☞p.38).**

📝 You can edit a user arpeggio pattern in Sequencer and Song Play modes in the same way as in Combination mode.
However, when you play the keyboard in Global mode, the program and arpeggiator of tracks that match the global MIDI channel (set in Global P1: MIDI) will be heard.

For example, suppose that you assign track 1 to MIDI channel **01** and arpeggiator **A**, and assign track 2 to MIDI channel **02** and arpeggiator **B**. (MIDI channel is set in Sequencer mode P2: Trk Param by MIDI Ch1–8, 9–16, and is fixed in Song Play mode.)
Use "Track Select" to select the track that you wish to play from the keyboard. If you select track 1, you will be able to play arpeggiator A. If you select track 2, you will be able to play arpeggiator B. If in this state you move to Global mode, arpeggiator A (track 1) will be played if the global MIDI channel is 01, or arpeggiator B (track 2) will be played if the global MIDI channel is 02.

When editing a user arpeggio pattern, pay attention to the global MIDI channel, the channel of each track, and the arpeggiator assignments, and make sure that the arpeggiator you are hearing is the pattern that you wish to edit.

📖 If you moved here from Sampling mode, the arpeggiator will not turn on. Nor will it be possible to edit arpeggio patterns.

About arpeggiator synchronization

The note timing of the arpeggiator will depend on the setting of its "Key Sync." check box.
If this is **checked**, the arpeggiator will operate at the timing that you play the first note-on after having released all notes.
If this is **unchecked**, the arpeggiator will synchronize to the timing of the internal/external MIDI clock.

The following paragraphs explain how synchronization occurs when the "Key Sync." check box is not **checked**.

Arpeggiator and sequencer synchronization in Sequencer or Song Play mode

When MIDI Clock (Global P1: MIDI "MIDI Clock") is set to " ♩ " **EXT** in Sequencer mode, the arpeggiator will synchronize to the external MIDI sequencer etc. connected via a MIDI cable.
In Song Play mode, it is not possible to synchronize to an external MIDI clock.

When the song is stopped:

• The arpeggiator will synchronize to the "♩" based on the timing of the internal/external MIDI clock.
• When a Sequencer mode RPPR pattern is playing, the arpeggiator will synchronize to the "♩" based on that timing.

When the song is playing or recording:

• The arpeggiator will synchronize to the "♩" based on the timing of the song.
• In Sequencer mode when the ARPEGGIATOR [ON/OFF] key is on, and you press a note during the pre-count before recording to start up the arpeggiator, the arpeggiator will start from the beginning of the pattern simultaneously with the start of recording, and will be recorded.

Synchronization with song start

• When the arpeggiator is on (ARPEGGIATOR [ON/ OFF] key is set to on) and is running, an incoming Song Start message will cause the arpeggiator to reset to the beginning of the pattern.

Synchronization with an external sequencer in Program or Combination mode

When MIDI Clock (Global P1: MIDI "MIDI Clock") is set to " ♩ " **EXT** in Program or Combination modes, the arpeggiator will synchronize to MIDI Clock or Start messages etc. received from an external MIDI sequencer etc. connected via a MIDI cable.

Synchronization with external MIDI clock

• The arpeggiator will synchronize to the "♩" based on the timing of the external MIDI clock.

Synchronization with song start

• If the arpeggiator is on and running, receiving a song start will reset the arpeggiator to the beginning of the pattern.

Synchronizing arpeggiators A and B

In Combination, Sequencer, or Song Play modes, the two arpeggiators can be operated simultaneously. At this time if one arpeggiator is running and the other arpeggiator (whose "Key Sync." is not **checked**) is started, the second arpeggiator will synchronize to the "♩" based on the timing of the first arpeggiator.

note If "Key Sync." is **checked**, arpeggiators A and B will operate with independent timing.

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Effects settings

The effect section of the TRITON provides five **insert effects**, two **master effects**, one **master EQ** (stereo 3-band EQ), and a mixer that controls the routing of these components.

You can choose from 102 types of full-digital effects for each insert effect, and from 89 types for each master effect. The effects are categorized as follows.

Categories of the 102 effect types

|	
001–015	Filter and dynamics effects, such as EQ and compressor
016–031	Phase modulation effects, such as chorus and phaser
032–040	Other modulation and pitch-shift effects such as rotary speaker and pitch shifter
041–051	Early reflection and delay effects
052–057	Reverb effects
058–089	Mono + mono chain effects that internally connect two mono effects in series
090–102	Double-size effects

Effects **000–089** can be selected for IFX1, 2, 3, 4, 5, or MFX 1 or 2. Effects **090–102** are double-size effects, and will use twice the processing area of other effects. They can be selected for IFX2, IFX3 or IFX4.

Effects in each mode

In **Program mode**, **insert effects** can be used as part of the sound-creating process, in the same way that the output sound of the oscillator (OSC) is processed by the filter and amp to create the final sound. Then the **master effects** can be used to apply spatial-type effects such as reverb. The stereo 3-band **master EQ** located immediately before the OUTPUT (MAIN) L/MONO and R outputs is used to make final adjustments in tone. These settings can be made independently for each program.
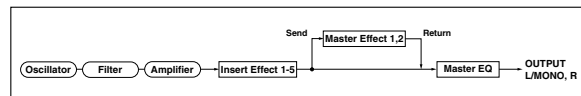
In **Combination mode**, **Sequencer mode**, and **Song Play mode**, **insert effects** can be used to help create the sound of each timbre/track. The **master effects** are used to apply overall spatial processing, and the **master EQ** is used to make overall adjustments in tone. These settings are made in Combination mode independently for each combination, in Sequencer mode for each song, and in Song Play mode for the entire mode.
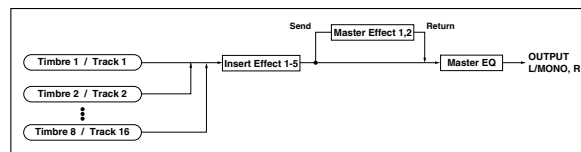

In **Sampling mode**, the sound of an external source that is input from AUDIO INPUT 1 and 2 can be processed by the **insert effects** as the sound is sampled. Settings in Sampling mode are made in "Audio Input (Sampling)" of Sampling P0: Input/Setup. These settings are valid only within Sampling mode.
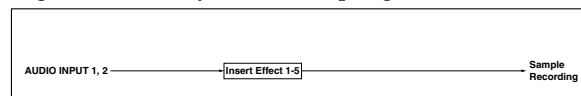
The external input from AUDIO INPUT 1 and 2 can be used outside of Sampling mode. In Program, Combination, Sequencer, and Song Play modes, the external input sound can be processed by the **insert effects**, **master effects**, and **master EQ**.

This means that you can use the TRITON as a 2-in/6-out effect processor. When **093: Vocoder** is selected, the TRITON can be used as a vocoder effect processor in which its internal sounds are controlled by an external mic input.
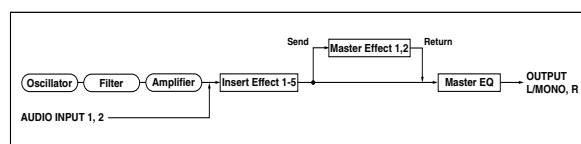
Routing settings and effect settings

The insert effects, master effects, and master EQ have the same structure in all modes, but the routing settings will determine how the oscillators of a program or the timbres of a combination or track of a song will be sent to each insert effect or master effect. In the pages that follow, we will explain how you can make routing settings and effect settings in each mode.

Effect settings for a program

Routing

① In Program P8: Edit-Insert Effect, select the Routing tab.
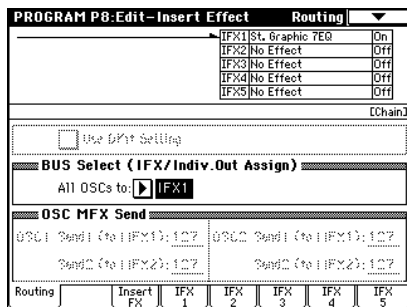
② Use "BUS Select (IFX/Indiv.Out Assign) to specify the bus (insertion effect) to which the output of the oscillator will be sent.

This specifies the bus (or the insert effect) to which the oscillator output will be sent.

L/R: The output will not be sent to the insert effects. After passing through the master EQ, the sound will be sent to AUDIO OUTPUT (MAIN) L/MONO and R.
IFX1–5: The output will be sent to insert effect IFX 1, 2, 3, 4, or 5.
1, 2, 3, 4, 1/2, 3/4: The output will be sent to AUDIO OUTPUT (INDIVIDUAL) 1, 2, 3, or 4. It will not be sent to the insert effects, the master effects, or the master EQ.
Off: The output will not be sent to AUDIO OUTPUT (MAIN) L/MONO, R, or to (INDIVIDUAL) 1, 2, 3, 4. (After passing through the master effects, it will be output from AUDIO OUTPUT (MAIN).) Select this when you wish to connect the output to the master effects in a series connection at the send levels specified by "Send 1 (MFX1)" and "Send 2 (MFX2)."
For this example, select IFX1.

③ **"OSC MFX Send"** specifies the send level from each oscillator to the master effects.

This can be set only when "BUS Select (IFX/Indiv.Out Assign)" is either **L/R** or **Off**.
If "BUS Select (IFX/Indiv.Out Assign)" is set to **IFX1–5**, the send level to the master effects is set by

"Send 1" and "Send 2" (Insert FX tab) after the signal passes through the insertion effects.

Insert effects

④ **Select the Insert Effect tab.**
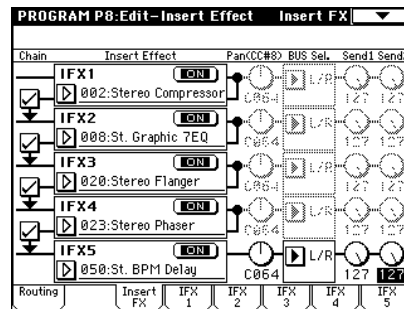
⑤ **For IFX1–5, select the effect type for each insert effect.**

📎 When you press the popup button, all effects will be displayed, organized into six categories. Use the tabs located at the left to select a category, and select an effect from that category on the LCD screen.

📎 Effects **000–089** can be selected for IFX1, 2, 3, 4, 5, and MFX1 and 2. Effects **090–102** are double-size effects, and require twice the processing area of other effects. These can be selected for IFX2, IFX3, and IFX4.

📝 Each time you press the **ON/OFF button**, the insertion effect will be switched on/off. A setting of **OFF** will be the same as when **000: No Effect** is selected. The input sound will be output without any change.

📝 You can use the "Copy Insert Effect" page menu command to copy effect settings from another program etc. Also, you can use "Swap Insert Effect" to exchange (for example) IFX1 and IFX5.

⑥ **Make "Chain" settings.**

If the "Chain" check box is **checked**, the insert effect will be connected in series. Since the output of the oscillator is being sent to IFX1 in ②, making settings as shown in the diagram ④ would connect all five insertion effects IFX1 → IFX2 → IFX3 → IFX4 → IFX5 in series, so that these effects would be inserted into the output of the oscillator.

⑦ **Make settings for "Pan," "BUS Sel. (BUS Select)," "Send 1," and "Send 2" for the sound after it has passed through the insert effects.**

If the insertion effects are chained, these settings will apply after the last IFX.
"Pan": Set the pan. This is valid only when BUS Sel. is L/R.
"BUS Sel." (BUS Select**):** Specify the output destination. Normally you will set this to **L/R**. If you wish to send the sound that has passed through the insert effects to AUDIO OUTPUT (INDIVIDUAL) 1–4, select **1–4**, **1/2**, or **3/4**.

**"Send 1", "Send 2":** Set the send levels to the master effects. For this example, set this to **127**.

⑧ **Select the IFX1–5 tabs, and set the parameters for each of the selected effects.**

For details on the parameters of each effect (☞p.155 in the *Parameter Guide*).

Master effects

The input levels to the master effects are set by the "Send 1, 2" levels (step ③ or ⑦). If "Send 1, 2" are zero, the master effects will not apply. "Send 1" corresponds to MFX1, and "Send 2" corresponds to MFX2.

⑨ **In Program P9: Edit-Master Effect, select the Master FX tab.**
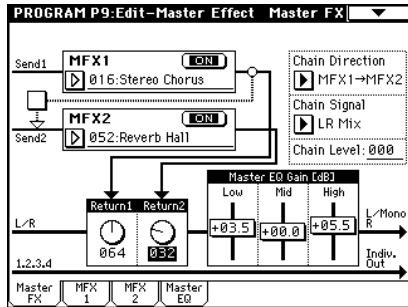
⑩ **In MFX1 and MFX2, select the type of each master effect (☞⑤).**

The procedure is the same as when selecting an insertion effect.

✍ The master effects cannot use double-size effects.

✍ The master effects are mono-in/stereo-out. Even if a stereo-input effect is selected, it will function as mono input.

📝 Each time you press the **ON/OFF button**, the master effect will be switched on/off. When **OFF**, the output of the master effect will be muted.

⑪ **Use "Return 1" and "Return 2" to adjust the output levels of the master effects.**

✍ For each effect, the **Wet** value of the "Wet/Dry" parameter is the output level at the effect. The return value is multiplied with this ("Return" = **127** will be x1.0) to determine the actual output level of the master effect.

⑫ **Select the MFX1 and MFX2 tabs, and set the parameters for each selected effect.**

For details on the parameters of each effect, refer to p.155 in the *Parameter Guide.*

Master EQ

⑬ **Use the stereo 3-band master EQ to make final equalizing adjustments immediately before the sound is output from the AUDIO OUTPUT L/MONO and R jacks.**

Move the slider for each band to make adjustments.

You can select the Master EQ tab, and adjust the band frequency of the master EQ (☞p.207 in the *Parameter Guide*).

Effect settings in Combination, Song, and Song Play modes

In Combination, Sequencer, and Song Play modes, you can specify the routing of each timbre/track to the insert effects and master effects. These settings are made in the same way in each of these modes. We will be using the example of Combination mode in our explanation here.

Routing

① **In Combination P8: Edit-Insert Effect, select the Routing tab.**
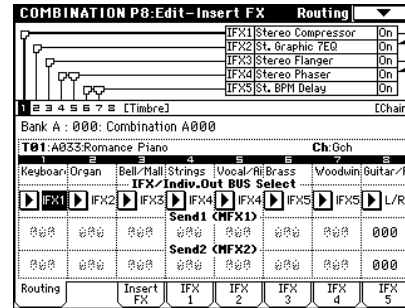
② **Select "IFX/Indiv.Out BUS Select." Here you can specify the bus (insert effect) to which the output of each timbre will be sent.**

📝 The routing, insert effects, and chain settings are shown graphically in the upper part of the display screen. In this example, T01 (timbre 1) uses IFX1 and 2. T02 uses IFX2, T03 uses IFX3 and 4, T02 and T05 use IFX4, and T06 and T07 use IFX5. Selection of each effect type, the on/off setting, and chain settings are made in the Insert Effect tab.

③ **Make settings for Send 1 and Send 2.**

For each timbre, you can set the send levels to the master effects.

This can be set only if "IFX/Indiv.Out BUS Select" is set to **L/R** or **Off**.

✍ The actual send level is determined by multiplying this by the "Send 1" or "Send 2" settings for oscillators 1 and 2 within the program selected by the timbre. If the program parameter "Send 1" or "Send 2" is set to **0**, the resulting level will still be **0** even if you raise this send level.

If "IFX/Indiv.Out BUS Select" is set to **IFX1–5**, the send levels to the master effects are set by "Send 1" and "Send 2" (Insert FX tab) following the insert effects.

Insert effects

Select an effect for IFX1–IFX5, and set "Pan," "BUS Sel. (BUS Select)," "Send 1" and "Send 2" for the signal that

has passed through each insertion effect. If effects are chained, the settings after the last IFX in the chain will be used. "Send 1" and "Send 2" adjust the amount of master effect that is applied to the signal that has passed through the IFX. These settings can be made in the same way as for a program (☞p.107).
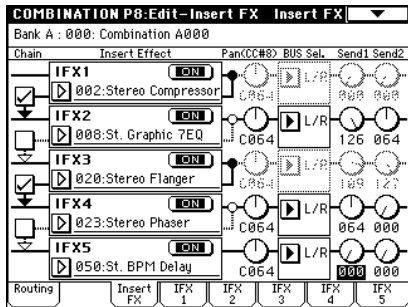
Master effects
Master EQ

These settings can be made in the same way as in "Effect settings for a program" (☞p.108).

Effect settings in Sampling mode

In Sampling mode, insert effects can be applied to an external audio source connected to the AUDIO INPUT 1 and 2 jacks, and sampled.

Routing

① **In Sampling P0: Recording, select the Audio Input tab.**

The parameters in "Audio Input (SAMPLING)" specify the insert effect to which the external audio input from the AUDIO INPUT 1 and 2 jacks will be sent. For details on these settings, refer to "Sampling (recording a sample)" (☞p.78).

Insert effects

Select an effect for IFX1–IFX5, and set "Pan," "BUS Sel. (BUS Select)," "Send 1" and "Send 2" for the signal that has passed through each insertion effect. If effects are chained, the settings after the last IFX in the chain will be used. "Send 1" and "Send 2" adjust the amount of master effect that is applied to the signal that has passed through the IFX. These settings can be made in the same way as for a program (☞p.107).

Master effects
Master EQ

The master effects and master EQ cannot be used in Sampling mode.

Effect settings for the AUDIO INPUT

Even in modes other than Sampling mode, the TRITON's effects can be applied to the external audio source connected to the AUDIO INPUT 1 and 2 jacks. The effect section of the TRITON can be used as a 2-in 6-out effect processor. When 093: Vocoder is selected, you can use the TRITON as a vocoder that combines the internal sounds with the sound from an external microphone.

Routing

In modes other than Sampling mode (i.e., in Combination, Program, Sequencer, and Song Play modes), the settings in Global P0: Basic Setup Audio Input tab specify the routing of the external audio input from the AUDIO INPUT 1 and 2 jacks.

① **Move from Program mode to Global mode.**

✍ If you move from Sampling mode to Global mode, the "Audio Input" settings of Sampling mode will be maintained, and you will not be able to hear the results of the settings you make in this page. Be sure to move from a mode in which the external audio signal can be input (Combination, Program, Sequencer, Song Play). In Sampling mode, the settings you make here will not apply. Settings for the rear panel AUDIO INPUT 1 and 2 jacks in Sampling mode are made in the same way in Sampling P0: Recording Input/Setup tab "Audio Input (SAMPLING)."

② **In Global P0: Basic Setup, select the Audio Input tab.**
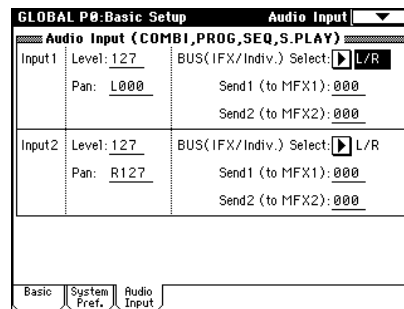
③ **Set the parameters for Input 1 and 2.**

Input 1 corresponds to AUDIO INPUT 1 jack and INPUT 2 jack corresponds to AUDIO INPUT 2.

"Level": Set the signal level from AUDIO INPUT 1 and 2. Normally you will set this to **127**. If the sound is still distorted even when this level is lowered significantly, it is possible that the distortion is occurring before the AD converter. Adjust the rear panel [LEVEL] knob or the output level of your external audio source.

"Pan": Set the panning of the signal from AUDIO INPUT 1 and 2. When you are inputting a stereo audio source, you will normally set Input 1 to **L000**, and Input 2 to **R127** (or Input 1 to **R127**, and Input 2

to **L000**). When you are inputting a monaural audio source, you will normally set this to **C064**.

"BUS (IFX/Indiv.) Select": In the same way as for the oscillator of a program, specify the bus to which the external audio source from AUDIO INPUT jacks 1 and 2 will be sent.

"Send 1 (to MFX1)", "Send 2 (to MFX2)": In the same way as for the oscillator of a program, specify the level at which the external audio source from AUDIO INPUT jacks 1 and 2 will be sent to the master effects. This setting can be made only if "BUS (IFX/Indiv.) Select" is **L/R** or **Off** (☞p.107).

If "BUS (IFX/Indiv.) Select" is set to **IFX1–5**, this is set by "Send 1" and "Send 2" (Insert Fx tab) after the sound has passed through the insert effects.

🖝 If "BUS (IFX/Indiv.) Select" has a setting other than **Off**, and you raise the "Level" value, the external audio source will be input to the TRITON. At this time if audio cables are connected to the rear panel AUDIO INPUT 1 and 2 jacks, noise may be input to the TRITON via the AD converter even if no audio input is actually present, and depending on the settings, may be output from AUDIO OUTPUT L/R, 1, 2, 3, or 4. If you will not be using an external audio source, but are using only the internal sounds of a program, combination, or song, set "BUS (IFX/Indiv.) Select" to **Off**, or set "Level" to **0**.

If no audio cables are connected to the rear panel AUDIO INPUT 1 and 2 jacks, the data that is input to the TRITON from the AD converter will be set to zero, and no noise will be output.

About dynamic modulation (Dmod) D-mod

Dynamic modulation (Dmod) is a function that lets you use the TRITON's controllers or MIDI messages to control specific effect parameters while you play, to make the effects change in realtime.
The BPM/MIDI Sync function also lets you control effect parameters in a similar way. This can be used to synchronize the LFO speed of a modulation-type effect or the delay time of a delay-type effect etc. to the tempo of the arpeggiator or sequencer.

For details on each of these functions, refer to "Appendices: Dynamic modulation" (☞p.214 in the *Parameter Guide*).

Setting example:

We will show how you can use dynamic modulation to control an effect parameter in realtime.

① **As described in the procedure for "Effect settings for a program" (☞p.107), set "IFX1" to 049: L/C/R BPM Delay. Verify that a delay sound is being output.**

② **Select the IFX1 tab.**

Using Dmod to change the delay level by moving the joystick away from yourself

① **Set "Input Level Dmod" to +100.**

② **Set "Src" to JS+Y: CC#01. The delay sound will disappear.**

The input level to the effect can be controlled by the joystick. As you move the joystick away from yourself, the delay sound will gradually increase.

Using Dmod to modify the feedback level from [SW1] key

① **In P1: Edit-Basic, select the Controller Setup tab, and set the function of "SW1" to SW1 Mod.: CC#80 (Toggle).**

② **Return to P8. Set "Feedback Src" to SW 1: CC#80.**

③ **Set "Amt" to +30.**

When you press the [SW1] key, the feedback level will increase, and the delay sound will continue for a longer time. (Move the joystick away from yourself so that the delayed sound is output.) The "Amt" setting specifies the feedback level that will be in effect when the [SW1] key is pressed. If "Amt" is set to **–10**, pressing the SW1 key will reduce the feedback level to **0**.

Using the BPM/MIDI Sync. function to synchronize the delay time to arpeggiator tempo changes.

① **Set "BPM" to MIDI.**

② **For L, C, and R, set "Delay Base Note" and "Times" as desired.**

For this example, set "Delay Base Note" to ♪ and "Times" to **x1** so that the effect will be easily understandable. The delay time will repeat at an interval of a 8th note.

③ **Rotate the [TEMPO] knob, and the delay time will change.**

(When you move the joystick away from yourself, the delay sound will be output.)

④ **When you turn on the ARPEGGIATOR [ON/OFF] switch, the arpeggiator will begin playing.**

Select any desired arpeggio pattern. When you rotate the [TEMPO] knob, the delay time will change in synchronization with the changing tempo of the arpeggio.

🖝 If you rotate the [TEMPO] knob to change the tempo while the delay is sounding, noise may occur in the delay sound. This is because the delay sound becomes discontinuous, and is not a malfunction.

note For some effects, you can synchronize the LFO frequency to the tempo. Set the effect parameters "BPM/MIDI Sync" to **On**, and "BPM" to **MIDI**. For details refer to p.159 in the *Parameter Guide*.

MIDI applications

About MIDI

MIDI stands for Musical Instrument Digital Interface, and is a world-wide standard for exchanging various types of musical data between electronic musical instruments and computers. When MIDI cables are used to connect two or more MIDI devices, performance data can be exchanged between the devices, even if they were made by different manufacturers.

## Connecting MIDI devices/computers (MIDI connectors)

Controlling an external MIDI tone generator from the TRITON

When you wish to use the TRITON's keyboard, controllers, and sequencer etc. to play an external MIDI tone generator, use a MIDI cable to connect the TRITON's MIDI OUT connector to the MIDI IN connector of the external MIDI tone generator.
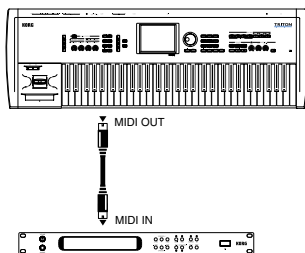

Controlling the TRITON's tone generator from an external MIDI device

When you wish to play or control the TRITON's tone generator from an external MIDI keyboard or sequencer etc., use a MIDI cable to connect the MIDI OUT connector of the external MIDI device to the MIDI IN connector of the TRITON.
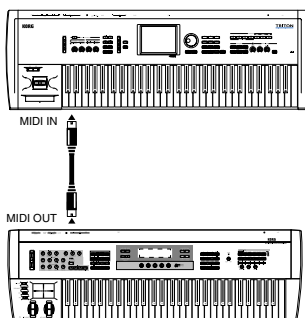

Controlling two or more external MIDI tone generators from the TRITON

You can use the MIDI THRU jack to simultaneously control multiple MIDI devices. (This type of connection should be used to connect no more than three devices. If you wish to connect a larger number of MIDI devices, we recommend that you use a MIDI patch bay as shown in the second diagram below.)
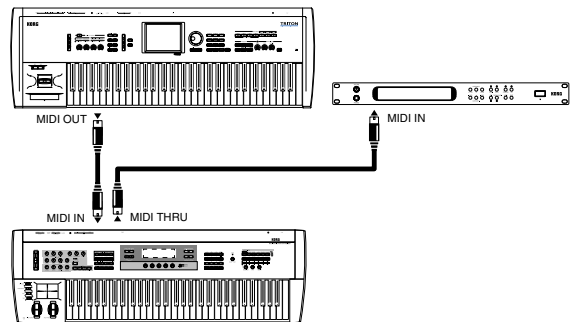
You can also use a MIDI patch bay to control multiple MIDI devices.
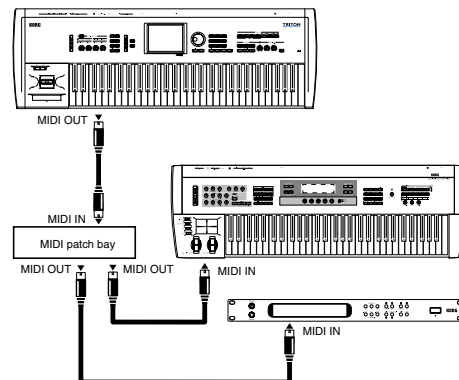
● ●
The "Convert Position" setting
On the TRITON, the Global P0: Basic tab parameters "Key Transpose," "Velocity Curve" and "After Touch Curve" allow you to transpose the pitch, adjust the velocity sensitivity, and adjust the after touch sensitivity (☞p.113 in the *Parameter Guide*).
The effect that these settings will have on the internal sequencer and on the MIDI data that is transmitted and received will depend on "Convert Position" (Global P1: MIDI) setting (☞p.118 in the *Parameter Guide*).

- When controlling an external MIDI tone generator from the TRITON, select "**Pre MIDI**." The above-listed settings will affect the MIDI data that is transmitted. These settings will also affect the data that is recorded on the internal sequencer.

Incoming MIDI data will be handled with settings equivalent to "Key Transpose" **0**, "Velocity Curve" **4**, and "After Touch Curve" **3**.
• When controlling the TRITON's tone generator from an external MIDI device, select "PostMIDI." The above-listed settings will affect the MIDI data that is received. These settings will also affect the data that is played back from the internal sequencer.
Outgoing MIDI data will be handled with settings equivalent to "Key Transpose" **0**, "Velocity Curve" **4**, and "After Touch Curve" **3**.

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Connecting an external MIDI sequencer or computer etc.

You can play the TRITON's keyboard and record your performance on an external MIDI sequencer/computer (connected via a MIDI interface), and then play back the recorded performance to sound the TRITON's tone generator (i.e., using the TRITON as an input keyboard and MIDI tone generator). To do this, connect the MIDI OUT and MIDI IN connectors of the TRITON and your external MIDI sequencer/computer to each other.

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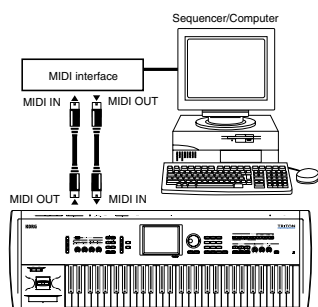
Local Control On settings

When connections are made as shown above, turn on the Echo Back function of the external MIDI sequencer or computer (so that data received at MIDI IN will be re-transmitted from MIDI OUT), and turn off the TRITON's Local Control setting (so that the TRITON's keyboard and tone generator will be internally disconnected). When you play the keyboard of the TRITON, the musical data will be transmitted to the external MIDI sequencer or computer, and then echoed back to play the TRITON's tone generator. In other words, by turning Local Control OFF, you can prevent notes from being sounded in duplicate, as would otherwise occur if a note were sounded by the TRITON's own keyboard and again by the data that was echoed-back.

If the arpeggiator function is on, playing the TRITON's keyboard will not cause the arpeggiator to operate, and only the musical data produced by playing the keyboard will be transmitted. The arpeggiator will operate only in response to the notes that are echoed-back and received at MIDI IN. In this way, turning off Local Control prevents the arpeggiator from operating

in duplicate.
Use this setting when you wish to record on the external MIDI sequencer or computer only the notes that trigger the arpeggiator, and to use the echoed-back notes to operate the arpeggiator while monitoring your recording or during playback.

To turn **off** Local Control, select the Global P1: MIDI, and press the "Local Control On" check box to **uncheck** it (☞p.117 in the *Parameter Guide*).
When using the TRITON by itself, leave Local Control turned on. (If this is **off** when the TRITON is used by itself, playing the keyboard will not produce sound.)

⚠ If you want the note data produced by the arpeggiator to be recorded on the external sequencer/computer, set Local Control on, and turn off the Echo Back setting of the external sequencer/computer.

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Connecting a computer (TO HOST connector)

By using a special cable to connect the TRITON's TO HOST to your computer, and installing the "Korg MIDI Driver," you can play and control the TRITON from your computer. Direct cable connections are possible with the following computers.

Connecting an IBM PC (compatible)

To connect an IBM PC (compatible) with the TRITON, you will need a separately sold AG-001B connecting kit (cable and Korg MIDI Driver software).

① **Use the special AG-001B cable to connect the serial port (COM port) of the IBM PC (compatible) to the TRITON's TO HOST connector.**
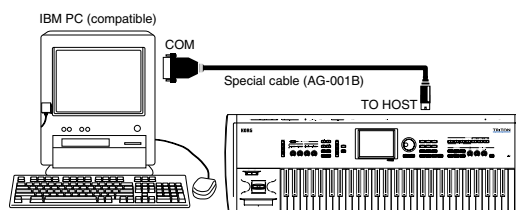
⚠ If the serial port of your computer uses a 25-pin connector, you will need to obtain a 9 pin - 25 pin adapter.
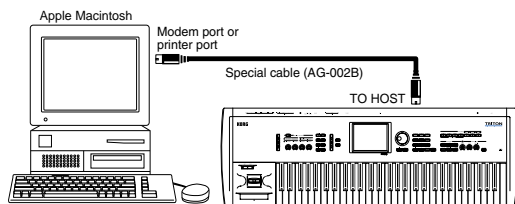
② **In Global P0: Basic Setup, set "PC I/F Baud Rate" to 38.40 [kBPS]. (☞"PC I/F Baud Rate settings")**

③ **If you are using Windows, install the Korg MIDI Driver. For the installation procedure, refer to "Installing and setting up the Korg MIDI Driver" (☞p.129).**

Connecting an Apple Macintosh

To connect an Apple Macintosh with the TRITON, you will need a separately sold AG-002B connecting kit (cable and Korg MIDI Driver software).

⚠ Macintosh computers that do not have a serial port (modem/printer) cannot be connected to the TO HOST connector.

① **Use the special AG-002B cable to connect the modem port or printer port of the Apple Macintosh to the TRITON's TO HOST connector.**

⚠ If the application program (sequencer) you are using has a Clock setting, set it to 1 MHz.

② **In Global P0: Basic Setup, set "PC I/F Baud Rate" to 31.25 [kBPS]. (☞"PC I/F Baud Rate settings")**

③ **If you will be installing the Korg MIDI Driver (☞p.131 "Installing the Korg MIDI Driver into a Macintosh").**

● ●

PC I/F Baud Rate settings

① **Press the [GLOBAL] key to enter Global mode.**

② **Press the [MENU] key, and then press the [EXIT] key to enter P0: Basic Setup.**

③ **Press the System Pref. tab.**

④ **Press the "PC I/F Baud Rate" popup button, and select the setting that is appropriate for your computer.**

31.25 [kBPS]:
Connection to an Apple Macintosh.

34.80 [kBPS]:
Connection to an IBM PC (compatible).

● ●
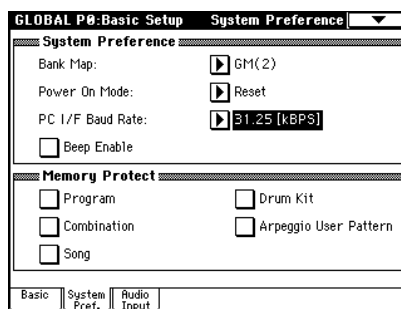
Messages transmitted and received by the TRITON

[...] indicates hexadecimal notation

MIDI channels

MIDI messages can be exchanged when the transmitting and receiving devices are set to the same MIDI channel. MIDI uses sixteen channels, numbered **1–16**. The way in which channels are handled will differ depending on the mode.

Program mode and Sampling mode
- Transmission/reception is performed on the global MIDI channel*.

- * The **global MIDI channel** is the basic channel that the TRITON uses for MIDI transmission/reception, and is set by Global P1: MIDI "MIDI Channel."

Combination mode
- The global MIDI channel is used to transmit/ receive messages for selecting a combination and turning effects on/off, and to transmit/receive exclusive data.

- The MIDI channel specified for each timbre (in Combination P2: MIDI channel tab) is used to transmit/receive MIDI data for each timbre.

- The MIDI channel specified for each of the insert effects and master effects is used to control dynamic modulation, and to control the pan and send 1/2 after the sound has passed through the insert effects.

- When you operate the keyboard or controllers of the TRITON, messages will be transmitted on the global MIDI channel, and will also be transmitted on the MIDI channel of any timbre whose "Status" is set to **EXT** or **EX2**.

- Channel messages will be received if they match the MIDI channel of a timbre whose "Status" is set to **INT** (☞p.33 in the *Parameter Guide* "Status" and "MIDI Channel").

Sequencer mode and Song Play mode
- The global MIDI channel is used to transmit/ receive exclusive data and for messages that switch effects on/off.

- MIDI data of each track is transmitted/received on the MIDI channel specified for each track (in the Sequencer P2: MIDI Channel tab).

- The MIDI channel specified for each of the insert effects and master effects is used to control dynamic modulation, and to control the pan and send 1/2 after the sound has passed through the insert effects.

- When you operate the keyboard or controllers of the TRITON, messages will be transmitted on the MIDI channel selected by "Track Select." However, messages will be transmitted only if the track selected by "Track Select" has a "Status" of **BTH**, **EXT**, or **EX2**. (☞p.46 in the *Parameter Guide* Track Select "MIDI").

- When the sequencer is played back, musical data of tracks whose "Status" is **BTH**, **EXT**, or **EX2** will be transmitted on the specified MIDI channels.

- Tracks whose "Status" is **INT** or **BTH** will receive channel messages of the matching MIDI channel (☞p.55, 104 in the *Parameter Guide* "Status" and "MIDI Channel").

Note on/off

Note-on [9n, kk, vv]
Note-off [8n, kk, vv]
(n: channel, kk: note number, vv: velocity)

When you play a note on the TRITON's keyboard, it will transmit note-on/off messages. When the arpeggiator is running, note-on/off messages will be transmitted by the arpeggiator. (If Local Control is off, the arpeggiator will not transmit note-on/off data. ☞p.112 "Local Control On settings")
However, most instruments do not receive or transmit note-off velocity, and neither does the TRITON.

Program Change/Bank Select

Changing the program/bank
Program change [Cn, pp]
(n: channel, pp: program number that allows 128 sounds to be selected)

- Programs 000–127 in banks A, B, C, D, E, and F correspond to program changes [Cn, 00]–[Cn, 7F].

- Programs 001–128 in banks G, g(1), g(2), g(3), g(4), g(5), g(6), g(7), g(8), g(9), and g(d) correspond to program changes [Cn, 00]–[Cn, 7F].

Bank select MSB (CC#0) [Bn, 00, mm]
Bank select LSB (CC#32) [Bn, 20, bb]
(n: channel, mm: bank number upper byte, bb: bank number lower byte)

- The internal banks that correspond to each bank select number will depend on the "Bank Map" setting (Global P0: Preference tab). With the factory settings, this will be **GM(2)**. (☞"Bank Map" on p.115 in the *Parameter Guide*.)

Simply receiving a Bank Select message will not cause the program or bank to change. The program or bank will actually change when a Program Change message is received.

Program mode

- In Program P0: Play, program change and bank select messages are transmitted and received on the global MIDI channel. These messages are not received in P1: Edit-Basic – P9: Edit-Master Effect.

Combination, Sequencer, and Song Play modes

- Program change and bank select messages can be received on the MIDI channel specified for each timbre/track to select programs on that timbre/track.

- When you select a combination, program change and bank select messages will be transmitted by timbres whose "Status" is **EXT** or **EX2**.

- In Sequencer and Song Play modes, program change or bank select messages will be transmitted by tracks whose "Status" is **BTH**, **EXT**, or **EX2** when you select the "Bank/Program" (P0: Program tab), when you select a song, or when you return to the beginning of a measure. (☞p.30, 47 in the *Parameter Guide* "Bank/Program"–"MIDI")

- In Combination and Sequencer modes, transmission/reception can be switched on/off for each timbre/track. (P3: MIDI Filter and MIDI 1 tab "Enable Program Change.") (☞p.35, 57 in the *Parameter Guide*).

Selecting combinations

You can use program change and bank select messages to select combinations in the same way that you select programs.

- Combinations 000–127 in banks A, B, C, and D correspond to program changes [Cn, 00]–[Cn, 7F].

- Similarly as for program banks, the internal banks that correspond to each bank select number will depend on the "Bank Map" setting (Global P0: Preference tab). (☞"Bank Map" on p.115 in the *Parameter Guide*.)

- In Combination P0: Play, program change and bank select messages are transmitted/received on the global MIDI channel. They are not received in P1: Edit-Program/Mixer – P9: Edit-Master Effect.

> note All program changes can be turned off in Global P1: MIDI "MIDI Filter."

As needed, you can independently turn all program changes on/off, specify whether or not incoming messages will be able to change combinations, and turn reception/transmission of bank select messages on/off.

- If "Combination Change" is unchecked, the combination will not change even if a program change on the global MIDI channel is received in Combination P0: Play. In this case, the program of the timbre that matches the MIDI channel of the received message will change.

- If "Bank Change" is unchecked, bank select messages will not be transmitted or received (☞p.118 in the *Parameter Guide* "MIDI Filter").

After touch

Channel after touch [Dn, vv]
(n: channel, vv: value)

When you apply pressure to the keyboard after playing a note, an after touch effect will be applied, and Channel After Touch messages will be transmitted. When these messages are received, an after touch effect will be applied.

- After touch for the entire instrument can be turned off in Global P1: MIDI "MIDI Filter."

- In Combination and Sequencer modes, after touch can be switched on/off independently for each timbre/track (P3: MIDI 1 tab "Enable After Touch) (☞p.35. 57 in the *Parameter Guide* "MIDI Filter").

Polyphonic key pressure [An, kk, vv]
(n: channel, kk: note number, vv: value)

There is another type of after touch called Polyphonic Key Pressure, which allows after touch to be applied independently for individual keys. This message can be used as an alternate modulation source, but cannot be transmitted by the TRITON's keyboard. In order to use this message, it will have to be received from an external device, or recorded on your sequencer.

The after touch mentioned in this manual refers to Channel After Touch.

Pitch bender

Pitch bender change [En, bb, mm]
(n: channel, bb: lower byte of the value, mm: upper byte of the value, together expressing a value of 16,384 steps where 8,192 [bb, mm = 00H, 40H] is the center value)

When the TRITON's joystick is moved in the X axis (left/right), a pitch bend effect will be applied, and pitch bender messages will also be transmitted. When these messages are received, a pitch bend effect will be applied.

> note The range of pitch change that is produced by pitch bend messages can also be adjusted via MIDI. (☞p.120 "Changing the pitch bend range")

Control change

[Bn, cc, vv]
Transmitted and received as (n: channel, cc: control change no., vv: value)

Refer to "MIDI transmission when controllers are operated" (p.221) and "How the TRITON transmits/receives control changes" (p.223) in the *Parameter Guide*.

- Control changes can be turned on/off as a whole in Global P1: MIDI "MIDI Filter."

- In Combination and Sequencer modes, the P3: MIDI Filter settings allow transmission/reception of control changes to be individually turned on/off for each timbre/track. For the assignable controllers ([SW1], [SW2], REALTIME CONTROLS [1]–[4] knobs, Foot Pedal/Switch), MIDI filter settings will apply to the control change number to which each controller is assigned. "Other Control Change" applies to control changes that are not covered by the items of the other check boxes (P3: MIDI Filter) (☞p.35, 57 in the *Parameter Guide* "MIDI Filter").

note MIDI **CC#00–CC#95** can be selected for the B-mode of REALTIME CONTROLS [1]–[4] knobs.

Selecting program/combination banks

Bank select (CC#00, CC#32)
☞p.114 "Program Change/Bank Select"

Using the joystick to apply modulation

Modulation 1 depth (CC#01) [Bn, 01, vv]
When you move the TRITON's joystick in the +Y direction (away from yourself), Modulation 1 Depth messages will be transmitted. When these messages are received, the same effect will be applied as when the TRITON's joystick is operated. Normally this will apply a vibrato effect (pitch LFO).

- In Combination and Sequencer modes, transmission/reception can be switched on/off for each timbre/track (P3: MIDI2 tab "Enable JS+Y"). (☞p.35, 57 in the *Parameter Guide* "MIDI Filter")

Modulation 2 depth (CC#02) [Bn, 02, vv]
When you move the TRITON's joystick in the –Y direction (toward yourself), Modulation 2 Depth messages will be transmitted. When these messages are received, the same effect will be applied as when the TRITON's joystick is operated. Normally this will apply a wah effect (filter LFO).

- In Combination and Sequencer modes, transmission/reception can be switched on/off for each timbre/track (P3: MIDI2 tab "Enable JS-Y"). (☞p.35, 57 in the *Parameter Guide* "MIDI Filter")

note Other manufacturers use this message for other purposes (e.g., breath controller, etc.)

Controlling the portamento effect

Portamento time (CC#05) [Bn, 05, vv]
When the above CC# is assigned as a B-mode function for one of the REALTIME CONTROLS [1]–[4] knobs, rotating that knob will transmit Portamento Time messages, and will modify the speed at which the portamento pitch changes. When this message is received, the result will be the same as when the controller is operated.

Portamento switch (CC#65) [Bn, 41, vv]
When the above CC# is assigned to [SW1], [SW2] or the ASSIGNABLE SWITCH, operating that switch will transmit vv=127 [7F] for ON or vv=0 [00] for OFF, and the portamento effect will be switched on/off. When

this message is received, the result will be the same as when the controller is operated. (vv of 63 [3F] or less will be OFF, and 64 [40] or greater will be ON.) (☞p.217 in the *Parameter Guide* "SW1, SW2 Assign List")

- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/track (P3: MIDI1 tab "Enable Portamento SW"). (☞ p. 35 and 58 in the *Parameter Guide*.)

- In Sequencer mode, portamento time/switch messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** when you set "Portamento" (P2: OSC tab), re-select a song or SMF, or return to the beginning of a measure. (☞p.55 in the *Parameter Guide* "Portamento"-"MIDI")

Controlling the volume

Volume (CC#07) [Bn, 07, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Volume messages, and the volume will change. When this message is received, the result will be the same as when the controller is operated.

Expression (CC#11) [Bn, 0B, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Expression messages, and the volume will change. When this message is received, the result will be the same as when the controller is operated.

The volume of the TRITON is determined by multiplying the value of the **Volume message** with the value of the **Expression message**.
If adjusting the Volume message does not increase the volume as you expect, or if there is no sound, transmit MIDI messages from an external device to reset the value of the Expression message (set vv to 127). In Sequencer mode, this will be reset when the "Location" of the song is moved to **001:01.000**.

- In Combination mode, Volume messages will be transmitted by each timbre whose "Status" is **EXT** or **EX2** when you re-select the combination.

- When you change the "Volume" setting (P0: Mixer tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the song in Sequencer mode, volume messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2**.

note Regardless of the "Status" settings, re-selecting a song, or returning to the beginning will reset the internal Volume value to the value specified by each track (the starting settings), and will reset the Expression value to the maximum.

note You can control the volume independently for each track. You will normally use Volume messages to set the initial volume level for each track (the starting settings), and use Expression mes-

sages to create changes in dynamics within the musical data of the song. (☞p.31, 49 in the *Parameter Guide* "Volume" - "MIDI)

By using the universal exclusive Master Volume message, you can adjust the overall volume without changing the volume balance between timbres or tracks. (☞p.120 "About system exclusive messages")

Controlling panpot (stereo position)

Panpot (CC#10) [Bn, 0A, vv]

(vv: value, where 00 is far left, 64 is center, and 127 is far right)

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Panpot messages, and the panning will change. When this message is received, the result will be the same as when the controller is operated.

• When you set the "Pan" (P0: Mixer tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the measure in Sequencer mode, Panpot messages (except for RND) will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** (☞"Pan" - "MIDI" on p.49 and 103 in the *Parameter Guide*).

Post insert effect panpot (CC#08)

[**Bn, 08, vv**] (vv: value, where 00 is far left, 64 is center, and 127 is far right)

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Post Insert Effect Panpot messages, and the panning of the sound following the insert effect will change. When this message is received, the result will be the same as when the controller is operated.

• In Program mode and Sampling mode, this message is transmitted/received on the global MIDI channel. In Combination, Sequencer, and Song Play modes, this message is transmitted/received on the MIDI channel specified for each insert effect.

• When you set "Pan (CC#8)" (P0: Insert Effect tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the measure in Sequencer mode, Post Insert Effect Panpot messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** (☞"Insert Effect" - "MIDI" on p. 76 and 110 in the *Parameter Guide*).

Effect control

Effect control 1 (CC#12) [Bn, 0C, vv]
Effect control 2 (CC#13) [Bn, 0D, vv]

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Effect Control 1/2 messages, and the specified dynamic modulation will be controlled. When this message is received, the result will be the same as

when the controller is operated.
Although various types of control change can be selected as dynamic modulation sources, Effect Control 1 (CC#12) and 2 (CC#13) are dedicated for dynamic modulation.

Effect 1 depth (Send 2) (CC#91) [Bn, 5B, vv]
Effect 3 depth (Send 1) (CC#93) [Bn, 5D, vv]

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Effect 1 Depth (Send 2) or Effect 3 Depth (Send 1) messages, and the send level 1 or 2 to the master effects **MFX1** or **MFX2** will be controlled respectively. When this message is received, the result will be the same as when the controller is operated.
On the corresponding MIDI channels, this will simultaneously control the timbre/track setting as well as the setting following the insertion effect.

• In Combination, Sequencer, and Song Play modes, the actual send level of the timbre/track is determined by multiplying this value with the send 1/2 settings for each oscillator (Program P8: Routing tab). (☞"Send 1, 2" - "MIDI" on p.25, 26, 42, 75, and 110 in the *Parameter Guide*.)

• When you adjust "Send 1" or "Send 2" (P8: Routing tab, Insert Effect tab) in Sequencer mode or Song Play mode, or when you re-select a song or return to the beginning of the measure in Sequencer mode, Send 1/2 will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2**. (☞"Send 1, 2," "Insert FX" - "MIDI" on p.76 and 110 in the *Parameter Guide*).

Effect 2 depth (IFX1–5 on/off) (CC#92) [Bn, 5C, vv]
Effect 4 depth (MFX1 on/off) (CC#94) [Bn, 5E, vv]
Effect 5 depth (MFX2 on/off) (CC#95) [Bn, 5F, vv]

Separately from the effect on/off settings in each mode, Global P1: Basic Setup "Effect Global SW" allows you to turn off insert effects IFX1–5 and master effects MFX1 and MFX2. If you **check** "IFX1–5 Off," "MFX1 Off" or "MFX2 Off," the corresponding message will be transmitted with vv=0 [00]. If you **uncheck** these settings, the corresponding message will be transmitted with vv=127 [7F]. If you check these settings, the corresponding effect(s) will be turned off as a group. If you uncheck these settings, the on/off settings of each mode will be used. The same applies to reception. (vv of 00 is off, and 01 or greater is the original setting.) These messages are transmitted/received on the global MIDI channel. (☞"ON/OFF" - "MIDI" on p.26 and 27 in the *Parameter Guide*.)

note These messages are defined simply for use in adjusting the effect levels, and may not have the same function on another instrument connected to the TRITON.

Using various controllers for control

Foot controller (CC#04) [Bn, 04, vv]

If the above CC# is assigned as the ASSIGNABLE PEDAL function, this message will be transmitted when the controller is operated.

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- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide* P3: MIDI2 tab "Enable Foot Pedal/Switch").

Ribbon controller (CC#16) [Bn, 10, vv]
This message will be transmitted when the TRITON's ribbon controller is operated.

- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide* P3: MIDI2 tab "Enable Ribbon").

Controller (CC#18) [Bn, 12, vv]
This message will be transmitted when the TRITON's [VALUE] slider is operated.
This is valid in Program P0: Play and Combination P0: Play when the program or combination number/name is selected (highlighted).

Knob modulation 1, 2, 3, 4 (CC#17, 19, 20, 21) [Bn, 11, vv], [Bn, 13, vv], [Bn, 14, vv], [Bn, 15, vv]
If the above CC# are assigned to the B-mode of REAL-TIME CONTROLS [1]–[4] knobs, these messages will be transmitted when the knobs are operated.

- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide* P3: MIDI3 tab "Enable REALTIME CONTROLS Knob 1, 2, 3, 4").

Controller (CC#83) [Bn, 53, vv]
If the above CC# is assigned to the B-mode of REAL-TIME CONTROLS [1]–[4] knobs, this message will be transmitted when the knob is operated.

SW1 modulation (CC#80) [Bn, 50, vv]
SW2 modulation (CC#81) [Bn, 51, vv]
If the above CC# are assigned as the function of [SW1] or [SW2], operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF. (These can also be set as the B-mode functions of the REALTIME CONTROL knobs [1]–[4].)

- In Combination and Sequencer modes, transmission/reception of these messages can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide*P3: MIDI3 tab "Enable SW1," "Enable "SW2"

Foot switch (CC#82) [Bn, 52, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF. (This can also be set as a B-mode function of the REALTIME CONTROL knobs [1]–[4].)

- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide* P3: MIDI Filter MIDI2 tab "Enable Foot Pedal/Switch").

When "Foot controller (CC#04)"–"Foot switch (CC#82)" are operated on the TRITON, the specified alternate modulation or dynamic modulation etc. will be controlled. When these messages are received, the result will be the same as if the controller had been operated. For "SW1 modulation (CC#80)"–"Foot switch (CC#82)," vv of 63 [3F] or less will be OFF, and 64 [3F] or greater will be ON.

Damper pedal (CC#64) [Bn, 40, vv]
This message is transmitted when you operate a damper pedal (separately sold Korg DS-1H etc.) connected to the DAMPER jack, and the damper effect will be turned on/off. If the DS-1H is used, a half-damper effect can be applied.

- In Combination and Sequencer modes, transmission/reception of this message can be turned on/off independently for each timbre/ track (☞p.35, 57 in the *Parameter Guide* P3: MIDI1 tab "Enable Damper").

Sostenuto (CC#66) [Bn, 42, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF, and the sostenuto effect will be turned on/off. When this message is received, the result will be the same as when the controller is operated (OFF for vv=63 [3F] or below, and ON for vv=64 [40] or above).

Soft pedal (CC#67) [Bn, 43, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF, and the soft pedal effect will be turned on/off. When this message is received, the result will be the same as when the controller is operated.

Controlling the tone/envelope of a program
CC#70-78 control specific parameters of a program. For details on the program parameters that correspond to each control change, and how the TRITON will respond in each mode when these are received, refer to "TRITON operations when control changes are transmitted/received" on p.223 of the *Parameter Guide*.

Low pass filter cutoff (CC#74) [Bn, 4A, vv]
Resonance level/High pass filter cutoff (CC#71) [Bn, 47, vv]
Filter EG intensity (CC#79) [Bn, 4F, vv]
Release time (CC#72) [Bn, 48, vv]
These messages are transmitted when you operate the TRITON's REALTIME CONTROLS [1]–[4] knobs in A-mode. (They can also be set as B-mode functions.)

Sustain level (CC#70) [Bn, 46, vv]
Attack time (CC#73) [Bn, 49, vv]
Decay time (CC#75) [Bn, 4B, vv]
LFO 1 speed (CC#76) [Bn, 4C, vv]
LFO 1 depth (pitch) (CC#77) [Bn, 4D, vv]
LFO 1 delay (CC#78) [Bn, 4E, vv]
These messages are transmitted when assign the above CC# to the REALTIME CONTROLS [1]–[4] knobs and operate them.

When you operate these, the corresponding program parameters will be controlled, and the sound and envelope will change. When these messages are received, the result will be the same as when the controller is operated. (When the message has a value vv=64 [40], the setting will have the value that was set by the program parameter.)

- In Combination and Sequencer modes, transmission/reception can be turned on/off independently for each timbre/track (☞p.35, 57 in the *Parameter Guide* P3: MIDI Filter MIDI2 tab "Enable REALTIME CONTROLS Knob 1, 2, 3, 4").

note In Program mode, the corresponding program parameters will be temporarily edited by these messages. You can Write the program to save the modified state (except for certain parameters). The Write operation can also be performed by a MIDI exclusive Program Write Request message, in addition to the usual method of using the TRITON's switches. When you write the data, the values of the corresponding program parameters will be rewritten.

note The results of receiving these messages will depend on the instrument. The operation may be different when a device other than the TRITON is connected.

Silencing all notes on a specific channel

All note off (CC#123) [Bn, 7B, 00] (value 00)
When this is received, all currently-sounding notes on that channel will be turned off (as though the keys had been released). However, the release portion of the notes will remain.

All sound off (CC#120) [Bn, 78, 00] (value 00)
When this is received, all currently-sounding notes on that channel will be silenced. While the All Note Off message allows the release portion of the notes to remain, the All Sound Off message will silence the notes immediately.

However, these messages are provided for emergency use, and are not something that you will use while performing.

Resetting all controllers on a specific channel

Reset all controllers (CC#121) [Bn, 79, 00] (value 00)
When this is received, the value of all controllers on that channel will be reset.

Using RPN to edit

RPN (Registered Parameter Number) is a type of message that allows settings to be made in a way that is common between instrument manufacturers. (NRPN (Non-registered Parameter Numbers) and exclusive messages can be freely used in non-compatible ways by different manufacturers and models of instrument.)

RPN messages can be used for editing with the following procedure.

① Use RPN MSB (CC#101) [Bn, 65, mm] and RPN LSB (CC#100) [Bn, 64, rr] (n: channel, mm, rr: upper and lower bytes of the parameter number) messages to select the parameter.
② Use data entry MSB (CC#6) [Bn, 06, mm] and data entry LSB (CC#38) [Bn, 26, vv] (n: channel, mm, vv: upper and lower bytes of the value, together expressing 16,384 levels) to specify the value.
③ You can use data increment (CC#96) [Bn, 60,00] or data decrement (CC#97) [Bn, 61, 00] (n: channel, value is fixed at 00) to change the value in steps of one.

The TRITON can receive the following three RPN messages (tuning, transpose, and pitch bend range).

Tuning

RPN fine tune [Bn, 65, 00, 64, 01]
This RPN message can be used to adjust the detuning for a program or timbre (in Combination mode), or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 01]: Select RPN parameter 01.
② [Bn, 06, mm, 26, vv]: Use data entry to set the value. A value of 8192 [mm, vv=40, 00] is center, 0 [mm, vv=00, 00] is -100 cents, and 16383 [mm, vv=7F, 7F] is +100 cents.

note You can use the universal exclusive Fine Tune message to adjust the overall tuning that corresponds to the Global P0: Basic Setup "Master Tune" parameter. (☞p.120 "About system exclusive messages")

Transposing

RPN coarse tune [Bn, 65, 00, 64, 02]
This RPN message can be used to adjust the transposition for a program or timbre (in Combination mode), or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 02]: Select RPN parameter 02.
② [Bn, 06, mm, 26, vv]: Use data entry to set the value. Normally only the upper byte is used.

A value of 8192 [mm, vv=40, 00] is center, 6656 [mm, vv=34, 00] is -12 semitones, and 9728 [mm, vv=4C, 00] is +12 semitones.

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note You can use the universal exclusive Coarse Tune message to adjust the overall tuning that corresponds to the Global P0: Basic Setup "Transpose" parameter. (☞p.120 "About system exclusive messages")

Changing the pitch bend range

RPN pitch bend range [Bn, 64, 00, 65, 00]

This RPN message can be used to adjust the pitch bend range for a program or timbre (in Combination mode) or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 00]: Select RPN parameter 00.
② [Bn, 06, mm, 26, vv]: Use data entry to set the value. Normally only the upper byte is used.

A value of 0 [mm, vv=00, 00] is +00, and a value of 1536 [mm, vv=0C, 00] is +12 (one octave). Although it is possible to set a negative value for a timbre/track, only positive values can be set using RPN messages.

Controlling the arpeggiator (NPRN)

Arpeggiator operations can be controlled using NRPN (Non Registered Parameter Number) messages. NRPN messages can be freely used in non-compatible ways by different manufacturers and models of instrument.

The procedure for using NRPN messages is the same as for RPN, but you will use NRPN MSB (CC#99) [Bn, 63, mm] and NRPN LSB (CC#98) [Bn, 62, rr] messages (n: channel, mm, rr: upper and lower bytes of the parameter number) to specify the parameter.

NRPN arpeggiator on/off
[Bn, 63, 00, Bn, 62, 02, Bn, 06, mm]

This message will be transmitted when you press the ARPEGGIATOR [ON/OFF] switch. When the switch is turned ON the data will be mm=127 [7F], and when turned OFF the data will be mm=0 [00], and the arpeggiator will be turned on/off accordingly. (This can also be specified as a function of the ASSIGNABLE SWITCH.)
Similarly, the arpeggiator will be turned on/off when this message is received. (ON when mm is 64 [40] or greater, and OFF when 63 [3F] or less.)

NRPN arpeggiator gate control
[Bn, 63, 00, Bn, 62, 0A, Bn, 06, mm]

This message will be transmitted when you operate the ARPEGGIATOR [GATE] knob, and the arpeggiator gate will change. When this message is received, the result will be the same.

NRPN arpeggiator velocity control
[Bn, 63, 00, Bn, 62, 0B, Bn, 06, mm]

This message will be transmitted when you operate the ARPEGGIATOR [VELOCITY] knob, and the arpeggiator velocity will change. When this message is received, the result will be the same.

About system exclusive messages

Since the way in which these messages are used is left up to each manufacturer, they are mainly used to transmit and receive sound data and editing data for parameters that are unique to a particular instrument. The TRITON's system exclusive message format is [F0, 42, 3n, 50, ff, ... F7]

F0: exclusive status
42: Korg ID
3d: [n=0–F] global MIDI channel 1–16
50: TRITON model ID
ff: function ID (type of message)
– ...
F7: end of exclusive

All models of the TRITON series use the same model ID. Exclusive data can be exchanged between models of the TRITON series.

note To obtain a copy of the "MIDI Implementation" which includes MIDI exclusive format information, please contact your Korg distributor.

Universal system exclusive

Certain of the system exclusive messages are publicly defined for a specific use, and these are called universal system exclusive messages.
The TRITON uses the following six universal system exclusive messages.

Inquiry message request [F0, 7E, nn, 06, 01, F7]
Inquiry message [F0, 7E, nn, 06, 02, (nine bytes), F7]

When an inquiry message request is received, the TRITON will respond by transmitting an inquiry message that means "I am a Korg TRITON series instrument, with system version ..."

GM system on [F0, 7E, nn, 09, 01, F7]

When this message is received in Song Play mode, the TRITON will be initialized for GM playback.

Master volume [F0, 7F, nn, 04, 01, vv, mm, F7]

(vv: lower byte of the value, mm: upper byte of the value, together indicating 16384 steps)

This message is transmitted if you assign **Master Volume** as the function of the ASSIGNABLE PEDAL or as a B-mode function of a REALTIME CONTROLS [1]–[4] knob and operate the controller. This will adjust the overall volume balance without changing the relative volume balance between timbres/tracks. When this message is received, the result will be the same as when the controller is operated.

Master balance [F0, 7F, nn, 04, 02, vv, mm, F7]

(vv: lower byte of the value, mm: upper byte of the value, together indicating 16384 steps, where 8192 is the default position, and lower values will move the sound toward the left)

When this is received, the overall panning will be adjusted without changing the relative panning between timbres/tracks.

Master fine tuning [F0, 7F, nn, 04, 03, vv, mm, F7]
(A value of 8192 [mm, vv=40, 00] is center, 4096 [mm, vv=20, 00] is -50 cents, and 12288 [mm, vv=60, 00] is +50 cents.)

When this is received, the Global P0: Basic tab "Master Tune" parameter will be set.

Master coarse tuning [F0, 7F, nn, 04, 04, vv, mm, F7]
(Normally only the upper byte mm is used. A value of 8192 [mm, vv=40, 00] is center, 6656 [mm, vv=34, 00] is -12 semitones, and 9728 [mm, vv=4C, 00] is +12 semitones.)

When this is received, the Global P0: Basic tab "Transpose" parameter will be set.

Transmitting sound settings data (Data Dump)

Data for programs, combinations, drum kits, user arpeggio patterns, global settings, and sequencer data can be transmitted as MIDI exclusive messages. The operation of sending this system exclusive data to an external device is called a "**data dump**."
By performing a data dump, you can store the TRITON's sounds and settings on an external device, or rewrite the sounds and settings of another TRITON series instrument.

There are the following three types of data dump.

- When you use the Global P1: MIDI "Data Dump" page menu command to dump data, various types of internal memory data will be transmitted. If this data is received by the TRITON, the data will be written directly into internal memory, and it will not be necessary to perform the Write operation. (☞"Transmission," "Reception" on pages 119 and 120 in the *Parameter Guide*.)

- If the Global P1: MIDI "Enable Exclusive" setting is checked, selecting a combination in Combination P0: Play will transmit data for one combination. Selecting a program in Program Play P0: Play will transmit data for one program.

  This data is the edit buffer data for the currently selected combination or program. If this data is received by the TRITON, the data will be written into the edit buffer, so if you wish to save it to internal memory, you will need to perform the Write operation. The Write operation can also be performed by a MIDI exclusive Program Write Request or Combination Write Request message, in addition to the usual method of using the TRITON's switches. (☞p.37 "Saving data")

- If the Global P1: MIDI "Enable Exclusive" setting is checked, data will also be dumped in response to a Dump Request message. This data is transmitted and received on the global MIDI channel.

Editing sounds etc.

By using various MIDI exclusive data dumps, you can rewrite all programs or an individual program. By using parameter change messages, you can edit individual parameters as follows.

Parameter changes

- In Program mode, all parameters other than the program name can be edited. Performance editor parameters are included.

- In Combination mode, parameters other than the combination name can be edited.

Drum kit parameter change/User arpeggio pattern parameter change

- In Global mode, you can edit drum kits and user arpeggio patterns.

Since the other global parameters or Sequencer mode data cannot be edited, you will use data dumps to transfer this data. Data dumping of Sampling mode data is not supported.

The global MIDI channel is used to transmit and receive this data.

First check Global P1: MIDI "Enable Exclusive," so that exclusive data can be transmitted and received. When you change modes on the TRITON, a mode change message will transmitted. When you change programs or combinations, the parameters for one program or one combination will be transmitted together with the program change. When you edit individual parameters, parameter change, drum kit parameter change, or user arpeggio pattern parameter change messages will be transmitted.
When these messages are received, the same editing operation will be performed as on the transmitted device.
After MIDI exclusive data has been received and processed, a Data Load Completed message will be transmitted. The control master device must not transmit the next message until this message is received (or until a sufficient interval of time has elapsed).

When you change programs or combinations, or use parameter changes to edit, the changes will affect the data in the edit buffer and will not be stored in internal memory unless you Write, so that the changes will be lost if you re-select the program or combination. The Write operation can be performed by a MIDI exclusive Program Write Request or Combination Write Request message, in addition to the usual method of using the TRITON's switches. (☞p.37 "Saving data")

If notes are "stuck"

If for some reason, notes become "stuck" and will not stop sounding, you can usually stop the sound by changing the mode. If notes played via MIDI are stuck, you can disconnect the MIDI cable.
MIDI transmits a message called Active Sensing [FE] at regular intervals. A device that receives this message will be aware that an external MIDI device is transmitting to it. Subsequently, if no MIDI messages are received for a certain interval of time, the receiving device will decide that the connection has been broken, and will turn off any notes that had been sounded via MIDI and reset its controller values.

Playing the TRITON multi-timbrally from an external device

The TRITON can be connected to an external device and played multi-timbrally in the following ways.

- MIDI messages from the external device can play a combination (8-part multi-timbral performance). You can change the overall settings (programs, levels, and effects) by using program change messages to switch combinations.

- MIDI messages from the external device can be used to play a song (using the TRITON as a 16-part multi-timbral tone generator). However if the Global P1: MIDI "MIDI Clock" is **INT**, it will not be possible to switch the overall settings.

- MIDI Clock messages from the external device can be used to make the TRITON playback a song (set "MIDI Clock" to **EXT**, and run the TRITON's sequencer). (☞"Synchronizing the playback of the arpeggiator or sequencer") You can change the overall settings (programs, levels, effects) by using song select messages to switch songs.

Synchronizing the playback of the arpeggiator or sequencer

The choice of whether the TRITON will be the master (the controlling device) or the slave (the controlled device) is made by Global P1: MIDI "MIDI Clock."

Using the TRITON as master and the external MIDI device as slave

Connect the TRITON's MIDI OUT connector to the MIDI IN connector of the external MIDI device. Alternatively, connect the TRITON's TO HOST connector to your computer (☞p.111, 112).

- When you set "MIDI Clock" to **Internal**, the TRITON will be the master device, and will transmit MIDI timing clock messages.

  Arpeggiator: The tempo can be controlled from the TRITON. Simultaneously, the performance of the arpeggiator will be transmitted via MIDI. (In Combination, Sequencer, and Song Play modes, data will be transmitted by timbres/tracks whose "Status" is **BTH**, **EXT**, or **EX2**.) An external tone generator connected to MIDI OUT will sound, and the tempo of an external sequencer can be controlled.

  Sequencer: The musical data can be played back and controlled on the TRITON. Simultaneously, the sequencer playback will be transmitted via MIDI from tracks whose "Status" is **BTH**, **EXT**, or **EX2**. An external tone generator connected to MIDI OUT will sound, and the tempo of an external sequencer can be controlled.

  However, since exclusive data cannot be recorded on the TRITON's sequencer, you can use the Global

P1: MIDI "Dump Sequencer" page menu command if the slave device is the TRITON. If the slave device is another model, you can use the TRITON's Disk mode data filer function ("Receive and Save MIDI Exclusive," "Load and Transmit MIDI Exclusive Data").

Using the external MIDI device as master and the TRITON as slave

Connect the TRITON's MIDI IN connector to the MIDI OUT connector of the external MIDI device. Alternatively, connect the TRITON's TO HOST to your computer (☞p.111, 112).

- When you set "MIDI Clock" to **External MIDI** or **External PCI/F**, the TRITON will be the **slave** device.

  Arpeggiator: The tempo will follow the MIDI timing clock. If you playback the external sequencer, the TRITON's arpeggiator will synchronize to the external timing clock. (☞p.105)

  Even if "MIDI Clock" is **External MIDI** or **External PCI/F** and the TRITON is being controlled from the external device, the performance of the arpeggiator will still be transmitted via MIDI. (In Combination and Sequencer modes, the arpeggiator performance will be transmitted from timbres/tracks whose "Status" is **BTH**, **EXT**, or **EX2**.)

  Sequencer: It will not be possible to control the playback from the TRITON; playback will be controlled by the external device connected to the TRITON's MIDI IN. If you wish to playback the external sequencer to make the TRITON's sequencer playback in synchronization to the external timing clock, you must first set the same time signature and starting measure locations on both devices.

  Even if "MIDI Clock" is set to **External MIDI** or **External PCI/F** and the TRITON is being controlled from an external device, musical data will be transmitted by tracks whose "Status" is **BTH**, **EXT**, or **EX2**.

Recording musical data from an external device

There are two ways in which you can play back an external sequencer and record its playback on the TRITON.

- Set Global P1: MIDI "MIDI Clock" to **Internal**, begin recording, and then start the external sequencer. With this method, the MIDI messages will be recorded without the two devices being synchronized. Since the incoming musical data will simply be recorded, this method allows the performance to be reproduced faithfully, but since measure divisions etc. will not be kept track of, this method is not suitable if you intend to edit the data later.

- If you set Global P1: MIDI "MIDI Clock" to **External MIDI** or **External PCI/F**, the start of recording and the tempo etc. will all be under the control of the external sequencer. Since the two devices will be synchronized during the recording process, measure divisions etc. will be accurately preserved. (You will need to set the time signature before recording.) However, tempo changes during the performance will not be recorded, so you will have to insert any tempo changes later. For normal multi-track recording, you will use this method. (☞p.66 "Multi (multitrack recording)")

About GM/GS/XG

The TRITON supports the GM standard. It also supports the GM2 sound map (including bank select) with 256 programs and 9 drum programs provided in ROM banks G, g(1)–g(9), and g(d). (Banks g(1)–g(9) are GM2 variation programs, and g(d) contains drum programs.)

GM is a standard that ensures basic compatibility of sounds etc. between different GM-compatible instruments made by different manufacturers, but you need to be aware of the following.

- The GM System On message is received only in Song Play mode. (☞p.102 in the *Parameter Guide* "GM Initialize")

Roland GS and Yamaha XG are specifications by which these respective manufacturers have extended the GM standard.
The TRITON automatically converts the GS/XG sound maps to the GM2 sound map, and supports some of their messages. This allows GS/XG music data to be played back in Song Play mode etc.

Since the TRITON does not support all of the GS/XG sound maps or messages, some data may not be played back correctly.

When you wish to playback a music data conform to GM/GS/XG format or load it into a song, select the Global P0: Preference tab and set "Bank Map" to **GM(2)**.

Converting the GS/XG bank/program maps to the GM2 bank/program map

- When bank select/program change messages used by GS/XG are received, they will automatically be converted to the G, g(1)–g(9), g(d) bank/program map of the TRITON.

- The same conversion is performed when a SMF is loaded into a song in Disk mode.

For banks that are used in common by GS/XG, GS Reset/XG System ON will be received to automatically convert to the optimal bank/program map for each.

Support for GS/XG part mode exclusive messages

- In Song Play mode when GS/XG part mode exclusive messages Drum or MDrm 1–4 are received, bank g(d) (GM2 drum bank) will be selected for the specified track.

  Until this part mode state is defeated, bank select messages will no longer be received for the specified track.

- When an SMF is loaded into a song in Disk mode, any bank select messages in a track that is set to a part mode of Drum or MDrm 1–4 will be ignored, and will not be loaded.

Support for NRPN messages used in GS/XG music data

The following NRPN messages can be received to modify the sound.

Vibrato Rate	[Bn, 63, 01, Bn, 62, 08, Bn, 06, mm]
Vibrato Depth	[Bn, 63, 01, Bn, 62, 09, Bn, 06, mm]
Vibrato Delay	[Bn, 63, 01, Bn, 62, 0A, Bn, 06, mm]
Filter Cutoff	[Bn, 63, 01, Bn, 62, 20, Bn, 06, mm]
Resonance	[Bn, 63, 01, Bn, 62, 21, Bn, 06, mm]
EG Attack Time	[Bn, 63, 01, Bn, 62, 63, Bn, 06, mm]
EG Decay Time	[Bn, 63, 01, Bn, 62, 64, Bn, 06, mm]
EG Release Time	[Bn, 63, 01, Bn, 62, 66, Bn, 06, mm]
Drum Filter Cutoff	[Bn, 63, 14, Bn, 62, kk, Bn, 06, mm]
Drum Filter Resonance	[Bn, 63, 15, Bn, 62, kk, Bn, 06, mm]
Drum EG Attack Time	[Bn, 63, 16, Bn, 62, kk, Bn, 06, mm]
Drum EG Decay Time	[Bn, 63, 17, Bn, 62, kk, Bn, 06, mm]
Drum Coarse Tune	[Bn, 63, 18, Bn, 62, kk, Bn, 06, mm]
Drum Fine Tune	[Bn, 63, 19, Bn, 62, kk, Bn, 06, mm]
Drum Volume	[Bn, 63, 1A, Bn, 62, kk, Bn, 06, mm]
Drum Panpot	[Bn, 63, 1C, Bn, 62, kk, Bn, 06, mm]*
Drum Rev Send(Send2)	[Bn, 63, 1D, Bn, 62, kk, Bn, 06, mm]
Drum Cho Send(Send1)	[Bn, 63, 1E, Bn, 62, kk, Bn, 06, mm]

kk: Drum Inst No. ([0C...6C] corresponds to C0...C8)
* [00, 01...7f] corresponds to Random, L000...R127)

About standard MIDI files

Standard MIDI files (SMF) make it possible for different computer programs or musical instruments made by different manufacturers to exchange time-based MIDI data. Each standard MIDI file contains one song. The TRITON supports **format 0 (type 0)** in which all of the MIDI data is combined into one track, and **format 1 (type 1)** in which the data is separated by track.

When a SMF is played back in Song Play mode or loaded into a song in Disk mode, the program bank that is selected will differ depending on the Global P1: System Preference tab "Bank Map" setting. When playing/loading SMF data that conforms to the GM/GS/XG specifications, set "Bank Map" to **GM(2)**.

Song Play mode

- In Song Play mode, the TRITON can playback SMF data directly from a disk or external SCSI device (if the separately sold EXB-SCSI option is installed); i.e., the data will be played back as it is being read, and does not need to be loaded into memory.

- If the SMF data contains a GM System On message, the TRITON will be initialized for GM playback (☞p.102 in the *Parameter Guide* "GM Initialize").

Sequencer mode

In Disk mode when you convert a song into a Standard MIDI File and save it, you can choose either **format 0 or format 1**.

- If TRITON song data that was saved as a format 1 SMF file is loaded into another device, the track configuration may be different than it was before being saved. This is because tracks that contain no musical data are omitted, and the remaining tracks are moved into the unused tracks. This will not affect the playback itself.

- If song data that was saved by another device as a format 1 SMF file is loaded into the TRITON, the track configuration may be different than it was before being saved. This is because tracks that contain no musical data are omitted, and the remaining tracks are moved into the unused tracks. This will not affect the playback itself.

When exchanging sequence data between two TRITON series instruments, we recommend that you save the sequence data in the TRITON's native format ("Save SEQ").
When sequence data is saved in the TRITON's native format, all of the settings and patterns unique to the TRITON will be saved, which will ensure a higher level of reproducibility than when the data is saved as a Standard MIDI File ("Save to Std MIDI File").

Other functions

Tuning to another instrument/ Transposing

When you play the TRITON together with other instruments, or along with music on a CD or tape, you may need to adjust the tuning so that the pitch matches. To adjust the tuning, use Global P0: Basic tab "Master Tune." The tuning can be adjusted in a range of –50 – +50 cents (one semitone is 100 cents).

You can also transpose by changing the pitch in semitone steps. To transpose the pitch of the entire TRITON, use Global P0: Basic tab "Key Transpose." The pitch can be transposed over a range of ±1 octave.

Here we will explain how to adjust the tuning and transposition of the entire TRITON.

① **Press the [GLOBAL] key to enter Global mode.**

② **After pressing the [MENU] key, and press the P0: Basic Setup.**

③ **Select the Basic tab.**

④ **To adjust the tuning, select "Master Tune." to adjust the transposition, select "Key Transpose."**

⑤ **Use the VALUE controllers to adjust the setting.**

You can use numeric keys [0]–[9] to enter a value and press the [ENTER] key. Alternatively, you can use the [VALUE] dial, the [VALUE] slider, or the [△][▽] keys.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

Bypassing the effects

Normally, effects are turned on/off within each program, combination, or song, or in Sampling mode or Song Play mode. However if you want the entire TRITON not to use its insert effects or master effects, you can bypass these effects.

① **Press the [GLOBAL] key to enter Global mode.**

② **After pressing the [MENU] key, and press the P0: Basic Setup.**

③ **Select the Basic tab.**

④ **To turn off insert effects 1–5, check the "IFX1-5 Off" check box.**

To turn off master effect 1, check the "MFX1 Off" check box. To turn off master effect 2, check the "MFX2 Off" check box.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

Specifying the function of the ASSIGNABLE Switch and ASSIGNABLE Pedal

Set the function of an assignable switch (separately sold option, Korg PS-1) connected to the **ASSIGNABLE SWITCH** jack.

This switch can act as a source for alternate modulation or effect dynamic modulation, or switch portamento on/off, control the sostenuto effect, turn the soft pedal effect on/off, turn the arpeggiator on/off, select programs or combinations (up/down), start/stop the sequencer, punch-in/out on the sequencer, or be a trigger to advance the cue list step (☞p.219 in the *Parameter Guide*).

• This setting is made in Global P2: Controller "Foot Switch Assign."

You can specify the function that will be performed by an assignable pedal (the separately sold Korg XVP-10 or EXP-2) connected to the **ASSIGNABLE PEDAL** jack.

This pedal can be used to control master volume, alternate modulation or effect dynamic modulation, portamento pitch change speed, volume, the pan following an insert effect, pan, volume, or send levels to the master effects (☞p.220 in the *Parameter Guide*).

• This setting is made in Global P2: Controller "Foot Pedal Assign."

note You can use this as a source for alternate modulation or effect dynamic modulation, and use it to control program parameters or effect parameters. In this case, set "Foot Switch Assign" to **Foot SW (CC#82)**, and "Foot Pedal Assign" to **Foot Pedal (CC#04)**.

Here we will show how to make settings that allow an assignable switch to change programs or combinations.

① **Connect a separately sold Korg PS-1 to the ASSIGNABLE SWITCH jack.**

② **Press the [GLOBAL] key to enter Global mode.**

③ **After pressing the [MENU] key, and press the P2: Controller.**

④ **Press the "Foot Switch Assign" popup button, and press either Program Up or Program Down.**

Program Up will cause the next higher program number to be selected each time you press the foot switch.
Program Down will cause the next lower program number to be selected each time you press the foot switch.

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⑤ **Set the "Foot Switch Polarity" to the polarity of the foot switch you have connected.**

If you have connected a Korg PS-1 pedal switch, set this to (–) KORG Standard. If the polarity is not set correctly, the pedal will not function appropriately.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

⑥ **Either press the [PROG] key to enter Program P: Play, or press the [COMBI] key to enter Combination P0: Play. When you press the foot switch, the program/combination will change.**

Adjusting the way in which velocity or after touch will affect the volume or tone

You can adjust the way in which changes in velocity or after touch will affect the volume or tone. By changing this, you can (for example) make the volume of the notes more consistent even when they are played with varying velocities (dynamics). Each curve has its own character, so you can select the curve that is appropriate for your own playing dynamics, playing style, and the effect that you wish to obtain (☞p.113, 114 in the *Parameter Guide*).

① **Press the [GLOBAL] key to enter Global mode.**

② **After pressing the [MENU] key, and press the P0: Basic Setup.**

③ **Select the Basic tab.**

④ **To change the velocity curve, select "Velocity Curve" and specify the desired curve.**

To change the after touch curve, select "After Touch Curve," and specify the desired curve.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

* This setting will affect the operation of the entire TRITON.

* Each program has parameters that allow you to adjust the effect of velocity (playing dynamics), and the change will depend on the settings of these parameters. These parameters can be individually set in detail in Program mode.

Creating original scales

You can create your own original scales. You can create sixteen different User Octave Scales in which the pitch of each note in the octave is repeated for all octaves, and one User All Note Scale in which the pitch of each of the 128 notes can be specified independently.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

The user scales you create here can be used by specifying the scale for a program, for each timbre of a combination, or for each track of a song (Sequencer/Song Play). (☞"Changing the scale")

Changing the scale

You can specify the scale for each program, for each timbre in a combination, or for each track of a song (Sequencer/Song Play mode).

These settings are made by "Type" in the following pages, and by "Use Program's Scale" for a combination or song.

Program	P1: Edit-Basic, Program Basic
Combination	P2: Edit-Trk Param, Other
Song	P2: Trk Param, Other T01–08/T09–16
Song Play mode	P1: Track, Status/Scale T01–08/T09–16

Here we will show how to make settings in Sequencer mode.

① **Press the [SEQ] key to enter Sequencer mode.**

② **After pressing the [MENU] key, and press the P2: Trk Param.**

③ **Select the Other T01-08 tab or the Other T09-16 tab.**

④ **If you wish to use the scale that is specified for the program used by a track, check the "Use Program's Scale" check box for that track.**

Tracks that are not checked will use the scale specified by Scale "Type."

⑤ **Set "Type" to select the scale for the entire currently selected song.**

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.38, p.39, and the *Parameter Guide* p.48 and 102).

Setting the function of [SW1] and [SW2]

You can specify the function of the [SW1] and [SW2] keys (☞p.217 in the *Parameter Guide*).

The functions of the [SW1] and [SW2] keys are set independently for each program, combination, and song. In Sampling mode and Song Play mode, the functions of these keys are set for the entire mode.

You can specify the function that will be performed by the [SW1] and [SW2] keys, and can also select between **Toggle** (when the function will be switched on/off each time the [SW1] or [SW2] key is pressed) and **Momentary** (when the function will be on only while you continue holding the [SW1] or [SW2] key).

These settings are made by "Panel Switch Assign" in the following pages.

Program	P1: Edit-Basic, Controller Setup
Combination	P4: Edit-Zonr/Ctrl, Control
Song	P4: Zonr/Ctrl, Controller Setup
Sampling mode	P4: Controller Setup
Song Play mode	P2: Controller Setup

note When you write a program or combination, the on/off status of the [SW1] and [SW2] keys is memorized.

note You can use these keys as alternate modulation or effect dynamic modulation sources, and control program parameters or effect parameters.
In this case, you will normally select **SW1 Mod.:CC#80** and **SW2 Mod.:CC#81**.

For an example in which the [SW1] key is specified as an effect dynamic modulation source for a program and used to control an effect, refer to ☞p.110.

note If you wish to keep these settings after the power is turned off, you must save them (☞p.38, p.39, and the *Parameter Guide* p.48 and 102). However, the settings of Sampling mode cannot be saved.

Setting the B-mode functions of REALTIME CONTROLS [1]–[4]

You can specify the B-mode functions of REALTIME CONTROLS knobs [1]–[4].

The B-mode functions are set independently for each program, combination, or song. The functions in Sampling mode or Song Play mode are set for the entire mode.

These settings are made by "Realtime Control Knob B-Assign" in the following pages.

Program	P1: Edit-Basic, Controller Setup
Combination	P4: Edit-Zonr/Ctrl, Control
Song	P4: Zonr/Ctrl, Controller Setup
Sampling mode	P4: Controller Setup
Song Play mode	P2: Controller Setup

note You can use these knobs as sources for alternate modulation or effect dynamic modulation, and control program parameters or effect parameters. In this case, you will normally select **Knob Mod.1:CC#17**, **Knob Mod.2:CC#19**, **Knob Mod.3:CC#20**, and **Knob Mod.4:CC#21**.

Here we will give an example of how knob [1] can be used to control the filter and amp EG attack of a program.

① **Press the [PROG] key to enter Program mode.**

② **After pressing the [MENU] key, and press the P1: Edit-Basic.**

③ **Press the Controller tab.**

④ **Press the Realtime Control Knob B-Assign "Knob 1-B" popup button, and select F/A Attack.**

⑤ **Press the [REALTIME CONTROLS] key to select B-mode, and rotate knob [1]. The EG attack of the filter and amp will change.**

note If you wish to keep these settings after the power is turned off, you must save them (☞p.38, p.39, and the *Parameter Guide* p.48 and 102). However, the settings of Sampling mode cannot be saved.

Adjusting the contrast (brightness) of the LCD screen

Use the rear panel contrast knob to make adjustments.

Sounding a beep when the LCD screen is pressed

If the Global P0: System Preference tab "Beep Enable" check box is turned on, a beep will sound when you press an object in the LCD screen.

Using the TRITON as a data filer

MIDI exclusive data transmitted from an external device can be received by the TRITON and saved on a floppy disk (the Data Filer function). This is done using the Disk mode Save tab "Save Exclusive" page menu command (☞p.141 in the *Parameter Guide*).

Shortcuts

[MENU] key + numeric keys [0]–[9]
- Access the pages within a mode

[ENTER] key + numeric keys [0]–[9]
- Access the page menu commands in each page (up to ten items)

[ENTER] key + keyboard
- Input note number values or velocity values
- Select "KEY" in Global P5: Drum Kit, Sequencer P5: RPPR Setup tab
- Select base key and index in Sampling mode

[ENTER] key + [LOCATE] key
- In Sequencer mode and Song Play mode, set the current location as the "Location" (equivalent to the "Set Location" page menu command)

Installing and setting up the Korg MIDI Driver

Installing the Korg MIDI Driver into Windows 95/98 and making settings

Installing the Korg MIDI Driver into Windows 95/98

If your application (sequencer) is Windows-compatible, using the Korg MIDI Driver will allow you to use a Korg tone generator connected to the serial port (COM, RS-232C) as a MIDI device.

⚠ Before you install the Korg MIDI Driver, use the special serial cable to connect the TRITON and your computer, turn on the power of the TRITON, and set the Global P0: System Pref. tab "PC I/F Baud Rate" parameter to the setting appropriate for your computer (☞p.112, 113).

⚠ If your computer is not fast enough, the data at MIDI IN may not be received correctly. Windows NT is not supported.

① In the task bar, click the [Start] button, and then click [Control Panel].

② In the control panel, double-click the "Hardware" or "Add hardware" icon, and the "Hardware wizard" will start up. On Windows 95 click [Next>]. On Windows 98, click [Next>] and when an explanation appears, click [Next>] once again.

In response to "Do you want Windows to search for your new hardware?" be sure to select "No," and then click [Next>].

③ Select "Sound, video, and game controllers," and click [Next>].

④ Click [Have Disk].
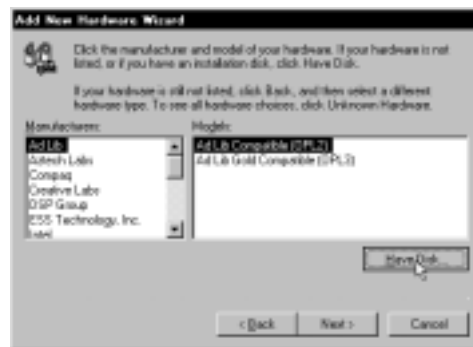
⑤ You will be asked for the drive and directory. Insert the floppy disk containing the Korg PC I/F Driver (AG-001B), and input the drive name.

For example if your floppy disk drive is A, type "A:\".

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Click the [OK] button, and then click [OK] again.

⑥ Make settings as described in "Setting up the Korg MIDI Driver" (below), and click the [OK] button.
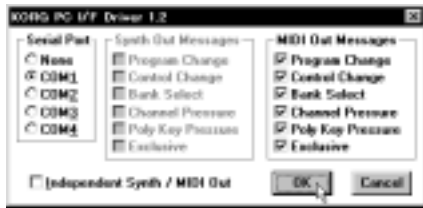
⑦ Be sure to restart your computer so that the new driver becomes effective.

Korg MIDI Driver settings

① In "Control panel," double-click the "Multimedia" icon, and the "Multimedia Properties" dialog box will appear.

Click the "Advanced" tab located at the upper right. Click the [+] located at the left of "MIDI Devices and Instrnments" (the display will change to [–]), and click "KORG PC I/F MIDI Port."
Then click the [Properties] button.

② "KORG PC I/F MIDI Port Properties" will appear. Click the [Settings] button.

③ Make settings as described in "Setting up the Korg MIDI Driver" (below), and click the [OK] button. If you change the settings, you must restart Windows.

Setting up the Korg MIDI Driver (Windows)

① For Serial Port, select the serial port ("COM1" to "COM4") to which the TRITON is connected. If you wish to use the serial port for a different purpose after installing the Korg MIDI Driver, you can either select "None" to disable the driver, or "Delete" the driver and restart Windows.

② If "Independent Synth/MIDI Out" is not checked, data that is output to Default MIDI will be sent both to the tone generator and to MIDI OUT. If "Independent Synth/MIDI Out" is checked, the operation will depend on the model of tone generator that you are using.

Since the TRITON does not support this function, do not check Independent Synth/MIDI Out.

③ Synth Out Messages allows you to select the messages that will be transmitted to the TRITON. MIDI Out Messages allows you to select the messages that will be output from the MIDI OUT of the tone generator.

④ When you finish making settings, click the [OK] button. Alternatively, if you wish to cancel the changes you made, click [Cancel]. If you have made changes, you must restart Windows.
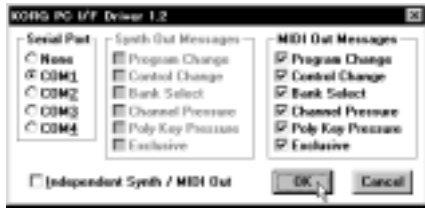
Installing the Korg MIDI Driver into a Macintosh

You can use the Korg MIDI Driver if the MIDI application (sequencer) you use runs on Apple MIDI Manager.

If you are using a MIDI application that does not use Apple MIDI Manager, it is not necessary to install the Korg MIDI Driver. Set the MIDI output port of your MIDI application to the port to which the TRITON is connected, and set the Clock setting to [1 MHz].

📎 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 will allow you to specify the MIDI channels and types of messages which will be transmitted to the TRITON. 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 (☞p.132).

① Copy the KORG MIDI Driver from the disk included with the AG-002B into the system folder of your startup disk.
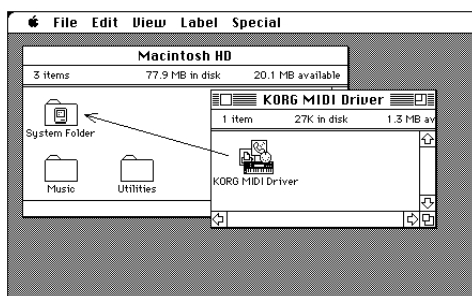
② If there is a copy of Apple MIDI Driver in your system folder, either delete it, or move it to another folder. Be careful not to delete or move the Apple MIDI Manager.

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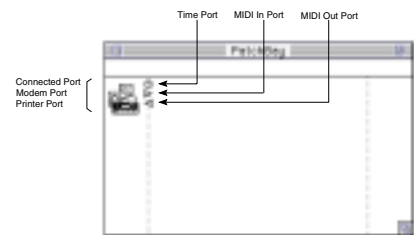
If installation has been performed correctly, the KORG MIDI Driver icon shown above will appear in the PatchBay window when PatchBay is started up. (The modem and printer ports will be displayed differently depending on the setup condition.)

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

The setup dialog box will appear.

③ Check the Port Enable box for the port to which the TRITON is connected, and specify [1 MHz].

Since the TRITON 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 whose box is checked will be output.

⑤ When you have finished making settings, click the [OK] button.

⑥ Start up your MIDI application (sequencer), and drag the mouse from the ▷ of the your MIDI application's Out Port to connect it to the MIDI Out of the MIDI Driver.

📎 For details on using PatchBay, refer to "About PatchBay..." etc. in the Apple menu.

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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 TRITON 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.

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Using PC Exchange to convert SMF data

Most commercially available Standard MIDI File (SMF) song data is saved in MS-DOS format.
You can use PC Exchange to make MS-DOS format SMF song files recognizable by the Macintosh.

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).

The selected icon will appear in the Application field.

⑤ From 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 now 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 documentation for "Macintosh PC Exchange."

Wiring diagram for special connection cables

(1) AG-001B (for IBM PC or Compatible)

Mini DIN 8-pin   D-SUB 9-pin

	8
	7
3	2
4	5
5	3

(2) AG-002B (for Macintosh)

Mini DIN 8-pin   Mini DIN 8-pin

1	2
2	1
3	5
4	4
5	3
6	8
7	7
8	6

Troubleshooting

If you experience problems, refer to the relevant item and take the appropriate measures.

Power does not turn on

- Is the power cable connected to an outlet? .... ☞p.15

- Is the [POWER] switch turned on?
  Turn on the rear panel [POWER] switch. .... ☞p.17

Power is on, but nothing is displayed in the LCD screen

- Use the rear panel [Contrast] knob to adjust the contrast of the LCD screen. .... ☞p.9

Can't operate the LCD screen correctly

- In Global P0: Basic Setup, execute the "Touch Panel Calibration" page menu command to adjust the sensitivity of the touch panel. .... PG ☞p.115

note If it is not possible to select this command from the page menu, enter Global mode P0 (press the [MENU] key, and then press the [0] or [EXIT] key to access this), and then hold down the [ENTER] key and press numeric key [2] to display the dialog box.

No sound

- Are connections made correctly to your amp, mixer, or headphones? .... ☞p.15

- Is your amp or mixer turned on?

- Is Local Control turned on?
  In Global P1: MIDI, **check** the "Local Control On" check box. .... PG ☞p.117

- Is the [VOLUME] slider raised? .... ☞p.6

- If there is no sound from the OUTPUT (INDIVIDUAL) 1–4 jacks, make sure that "BUS Select (IFX/Indiv.Out Assign)" or "Bus Select" following the insert effect is set to **1**, **2**, **3**, **4**, **1/2**, or **3/4**. .... ☞p.107~

- If specific tracks in Sequencer mode or Song Play mode do not sound, Make sure that the **PLAY/MUTE/REC button** or **PLAY/MUTE button** is set to **PLAY**. .... ☞p.62, p.88
  Make sure that the "Status" is **INT** or **BTH**.
  .... ☞p.59, p.85

- Are the Key Zone and Velocity Zone set so that sound will be produced when you play? .. PG ☞p.59

Notes do not stop

- In Program P1: Edit Basic, select the Program Basic tab, make sure that the "Hold" check box is unchecked. .... PG ☞p.4

- In Global P2: Controller, make sure that "Damper Polarity" or "Foot Switch Polarity" is set correctly.
  .... PG ☞p.121

Cannot input sound

- Is your audio source connected to the AUDIO INPUT 1, 2 jacks? .... ☞p.78

- Is the AUDIO INPUT [LEVEL] knob raised?
  .... ☞p.78

- Is the [MIC-LINE] switch set appropriately?
  .... ☞p.78

- If there is no sound in Sampling mode, go to Sampling P0: Recording, select the Input/Setup tab, and make sure that "Level" and "BUS(IFX) Select" are set correctly. .... ☞p.79

- If there is no sound in Program, Combination, Sequencer, or Song Play modes, go to Global P0: Basic Setup, select the Audio Input tab, and make sure that "Level" and "BUS(IFX) Select" are set correctly. .... ☞p.109

Noise or oscillation is heard

- When using an effect on the external audio source being input from AUDIO INPUT 1 and 2, oscillation may occur depending on the type of effect or on the parameter settings. Please adjust the input level, output level, and effect parameters. You need to be particularly careful when using a high-gain effect.

- After a sample edit has been executed, or after a stereo sample has been recorded, a small noise may be heard. This has no effect on the audio data that was edited or sampled.

- When using the BPM/MIDI Sync function to control the delay time of an effect, noise may occur in the delay sound. This noise is due to discontinuities in the delay sound, and is not a malfunction.

Effects are not applied

- Are the Global P0: Basic tab "IFX1–5 Off," "MFX1 Off," or "MFX2 Off" settings checked? .... ☞p.125

- If you are in Combination, Sequencer, or Song Play modes, and master effects are not applied when you raise the "Send 1" or "Send 2" of the timbre/track, does "Return 1" or "Return 2" from the master effect need to be raised? .... ☞p.108
  Alternatively, has "Send 1" or "Send 2" for each oscillator of the program used by the timbre/track been lowered? .... PG ☞p.24

note The actual send level is determined by multiplying the send setting of each oscillator in the program

with the send setting of the timbre/track.

Cannot record a sample

- Are one or more SIMM modules installed?
  .... PG ☞p.243

- Is there free RAM area................................. PG ☞p.81
  Select a different RAM memory.................. PG ☞p.81
  Delete unneeded samples. .... PG ☞p.83
  Save important samples before deleting them
  .... PG ☞p.83

Song does not playback correctly after data is loaded

- In the dialog box when saving the data, did you check the check boxes for each item that you wanted to save? ....☞p.41

- Are the program or combination banks/numbers the same as when you created the song?
  .... PG ☞p.115

- Did you load the necessary multisamples and samples?

Playback does not start when you press the [START/STOP] key in Sequencer mode

- Is the Global P1: MIDI "Clock Source" set to Internal?.. PG ☞p.118

Can't record in Sequencer mode

- Is the Global P0: Memory Protect "Song" check box unchecked?... PG ☞p.118

- Is the Global P1: MIDI "Clock Source" set to Internal?.. PG ☞p.118

In Song Play mode, a GM/GS/XG-compatible SMF is not played correctly

- Execute GM Initialize to initialize the settings.
  .... PG ☞p.102

- Is Bank Map set to **GM(2)**? .... PG ☞p.115

- Is "Status" set to **INT**? ....☞p.104

Settings for oscillator 2 are not displayed

- Make sure that the Program P1: Program Basic tab "Oscillator Mode" parameter is set to **Double**.
  ....☞p.45

The TRITON does not respond to incoming MIDI data

- Are all MIDI cables connected correctly?
  ....☞p.111~

- Is the MIDI data being received on the channel on which it is being transmitted? .....☞p.114, PG ☞p.118

The TRITON does not respond correctly to incoming MIDI data

- Are the Global P1: MIDI settings "Enable Program Change," "Enable Bank Change," "Enable Control Change," and "Enable After Touch" each **checked**?
  .... PG ☞p.118

- If you wish to receive MIDI exclusive messages, is the Global P1: MIDI "Enable Exclusive" item **checked**? .... PG ☞p.119

- Does the TRITON support the types of messages that are being sent to it?

Can't format a floppy disk

- Are you using a 2.5 inch 2HD or 2DD floppy disk?

- Is the floppy disk inserted correctly?

- Cover the write protect hole of the floppy disk, so that it is in the "write permit" position.
  Correctly insert a 3.5 inch 2HD or 2DD floppy disk (with its write protect hole covered) into the disk drive, and format it once again.

Can's save/load data to/from a floppy disk

- Is the floppy disk inserted correctly?

- Is the floppy disk formatted?

- Is the write protect hole of the floppy disk covered, so that it is in the "write permit" position?
  Correctly insert a 3.5 inch 2HD or 2DD floppy disk (with its write protect hole covered) into the disk drive, and perform the save or load operation once again.

The TRITON does not recognize when MO media has been exchanged, and does not correctly display the media information after the exchange.

- If you are able to switch the mode setting of your MO drive between PC/AT and Mac settings, please use PC/AT mode. For details on changing the mode of your drive, refer to the owner's manual for your MO drive.

- If your MO drive does not have a mode setting, or if the media exchange is not recognized even after you switch the mode, use the drive select button to select a different drive, and then re-select the MO drive.

*Parameter Guide = PG

Specifications and options

Specifications

System
HI (Hyper Integrated) synthesis system

Modes
Combination, Program, Sequencer, Sampling, Song Play, Global, Disk

Tone generator
HI (Hyper Integrated) synthesis system
Polyphony: 62 voices (62 oscillators) in single mode
31 voices (62 oscillators) in double mode
Filters: 24 dB/oct LPF with resonance
12 dB/oct LPF + HPF
Alternate modulation function

Waveform memory
32 Mbyte PCM ROM
(425 multisamples, 413 drumsamples)
Expandable via PCM ROM option
(EXB-PCM series is supported)
16 Mbyte user sampling RAM (SIMM)
(expandable to a maximum of 64 Mbytes)

Sampling
48 kHz, 16 bit linear
Maximum sample data memory capacity 64 Mbyte (with SIMM expansion)
4000 samples, 1000 multisamples
(128 indexes for each multisample
Able to load AIFF, WAVE, AKAI (S1000/3000), Korg format sample data can be loaded

Effect section
5 insert effects (stereo in/out),
2 master effects (mono in/stereo out),
1 master EQ (3-band stereo), all usable simultaneously
102 effect types (available for insert effects or master effects)
Effect dynamic modulation function

Combinations/Programs
512 user memory combinations (512 presets)
640 user memory programs (512 preset)
256 + 9 drum ROM programs (GM2 sound map compatible)

Drum Kits
64 user drum kits (16 presets)
9 ROM GM drum kits (GM2 sound map compatible)

Dual polypnonic arpeggiator
Use two arpeggiators simultaneously
(Combination, Sequencer, Song Play modes)
5 preset arpeggio patterns
232 user arpeggio patterns (200 presets)

Sequencer
16 timbres, 16 tracks + 1 master track

Maximum capacity: 200,000 notes
Resolution ♩=192
200 songs
20 cue lists
150 preset patterns, 100 user patterns (for each song)
16 preset/16 user template songs
Supports TRITON format and SMF (formats 0 and 1)
RPPR (Realtime Pattern Play/Recording) function
(One set is available for each one song)

Song play
16 timbres, 16 tracks
SMF (formats 0 and 1) supported

Disk mode
Load, save, utility
Data filter function (save/load MIDI exclusive data)
Loading from CD-ROM (ISO 9660 level1) is supported

Keyboard
TRITON proX: 88 keys (weighted)
TRITON pro: 76 keys
TRITON: 61 keys

Controllers
Joystick, ribbon controller, [SW1]/[SW2] keys, REALTIME CONTROLS knobs [1]–[4] and [A/B mode] key, [VALUE] slider, ARPEGGIATOR [TEMPO], [GATE], [VELOCITY] knobs and [ON/OFF] key

User interface
TouchView graphical user interface
(320 × 240 pixel LCD display)
[VOLUME] slider
Mode keys:
[COMBI], [PROG], [SEQ], [SAMPLING], [S.PLAY], [GLOBAL], [DISK]
Value controllers:
[VALUE] slider, [△][▽] keys, [VALUE] dial, numeric keys ([0]...[9], [–], [./10's HOLD], [ENTER]
[MENU], [EXIT] key, [COMPARE] key
BANK keys: [A], [B], [C], [D], [E], [F], [G]
SEQUENCER/SAMPLING control keys:
[PAUSE], [REW], [FF], [LOCATE], [REC/WRITE], [START/STOP]

Audio outputs
AUDIO OUTPUT (MAIN) L/MONO, R:
AUDIO OUTPUT (INDIVIDUAL) 1, 2, 3, 4:
Output impedance 1.1 [kΩ]
(L/MONO is 550 [Ω] for mono)
Maximum output level +13.5 [dBu]
Load impedance 100 [kΩ] or greater
AUDIO OUTPUT HEADPHONE
Output impedance 33 [Ω]
Maximum output level 25 [mW]
Load impedance 33 [Ω]

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Audio inputs
AUDIO INPUT 1, 2
LEVEL [MIC/LINE] switch, [LEVEL] knob
Input impedance   10 [kΩ]
Nominal level   LINE   +4 [dBu] @ [LEVEL] knob= min.
                         −30 [dBu] @ [LEVEL] knob= max.
                 MIC   −17 [dBu] @ [LEVEL] knob= min.
                         −52 [dBu] @ [LEVEL] knob= max.
Maximum level LINE   +14 [dBu] @ [LEVEL] knob = min.
                         −20 [dBu] @ [LEVEL] knob= max.
                 MIC   −7 [dBu] @ [LEVEL] knob= min.
                         −42 [dBu] @ [LEVEL] knob= max.
Source impedance   600 [Ω]

Control inputs
DAMPER (half-damper supported), ASSIGNABLE
SWITCH/PEDAL

Other
MIDI IN, OUT, THRU
TO HOST (Mini-DIN 8 pin I/F)
LCD contrast knob
3.5 inch floppy disk drive
AC power inlet, switch

Support for options
EXB-PCM series PCM expansion board (16 Mbyte
ROM) slots × 2
72 pin SIMM memory slots × 2 (for user sample
memory)
EXB-MOSS
EXB-SCSI

Dimensions (W × D × H)
TRITONproX: 1472.0 × 436.5 × 137 (mm)
TRITON pro: 1281.4 × 348.5 × 122 (mm)
TRITON: 1074.4 × 348.5 × 122 (mm)

Weight
TRITONproX: 28.6 kg
TRITON pro: 16.5 kg
TRITON: 14.2 kg

Power consumption:
26 W

Included items:
AC cable
Preloaded program disks TNFD-00P, TNFD-01P

Options

Expansion boards
EXB-MOSS DSP Synthesizer Board
EXB-SCSI SCSI Interface Board
EXB-PCM01 PCM Expansion Board
  - Pianos/Classic Keyboards
EXB-PCM02 PCM Expansion Board
  - Studio Essential

Expression/volume pedal:
XVP-10

Foot controller:
EXP-2

Damper pedal:
DS-1H

Pedal switch:
PS-1

Connection kit:
AG-001B MIDI Driver software and computer inter-
face cable for IBM PC compatible.
AG-002B MIDI Driver software and computer inter-
face cable for Macintosh (for models a serial port is
equipped)

Other:
MIDI cable

* Appearance and specifications of this product are subject to
   change without notice. (April/'99)

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1 16	1 16	Memorized
	Changed	1 16	1 16	
Mode	Memorized		3	
	Messages	×	×	
	Altered			
Note Number:		O 127	O 127	Sequencer and Arpeggiator data
	True Voice		O 127	can transmit all note numbers 0–127
Velocity	Note On	9n, V =1 127	9n, V =1 127	
	Note Off	×	×	
Aftertouch	Polyphonic (Key)			Polyphonic aftertouch transmitted *A
	Monophonic (Channel)			only as sequence data *A
Pitch Bend				*C
Control Change	0, 32			Bank Select (MSB, LSB) *P
	1, 2, 16, 18			Joystick (+Y, –Y), Ribbon, Slider *C
	4, 5, 7, 8, 10			Pedal, Portamento Time, Volume, IFX pan, Pan *C
	11, 12, 13			Expression, Effect Control 1/2 *C
	64, 65, 66, 67			Damper, Portamento Sw., Sostenuto, Soft *C
	70 – 79			Sound (Realtime Controls 1–4A: 74, 71, 79, 72) *C
	80, 81, 82, 83			Switch 1, 2, Foot Switch, Controller *C
	93, 91, 92, 94, 95			Send 1, 2, Effect ON/OFF (IFXs, MFX1, MFX2) *C
	6, 38			Data Entry (MSB, LSB) *C
	96, 97	×		Data Increment, Decrement *C
	98, 99			NRPN (LSB, MSB) *C, *2
	100, 101	×		RPN (LSB, MSB) *C, *3
	0 – 95			Realtime Controls knobs 1–4 B-assign *C
	0 – 101			Sequencer data (receive *C)
	120, 121	×		All Sound Off, Reset All Controllers *C
Program Change		O 127	O 127	*P
	Variable Range		O 127	
System Exclusive				*E*4
System Common	Song Position			When cue list is selected, corresponds to cue list *1
	Song Select	O 127	O 127	When cue list is selected, corresponds to cue lists 0–19 *1
	Tune	×	×	
System Real Time	Clock			*1
	Command			*1
Aux Messages	Local On/Off	×		
	All Notes Off	×	123 127	
	Active Sense			
	Reset	×	×	

Notes
*P, *A, *C, *E: Transmitted/received when Global P1: MIDI Filter (Program Change, After Touch, Control Change, Exclusive) is Enable, respectively.
*1: When Global mode P1: MIDI Clock is Internal, transmitted but not received. The opposite for External MIDI or PCI/F.
*2: LSB,MSB=02,00: Arpeggiator ON/OFF, 0A,00: Arpeggiator Gate control, 0B,00: Arpeggiator Velocity control
*3: LSB,MSB=00,00: Pitch bend range, 01,00: Fine tune, 02,00: Coarse tune
*4: In addition to Korg exclusive messages, Inquiry, GM System On, Master Volume, Master Balance, Master Fine Tune, and Master Coarse Tune are supported.

Mode 1: OMNI ON, POLY	Mode 2: OMNI ON, MONO		O : Yes
Mode 3: OMNI OFF, POLY	Mode 4: OMNI OFF, MONO		× : No

Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.

Appendices

MIDI Implementation Chart

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Appendices

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