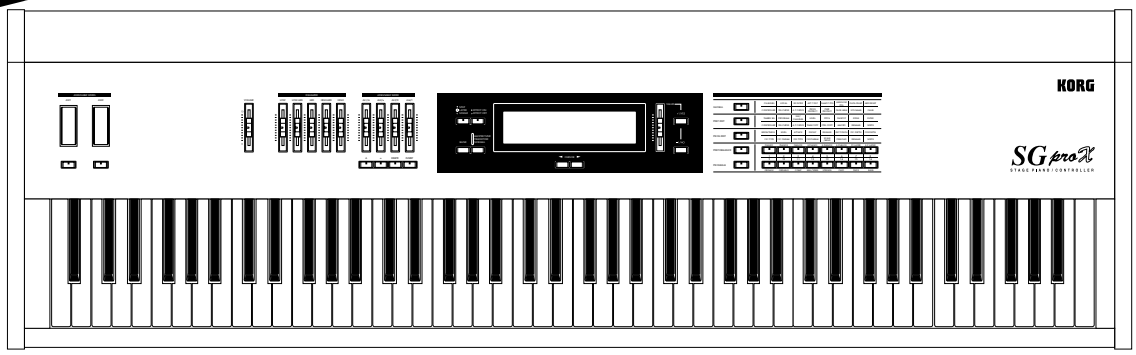
SG pro X

STAGE PIANO / CONTROLLER

AI² Synthesis System



Owner's Manual

KORG

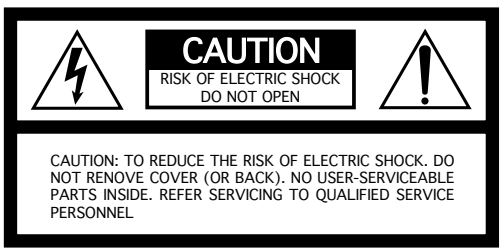
Ⓔ ③

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electrical products, basic precautions should be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, sink, in a wet basement, or near a swimming pool, etc.
3. This product should be used only with additional hardware that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply of the type described in the operating instructions or as marked on the product.
8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
9. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
10. The product should be serviced by qualified personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

SAVE THESE INSTRUCTIONS



The lightning flash with the arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to people.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

GROUNDING INSTRUCTIONS

This product must be grounded (earthed). If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with the local codes and ordinances.

DANGER – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

THE FCC REGULATION WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

CE mark for European Harmonized Standards

CE mark which is attached to our company's products of AC mains operated apparatus until December31,1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).
And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).
Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Warning-THIS APPARATUS MUST BE EARTHED
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
- the wire which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol ⏚, or coloured green or green and yellow.
- the wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- the wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Back-up Battery

The SGproX uses a back-up battery to prevent memory loss when the power is turned off. If the display shows "Battery Lo", the battery should be replaced. Consult the nearest Korg Service Center or dealer.

Data handling

Unforeseen malfunctions can result in the loss of memory contents. Please be sure to save important data on an external data filer (storage device). Korg can accept no responsibility for any loss or damage which you may incur as a result of data loss.

LCD Display

Some pages of the manuals show LCD screens along with an explanation of functions and operations. All sound names, parameter names, and values are merely examples and may not always match the actual display you are working on.

Contents

Introduction

Thank you for purchasing the SGproX professional stage piano / MIDI controller.

Main features

High-quality stereo piano sound for outstanding on-stage presence

- Newly recorded samples are featured, with careful attention paid to the selection of the sampled sounds, their acoustic environment, mic position, and even the way in which notes were struck.
- 15 Mbytes of the 24 Mbyte waveform ROM has been used for a stereo-sampled piano sound.

High-quality keyboard for musicians

The professional 88-note, full-scale, weighted keyboard has been designed foremost as a stage piano and master controller keyboard, and features a smooth touch and natural expression that conveys musical nuances from your fingertips directly to the sound.

Program mode with 64 voice professional stage sound

- The ultra-high capacity waveform memory contains new stereo sampled piano sounds, and also provides a total of 64 versatile and high-quality sounds frequently used on stage, including electric piano, clavi, organ, strings, and bass.
- Effect settings and parameters can be edited to your taste, and stored as one of 64 programs in internal memory.

Stereo digital multi-effects

Twelve different high-quality, stereo, digital multi effect are built in, including a new Hyper Enhancer effect that was specially developed for piano sounds.

Performance mode provides a rich array of master keyboard functionality

The SGproX is a master keyboard that meets a professional's needs.

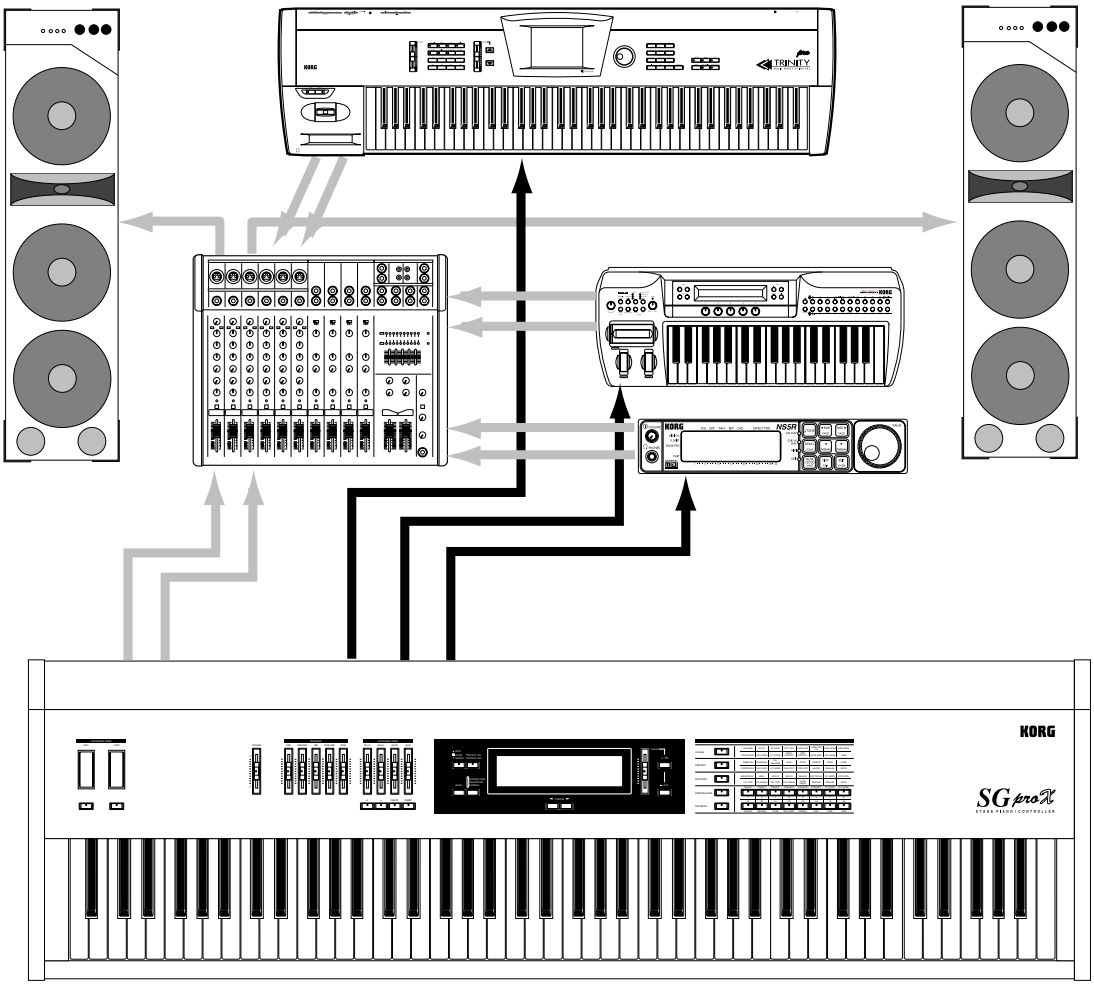
- Two sets of MIDI connectors provide a total of four MIDI OUT connectors for controlling external MIDI devices.
- Your performance can use a total of ten timbres: eight timbres on external MIDI devices, and two internal programs.
- A combination of the ten timbres can be saved as a Performance, and a total of 64 Performances can be stored in internal memory.

Eight flexible assignable controllers

- Two new assignable wheels with switches located at the left side, four assignable sliders with switches on the front panel, an assignable pedal jack and an assignable pedal switch provide a total of eight assignable controllers.
  MIDI messages such as control changes can be assigned freely.
- Seven different sets of frequently-used control settings such as tuning and pitch bend range can be stored. In addition, various functions of the SGproX itself (volume, effect depth, brightness etc.) can be assigned freely for control.

Superb operability

- An ergonomically designed panel layout guarantees smooth operation.
- Sixteen direct select switches allow one-touch selection of sound programs such as piano, electric piano or organ, and Performances.
- A large, 2 by 20 character, backlit LCD provides unsurpassed visual information.
- A five-band graphic equalizer allows you to emphasize the beautiful spacious sound of the piano to give it even greater impact.
- A single/layer/split select switch lets you smoothly change the performance mode even while you play.
- Many functions and parameters of Program Edit, Performance Edit and Global modes are indicated directly on the front panel.
- Dedicated sliders and switches are provided for the equalizer and effects, putting easy and intuitive adjustment of the sound at your fingertips.



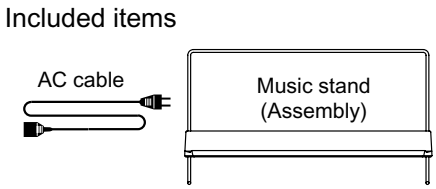
- Before you play the SGproX, please read the sections of this manual entitled Safety Precautions, To avoid personal harm by fire or electric shock, Cautions and Warnings.
- In this owner's manual, text printed in square brackets 〈 〉 indicate items which are printed on the front panel of the SG proX. Text printed in double quotation marks " " indicates items which appear in the LCD.
- In this manual, the symbol indicates a warning, and the ☞ symbol indicates a page reference.

Preparing to play

1. Check the included items

Make sure that the following items are included with your SGproX.

- AC cable
- Music stand (Assembly ☞ p.68)



2. Location

Place the SGproX on a stable base or stand so that it will be easy to play.

3. Connect the monitor speakers etc.

In order to fully enjoy the sound of the SGproX, use two powered monitor speakers (left and right), and connect them to the rear panel 〈L/MONO〉 and 〈R〉 jacks.
If you have only one powered monitor speaker, connect it to the 〈L/MONO〉 jack. In this case, do not connect anything to the 〈R〉 jack.

4. Connect the power cable.

Connect the AC power cable to the input jack of the SGproX.
Connect the other end of the cable to an AC outlet.
Be sure to use an AC outlet of the appropriate voltage for your instrument.
Before doing so, turn off the power of the SGproX and of the monitor speaker system etc.

● When using headphones

Connect the headphones to the jack located on the front left of the SGproX.
In this case, the output from the 〈OUTPUT〉 jacks will not be canceled.
Use the 〈VOLUME〉 slider to adjust the volume.

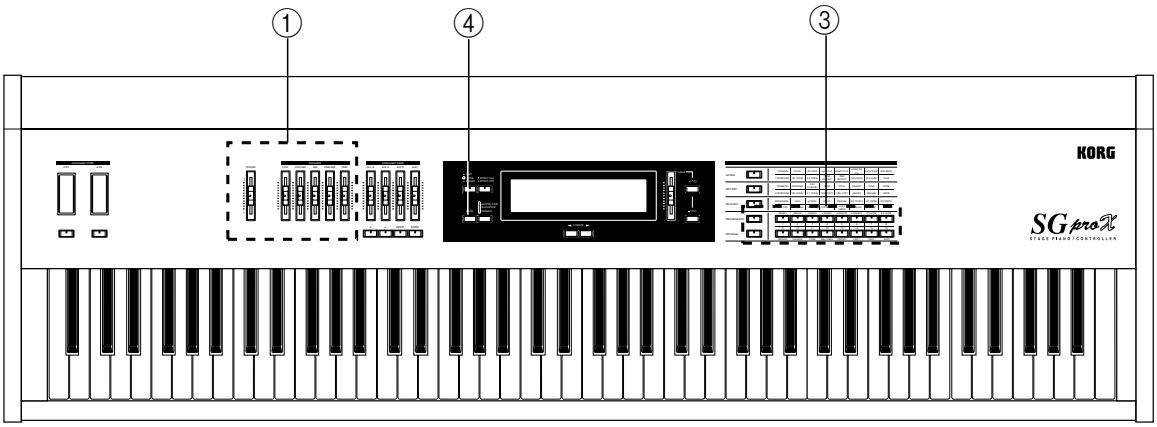
When using headphones, protect your hearing by avoiding prolonged use at high volumes.

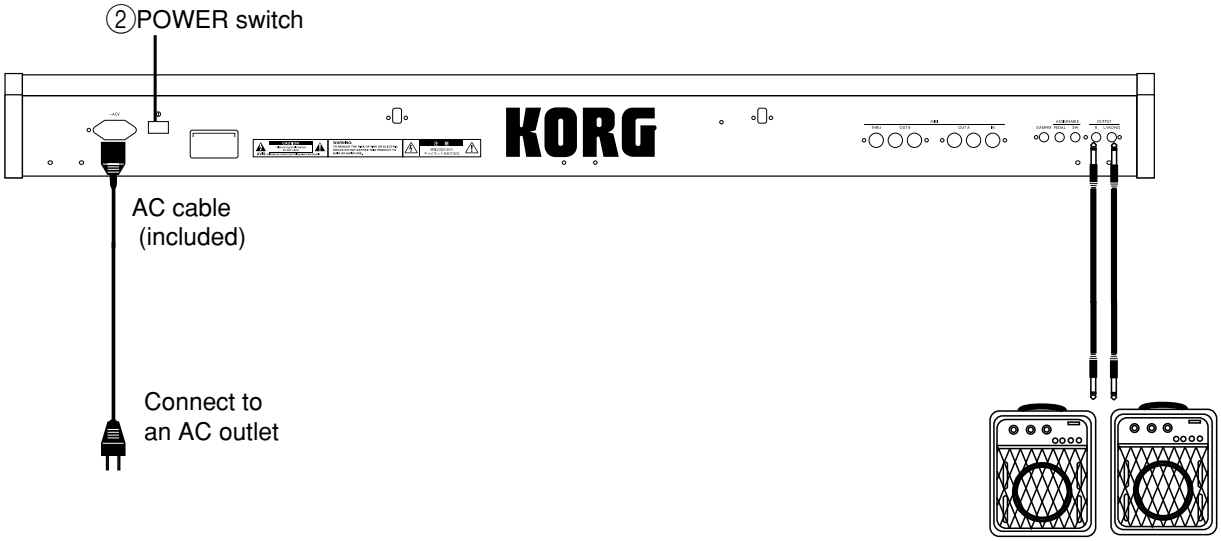
● When using the music stand

For assembly, refer to "assembly the music stand" (☞ p.68).
When using the music stand, insert it firmly all the way into the holes located on the rear panel.

Turn on the power

1) With ⟨VOLUME⟩ ① lowered, press the POWER switch ② located on the rear panel to turn on the power.
2) The ⟨PROGRAM⟩ and ⟨PIANO1⟩ LEDs ③ will light, and you can now play the keyboard to hear the ⟨PIANO1⟩ sound.
3) Press one of the sixteen switches ③ that indicate names of various sounds. The LED of that switch will light, and the sound will change.
4) Press the ⟨BANK⟩ switch ④, and the bank will change in the order of A → B → C → D → ..., allowing you to select from four sounds of the same category.
5) Use the ⟨VOLUME⟩ and ⟨EQUALIZER⟩ sliders ① to adjust the volume and tone to your taste.





Front and rear panel

Front panel

① Headphone jack

② Assignable wheels / switches 1,2 ⟨AW⟩

The wheels and switches are paired, and you can specify different functions for both wheels (☞ p.16).

③ Volume slider

This adjusts the level of the signal that is output from the ⟨L/MONO⟩, ⟨R⟩ and Headphone jacks.

④ Equalizer sliders

This is a five-band graphic equalizer that adjusts the tone of the signal which is output from the ⟨L/MONO⟩, ⟨R⟩ and Headphone jacks.

⑤ Assignable sliders / switches 1 to 4 ⟨AL⟩

The sliders and switches are paired, and you can specify different functions for each slider (☞ p.16). When modifying a program name etc., these are also used to input characters (☞ p.37).

⑥ LAYER / SPLIT switch

In PROGRAM mode, this switch will cycle through the play modes each time it is pressed: ⟨SINGLE⟩ (LED off) → ⟨LAYER⟩ (blinking) → ⟨SPLIT⟩ (lit) → ⟨SINGLE⟩ (☞ p.15).

⑦ EFFECT ON/OFF switch

This switch lets you turn effects 1 and 2 on/off together (☞ p.14).

⑧ ⟨BANK⟩ switch

Each time you press this switch, the program or program bank will cycle in the order of A → B → C → D.

⑨ TRANSPOSE / MASTER TUNE switch

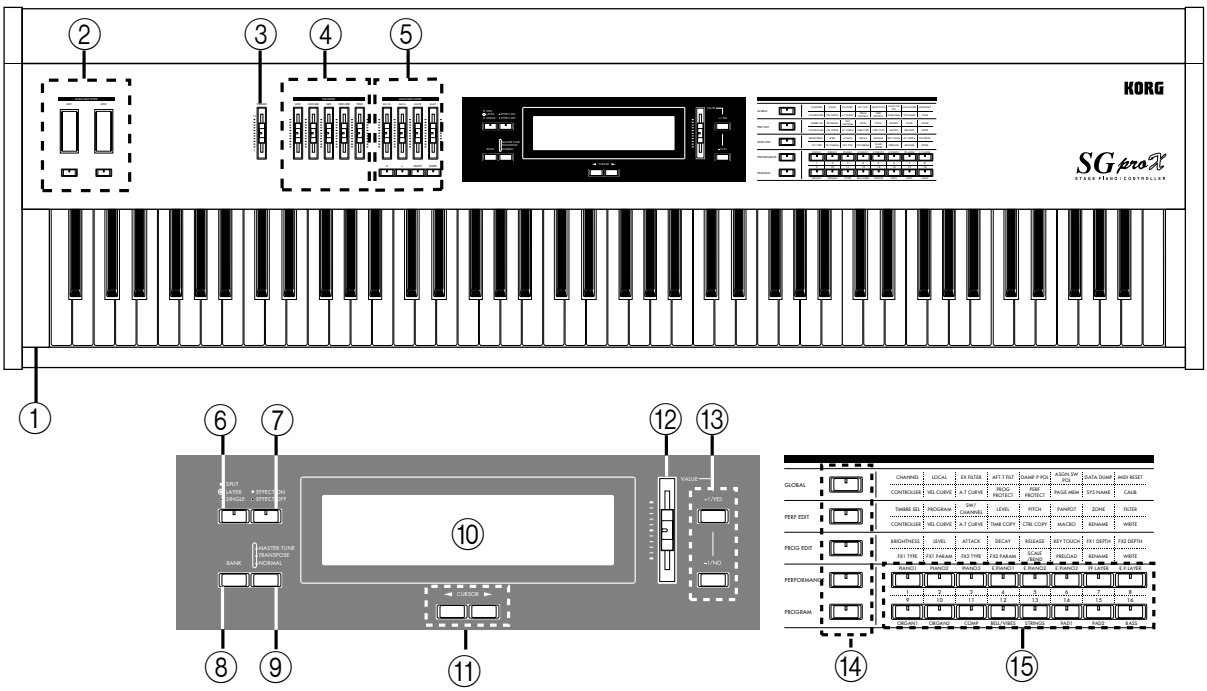
Use this switch to adjust the transposition or pitch. Each time you press this switch, the setting will cycle from ⟨NORMAL⟩ → ⟨TRANSPOSE⟩ → ⟨MASTER TUNE⟩ → ⟨NORMAL⟩.
From any mode, pressing this switch will access the ⟨TRANSPOSE⟩ and ⟨MASTER TUNE⟩ setting displays.
When the button is cycled back to the ⟨NORMAL⟩ stage, you will be back in the screen display from which you started (☞ p.16).

⑩ LCD (Liquid Crystal Display)

Program names, Performance names, and various settings and values are displayed here.
The contents of the display will depend on the mode.

⑪ ⟨CURSOR⟩ switch (◄ ►)

Use these switches to move between two or more parameters that are shown in the LCD, and to move between editing displays (☞ p.19).



⑫ ⟨VALUE⟩ slider

When editing, use this slider to specify the values of various settings.

⑬ ⟨VALUE⟩ switch (⟨+1/YES⟩ ⟨-1/NO⟩)

In Program mode and Performance mode, the program or performance will change in steps of one each time these switches are pressed.
When editing, use these switches to adjust the value of various settings.
These switches are also used to answer "YES" or "NO" in response to an "OK?" prompt that appears in the LCD.
By pressing both switches simultaneously, you can bring back the original value that was specified when you selected that parameter (the UNDO function).

⑭ Mode switches (× 5)

Use these switches to change modes.
The LED of the selected mode switch will light. (In the case of GLOBAL mode it will blink.)

- GLOBAL mode (☞ p.27)
- PERFORMANCE EDIT mode (☞ p.38)
- PROGRAM EDIT mode (☞ p.33)
- PERFORMANCE mode (☞ p.26)
- PROGRAM mode (☞ p.25)

⑮ Select switches (8 × 2)

Use these switches to select programs, performances, and edit displays.
The LED of the selected switch will light or blink.

Rear panel

⑯ Power switch

Press this switch to turn the power on or off.

⑰ Music stand holes

The music stand (included) can be attached here.

⑱ MIDI connectors (6 connectors)

- IN: This connector is used for MIDI reception
- OUT A: These connectors transmit data from the SGproX. They transmit data of channels A1 to A16. The two connectors transmit the same data.
- OUT B: These connectors transmit data from the SGproX. They transmit data of channels B1 to B16. The two connectors transmit the same data.
- THRU: The MIDI data received at MIDI IN is re-transmitted without change from this connector.

⑲ Other jacks

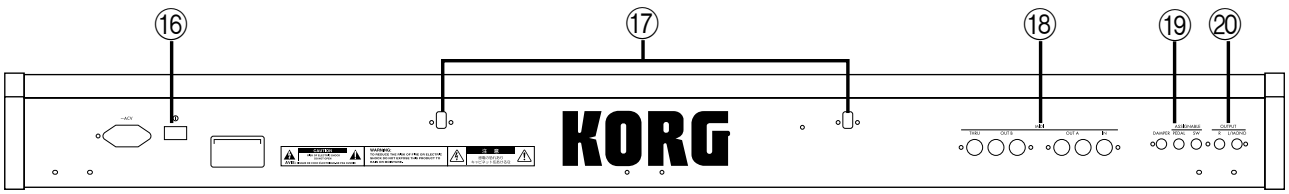
- Assignable pedal switch jack (AS)
  A foot switch can be connected here. You can specify the function of the switch (☞ p.55).
  You will need to specify the polarity of the foot switch that you use (☞ p.28).

- Assignable pedal jack (AP)
  A continuous pedal (XVP-10 is recommended) can be connected here. You can specify the function of the pedal (☞ p.55).

- Damper jack
  If an optional Korg DS-1H is connected here, it can function as a half-damper pedal.
  If a DS-1 is connected, it will function as a damper switch.
  You will need to specify the polarity of the damper switch that you use (☞ p.28).
  If you want the operation of a half-damper pedal to be more precise, you will need to make an adjustment (☞ p.32)

⑳ ⟨OUTPUT⟩ (two)

- L/MONO: When stereo connections are used, the left channel signal is output from this jack. When listening in monaural, only connect this jack.
- R: When stereo connections are used, the right channel signal is output from this jack. When listening in monaural, do not use this jack.



Playing the SGproX

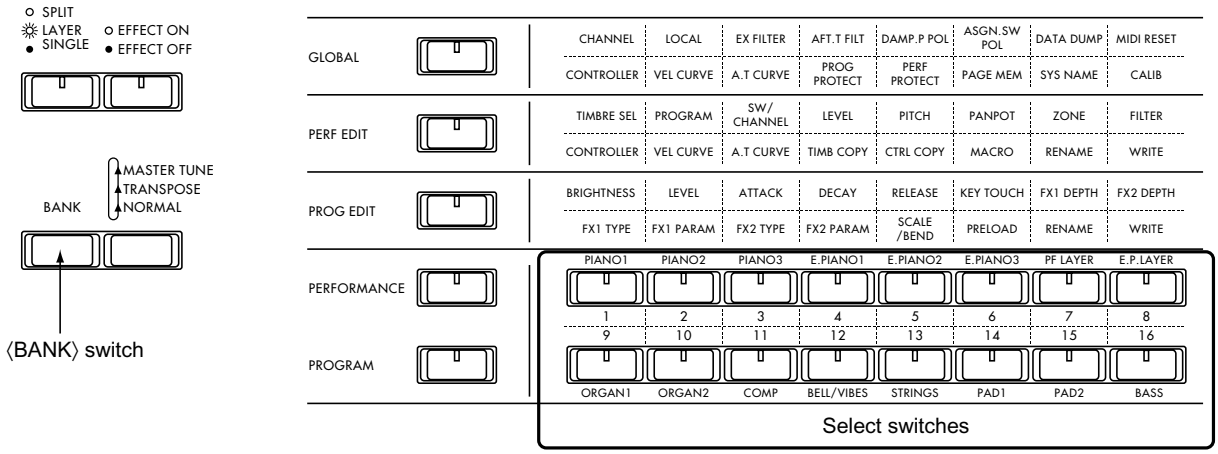
Now you can go ahead and play the SGproX.

Turn on the power, and make sure that the ⟨PROGRAM⟩ switch LED is lit. Then follow the instructions given below, referring to the characters printed on the front panel.

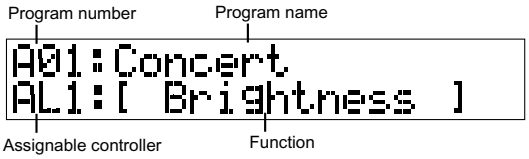
Selecting a program

Each of the four banks has 16 sounds, for a total of 64 sounds.
On the SGproX, these sounds are referred to as programs.

1. Use the 16 select switches to select programs. The LED of the selected switch will light.
2. Pressing the ⟨BANK⟩ switch will cycle through the program banks A → B → C → D→ A….

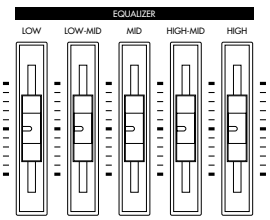


At this time, the upper line of the LCD will show the program name, and the lower line will show the function of the assignable controller. The display can be selected using the ⟨CURSOR⟩ switches.(☞ p.25)



Using the equalizer

You can use the five-band graphic equalizer to adjust the tone to your taste.



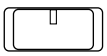
The equalization (tone adjustment) that you make here is not written (saved) into memory. The setting that you specify will continue to apply even if you switch programs or banks.

EFFECT ON / OFF switch

The effect can be turned on/off instantly.

Each time you press this switch, the effect will alternate between on (LED lit) and off (LED off). Normally you will leave this on.
The effect on/off setting will not be written (saved).
The setting of this switch will not be canceled even if you select another program.

○ EFFECT ON
● EFFECT OFF



Depending on the type of effect that is used, it may not be possible to turn off part of the effect (EQ Lo, EQ Hi) (☞ p.50).

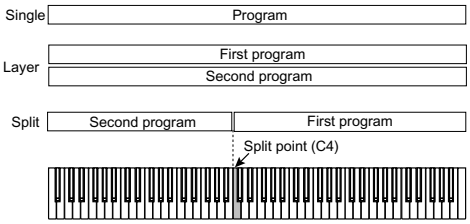
LAYER / SPLIT switch

Each time you press the select switch, the Play mode will cycle between ⟨SINGLE⟩ (LED off) → ⟨LAYER⟩ (blinking) → ⟨SPLIT⟩ (lit) → ⟨SINGLE⟩.

○ SPLIT
☼ LAYER
● SINGLE

This adjustment will return to the default setting when the power is turned off.

SINGLE: One program will sound when you play a note.
LAYER: Two programs will sound when you play a note.
SPLIT: Two different programs will sound for notes in the left and right areas of the keyboard.



SINGLE: Press one program switch to choose the program. (The switch LED will light.)

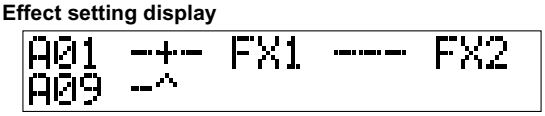
LAYER: Press one program switch to make the switch LED light, and the program shown in the upper line of the LCD will change (referred to as the first program). Continuing to hold that switch, press another select program switch to make the switch LED blink, and the program shown in the lower line of the LCD will change (referred to as the second program).

If you wish to select programs that are in two different banks, or to modify the levels etc., use the following procedure. Use the ⟨CURSOR⟩ switches to move through the various items that can be set, and the display blinks. Use the ⟨VALUE⟩ switches and ⟨VALUE⟩ slider to make settings.

Level setting display

1. Select the first program. (A01 to D16)
2. Use the ⟨CURSOR⟩ switches to move the cursor. Specify the level of the first program (range of 0 to 127).
3. Use the ⟨CURSOR⟩ switches to move the cursor. Select the second program (A01 to D16).
4. Use the ⟨CURSOR⟩ switches to move the cursor. Specify the level of the second program (range of 0 to 127).
5. Use the ⟨CURSOR⟩ switches to move to the effect setting display. Specify whether the second program will be sent through effects 1 and 2, or only through effect 2. The effect settings of the program selected as the first program will be used, and the first program will be sent through both effects 1 and 2.

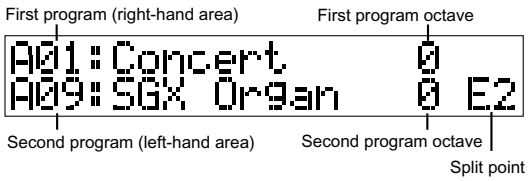
Effect setting display



This display indicates that the second program will pass through both effects 1 and 2.

SPLIT: The way in which programs are selected and the settings for each item are the same as for LAYER. The first program will be assigned to the right-hand area (the high range).

Octave and Split point setting display



1. Select the first program.
2. Use the ⟨CURSOR⟩ switches to move the cursor. Specify the octave in which the first program will sound (range of –2 to +2).
3. Use the ⟨CURSOR⟩ switches to move the cursor. Select the second program.
4. Use the ⟨CURSOR⟩ switches to move the cursor. Specify the octave in which the second program will sound (range of –2 to +2).
5. Use the ⟨CURSOR⟩ switches to move the cursor. Specify the split point (the bottom key of the area in which the first program will sound) (range of C–1 to G9). You can also set the split point by holding down the ⟨PROGRAM⟩ switch and pressing the desired note on the keyboard.
6. Use the ⟨CURSOR⟩ switches to move to the effect setting display. The settings and procedure here are the same as for LAYER.

Effect setting display

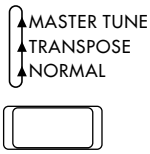
This display indicates that the second program will pass through only effect 2.

For layers and splits, incoming MIDI Program Change messages will change only the first program. Also, a MIDI Program Change message will be transmitted when you change the first program.

In the case of a layer, the effect of the damper and the various controllers will apply to both of the programs. However in the case of a split, their effect will apply only to the first program.

TRANSPOSE/MASTER TUNE switch

In any mode, pressing this switch will cycle the LCD display from ⟨NORMAL⟩ → ⟨TRANSPOSE⟩ → ⟨MASTER TUNE⟩ → ⟨NORMAL⟩.



Each setting that you make here will be remembered even when the power is turned off.

By changing the Key Transpose setting, you can transpose a song without having to change your fingering.

1. Press the TRANSPOSE/MASTER TUNE switch to access the Key Transpose screen.
2. Use the ⟨VALUE⟩ switches or the ⟨VALUE⟩ slider to set the amount of key shift in semitone steps, up to a maximum of ±1 octave.
3. Press the TRANSPOSE/MASTER TUNE switch twice to return to the previous screen.

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TRANSPOSE
Trans+00
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This cannot be switched while a note is held on the keyboard.

This setting will affect the note numbers of the MIDI Note-on and Note-off messages that are transmitted, but the note numbers for reception will not be affected.

You can adjust the tuning of the SGproX's internal tone generator.

1. Press the TRANSPOSE/MASTER TUNE switch to access the Master Tune screen.
2. Use the ⟨VALUE⟩ switches or the ⟨VALUE⟩ slider to adjust the tuning of the internal tone generator, in 1-cent steps over a range of ±50 cents.
   As you adjust this value, the frequency of the A4 key will also be displayed.
3. Press the TRANSPOSE / MASTER TUNE switch once again to return to the previous display.

MIDI RPN and Fine Tune messages can be used to modify this setting. (☞ p.58)

What are cents?

Cents are the smallest unit used to indicate relative pitch. 100 cents equals one semitone, and 1200 cents equals one octave.

```
MASTER TUNE
Tune+00:440.00Hz
```

Tuning value (cents) — Frequency of the A4 note (Hz)

Assignable controllers

The SGproX provides eight controllers whose function can be assigned. These are collectively referred to as "assignable controllers."

Assignable wheels/switches	⟨AW1⟩ ⟨AW2⟩
Assignable sliders/switches	⟨AL1⟩ ⟨AL2⟩ ⟨AL3⟩ ⟨AL4⟩
Assignable pedal	(AP)
Assignable switch	(AS)

By operating these controllers, you can control the pitch of a MIDI instrument connected via a MIDI cable, or adjust the way in which effects are applied, etc.
Depending on the function of the controller, it is also possible to simultaneously modify the sound being produced by the SGproX.

If the controller function is selected from Individual or Set, it will not be possible to control the SGproX. If you wish to control the SGproX as well as simultaneously transmit MIDI messages, select one of the Internal functions enclosed in square brackets [ ].

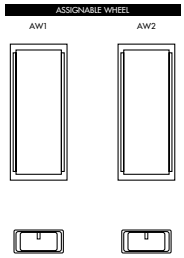
You can also use them to modify the sound of the SGproX.
If you connect separately sold pedals to the Assignable Pedal jack and Assignable Switch jack located on the rear panel, you can use them as well for similar types of control.
The function can be specified independently for each controller.

The same control function will be assigned both to the switch and to the wheel (slider) of ⟨AW1⟩, ⟨AW2⟩, ⟨AL1⟩, ⟨AL2⟩, ⟨AL3⟩ and ⟨AL4⟩ respectively.
Depending on the controll type setting, you will be able to apply a specific control value by pressing the switch while moving the wheel (slider), or to apply a specific control value fixed for each function each time the switch is pressed.
For details refer to **Controllers / MIDI** (☞ p.55).
The available controll functions, controll types, and fixed values that are specified for each function are listed in the tables given in the **Controller / MIDI** section (☞ p.58 and following).

Assignable wheels/switches 1/2

With the factory settings, a function of [Pitch Bend] is selected for ⟨AW1⟩, and a function of [LFO] is selected for ⟨AW2⟩.
By operating a wheel or switch, you can modify the pitch of the SGproX's sounds, or apply vibrato or wah.
The corresponding MIDI message will also be transmitted from MIDI OUT.

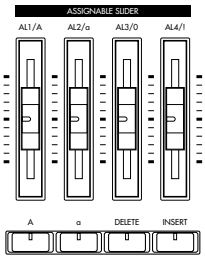
For some programs, the effect may not be available.



Assignable sliders/switches 1 to 4

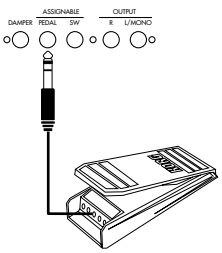
With the factory settings, a function of [Brightness] is assigned to ⟨AL1⟩, [Decay Time] is assigned to ⟨AL2⟩, [FX2 Depth] (effect depth) is assigned to ⟨AL3⟩, and [FX Dyna Mod] (effect modulation) is assigned to ⟨AL4⟩. By operating a wheel or switch, you can modify the sound of the SGproX.
The corresponding MIDI message will also be transmitted from MIDI OUT.

For some programs, the effect may not be available.



Assignable pedal

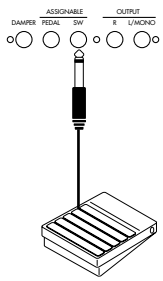
This is available only when a continuous pedal (XVP-10) is connected to the AP jack on the rear panel. With the factory settings, a function of [Volume] is selected.
By operating the pedal you can control the volume of the SGproX.
The corresponding MIDI message will also be transmitted from MIDI OUT.



XVP-10 , EXP-2

Assignable foot switch

This is available only when a pedal switch (PS-1) is connected to the AS jack on the rear panel. With the factory settings, a function of [Sostenuto] is selected. By operating the pedal you can apply a sostenuto effect to the sound of the SGproX.
The corresponding MIDI message will also be transmitted from MIDI OUT.



PS-1, PS-2 etc.

✻ Sostenuto is when a damper effect is applied only to the sound of those keys which were being held at the time that the pedal switch was pressed, so that only these notes will be sustained as long as the pedal remains pressed.
The effect will not apply to notes which are played while the sostenuto pedal remains pressed.

Modes

The SGproX has the following five modes, and pressing a mode switch will cause the switch LED to light, and the specified mode to be selected.

Program mode and Performance mode are used mainly when playing. Various settings can be modified (edited) in Program Edit mode, Performance Edit mode, and Global mode.

Global mode

Here you can make settings that are common to all programs and performances of the SGproX (global MIDI channel, memory protect, etc.).
You can also make settings that are common to all programs in Program mode (controllers, velocity curve etc.).
When you enter this mode, the ⟨GLOBAL⟩ switch LED will blink. When you press the ⟨GLOBAL⟩ switch once again, the LED will go dark, and you will return to the mode in which you previously were. (☞ p.27)

Performance Edit mode

Here you can make settings for each timbre (groups of parameters that control external MIDI devices and the internal tone generator) of a performance, make settings for the assignable controllers, and modify the performance name, etc. (☞ p.38)

Program Edit mode

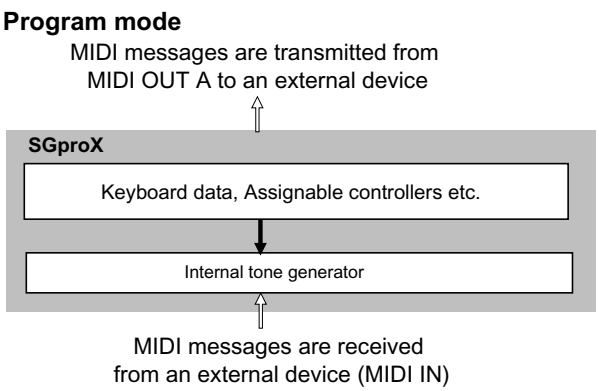
Here you can modify the sound of a program, specify the keyboard sensitivity and scale, and modify the program name, etc. (☞ p.33)

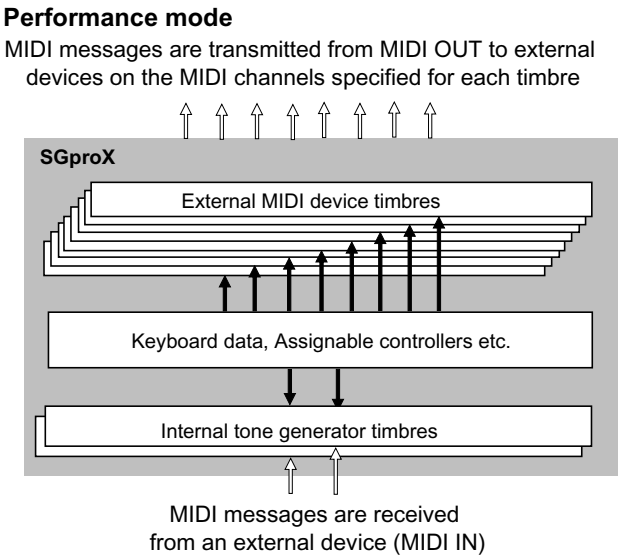
Performance mode

Here you can play a program and simultaneously control multiple external MIDI devices. (☞ p.26)

Program mode

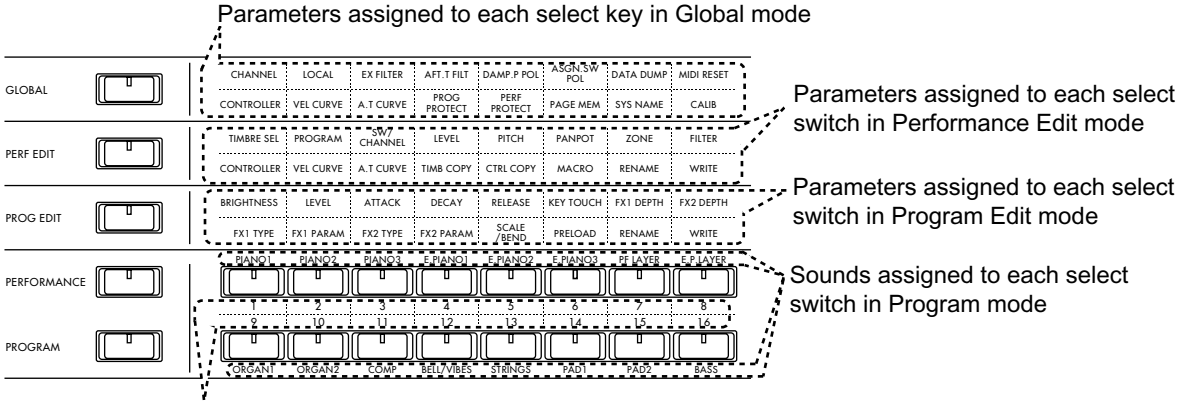
Here you can play a program.
It is also easy to play layers or splits. (☞ p.25)





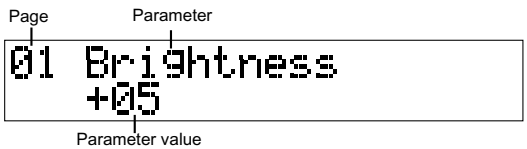
Editing

1. On the front panel, find the parameter that you wish to edit. (Parameters for each mode are printed above the select switches.)
2. Press the appropriate mode switch.
   Press a select switch to choose the display page.
   Use the ⟨CURSOR⟩ switches to move the cursor so that the value that you wish to modify begins to blink.
3. Use the ⟨VALUE⟩ slider or the ⟨VALUE⟩ switches (⟨+1/YES⟩ ⟨-1/NO⟩ switches) to modify the value.



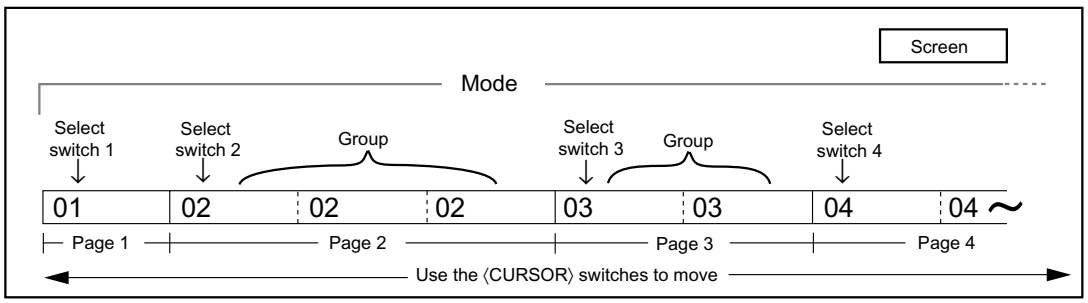
The editing screens

Each of the displays that appear in the LCD are called screens. Related functions and parameters are grouped together, and referred to as pages. The page number is shown in the upper left of the LCD.



Selecting pages

By pressing a select switch, you can directly select the first screen in each page.
Since the screens of each mode are organized as follows, you can use the ⟨CURSOR⟩ switches to move between pages within each mode.



⟨VALUE⟩ switches (⟨+1/YES⟩ ⟨-1/NO⟩ switches)

Use these switches to modify the blinking parameter value in steps of one unit. If you continue pressing the switch, the value will continue to change.
These switches are also used to reply “YES” or “NO” to a display which asks you “OK?”
In addition, pressing both switches simultaneously will bring back the value that had been selected when you selected that parameter (the UNDO function).

⟨VALUE⟩ slider

Use this slider when you wish to make large changes in the blinking parameter value. To make fine adjustments, use the ⟨VALUE⟩ switches (⟨+1/YES⟩ ⟨-1/NO⟩ switches).

Trying out the functions

This section will provide a simple explanation of the major functions of the SGproX: Program Edit mode and Global mode.
For a detailed explanation, refer to the section for each mode.

Editing a basic sound

1. Press the ⟨PROGRAM⟩ switch, and use the select switches and the ⟨BANK⟩ switch to select a program.
2. Press the ⟨PROG EDIT⟩ switch (The LED will light) and you will enter Program Edit mode.
3. Use select switches 1 to 6 to choose pages that will allow you to modify the sound (☞ p.34).

Be aware that editing on the SGproX does not allow you to make drastic changes in the sound. For example, your edits can make a piano sound brighter, or slow down the attack of a note, etc.

If after modifying a sound, you select another program or turn the power off, the sound will revert to the original program.
If you wish to save the modified sound, refer to Saving a sound that you create (☞ p.20).

Modifying the effects

1. Press the ⟨PROGRAM⟩ switch, and use the select switches and the ⟨BANK⟩ switch to select a program.
2. Press the ⟨PROG EDIT⟩ switch (The LED will light) and you will enter Program Edit mode.
3. The pages of select switches 7 and 8 allow you to adjust the depth of effects 1 and 2 (☞ p.35).
4. Use select switches 9 to 12 to choose pages that allow you to modify the type of effects 1 and 2 and modify their settings. If you change the effect types here, the settings of pages 7 and 8 will also change.

For details on effect types and parameter settings, refer to **Effect** (☞ p.50).

The effect settings that you have modified here will revert to the effect settings of the original program if you select a different program or turn off the power.
If you wish to save the modified effect settings, refer to Saving a sound that you create (☞ p.20).

Saving a sound that you create

1. Press the ⟨GLOBAL⟩ switch (The LED will blink) and you will enter GLOBAL mode.
2. Use select switch 12 to choose the page that allows you to turn ⟨PROG PROTECT⟩ “OFF”.
3. Press the ⟨GLOBAL⟩ switch (The LED will turn off) and you will to return Program Edit mode.
4. In Program Edit mode, modify the sound or effect settings.
5. Use the ⟨WRITE⟩ page (select switch 16) to write the modified data into memory.

It is also possible to write the modified program into a different program number.
For details refer to 16. Write of **Program Edit mode** (☞ p.37).

When you write data, the program that previously occupied that memory will be erased.

Modifying the name of a program

1. Press the ⟨GLOBAL⟩ switch (The LED will blink) and you will enter Global mode.
2. Use select switch 12 to choose the page that allows you to turn ⟨PROG PROTECT⟩ “OFF”.
3. Press the ⟨GLOBAL⟩ switch (The LED will turn off) and you will return Program Edit mode.
4. In the ⟨RENAME⟩ page (select switch 15), you can use AL1 to 4 to modify the name.

For details refer to 15. Rename of **Program Edit mode** (☞ p.37).

Changing the velocity curve of the keyboard

1. Press the ⟨GLOBAL⟩ switch (The LED will blink) and you will enter Global mode.
2. In the ⟨VEL CURVE⟩ page (select switch 10), you can change the velocity curve (☞ p.29).

This setting will remain even if the power is turned off.

* Velocity refers to the way in which your playing dynamics will affect the volume or tone.

Changing the operation of the pedals

1. Press the ⟨GLOBAL⟩ switch (the LED will blink) and you will enter Global mode.
2. In the ⟨DAMP.P POL⟩ and ⟨ASGN. SW POL⟩ pages (select switches 5 and 6) you can change the polarity of the pedals (☞ p.28).

This setting will remain even if the power is turned off.

LCD page display mode setting

1. Press the ⟨GLOBAL⟩ switch (the LED will blink) and you will enter Global mode.
2. In the ⟨PAGE MEM⟩ page (select switch 14), you can change the page memory setting and power-on mode setting. (☞ p.30)

This setting will remain even if the power is turned off.

Other settings

Press the ⟨GLOBAL⟩ switch (the LED will blink) and you will enter Global mode.

- The system name (the title that is displayed for a few seconds when the power is turned on) can be changed in the ⟨SYS NAME⟩ page (select switch 15). (☞ p.31)
- MIDI-related settings can be made in the pages called up with select switches 1 to 4. (☞ p.27)
- The functions of the assignable controllers in Program mode can be specified in the ⟨CONTROLLER⟩ page (select switch 9). (☞ p.29)
- Pedals and controllers etc. can be calibrated in the ⟨CALIB⟩ page (select switch 16). (☞ p.31)

* Calibration adjustments allow you to optimize the range and sensitivity of the pedals and controllers.

All of the above settings will remain even when the power is turned off.

Press the ⟨PROG EDIT⟩ switch. (The LED will light) and you will enter Program Edit mode.

- The scale type (transposition) can be changed in the ⟨SCALE⟩ page (select switch 13). (☞ p.36)
- After modifying a program, you can bring back the sound of the original program by using the ⟨PRELOAD⟩ page (select switch 14). (☞ p.36)

The above settings will return to the settings of the original program when you re-select a program or turn off the power. If you wish to keep the settings that you modified, refer to “Saving a sound that you create” (☞ p.20).

Connecting other MIDI devices

When the SGproX is used as a MIDI master keyboard, it can control one channel of external MIDI devices in Program mode, or eight channels of external MIDI devices in Performance mode.
This section provides a simple explanation of how an external MIDI device can be controlled by the SGproX in Program mode.
For details on the control functions, refer to **Controllers / MIDI** (☞ p.55).

What is MIDI?

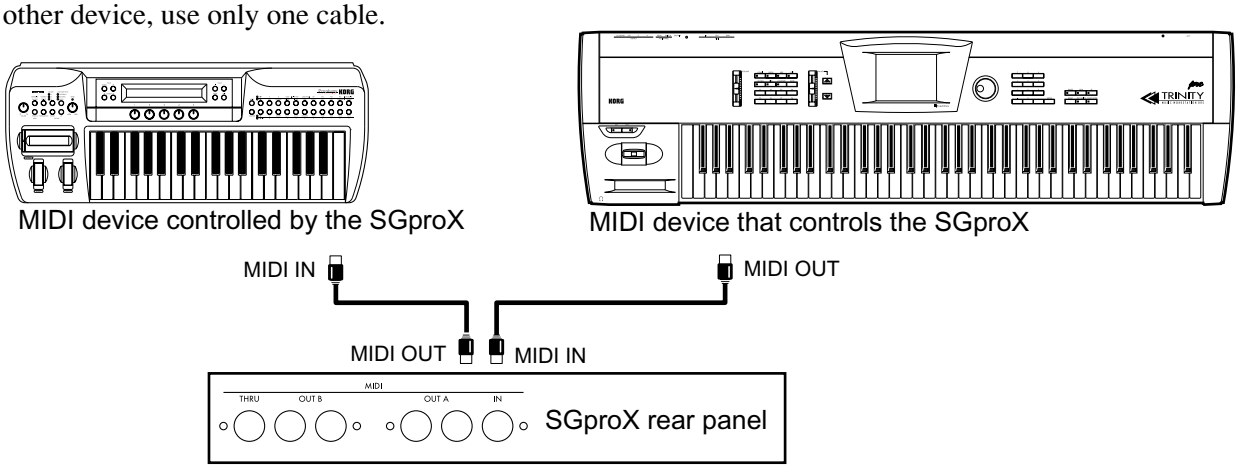
MIDI (Musical Instrument Digital Interface) is a standard specification that allows musical performance data from an instrument (notes played on a keyboard, sound selections etc.) to be exchanged as digital data between electronic musical instruments and computers etc.
This allows you to control other MIDI instruments by playing the SGproX. When you select sounds or operate the damper pedal etc., all of this information is transmitted as well.
In a similar way, musical data can be transmitted from another MIDI keyboard or sequencer (automatic playback device) to control the SGproX.
The following section will explain ways in which the SGproX can use MIDI. If you wish to learn more about MIDI, you can refer to the numerous books on MIDI that have been published.

Connecting MIDI cables

You will need to provide an additional MIDI device, and have its owner's manual at hand for reference.

- Connect a MIDI cable to the SGproX's MIDI OUT A, and the other end of the cable to the MIDI IN of the MIDI device that you wish to control. (The SGproX will be the transmitting device.) *MIDI OUT B is not used in Program mode.
- If you wish to control the SGproX from the other MIDI device, use a MIDI cable to connect the SGproX's MIDI IN to the other MIDI device's MIDI OUT. (The SGproX will be the receiving device.)

If you wish only to control the other MIDI device from the SGproX, or only to control the SGproX from the other device, use only one cable.



Setting the MIDI channels

1. Press the ⟨GLOBAL⟩ switch (The LED will blink) and you will enter Global mode.
2. In the ⟨CHANNEL⟩ page (select switch 1), select the same channel as the MIDI device that is connected. MIDI messages will be transmitted and received on this channel.
3. Press the ⟨GLOBAL⟩ switch (The LED will turn off) and you will return to PROGRAM mode.

If the other MIDI device is a tone generator or keyboard (that can produce sound), it will play when you play the SGproX's keyboard. (If the MIDI OUT A of the SGproX is connected to the MIDI IN of the other MIDI device)
If the external MIDI device connected to the SGproX's MIDI IN is a sequencer or keyboard (that can transmit performance data), the SGproX will sound in accordance with the incoming data from the external device.

The following section is a simple explanation of only how to control an external device.

Selecting a different program

When you switch programs on the SGproX, the program of the external MIDI device will also change.
Selecting a program A1 to D16 will cause a program number 0 to 63 to be transmitted, but the actual sound that this will select will depend on the receiving device. (☞ p.62)

Changing the bank

The ⟨BANK⟩ switch of the SGproX does not transmit Bank Select messages.
Banks A, B, C and D are all within the same bank of MIDI messages. (☞ p.62)

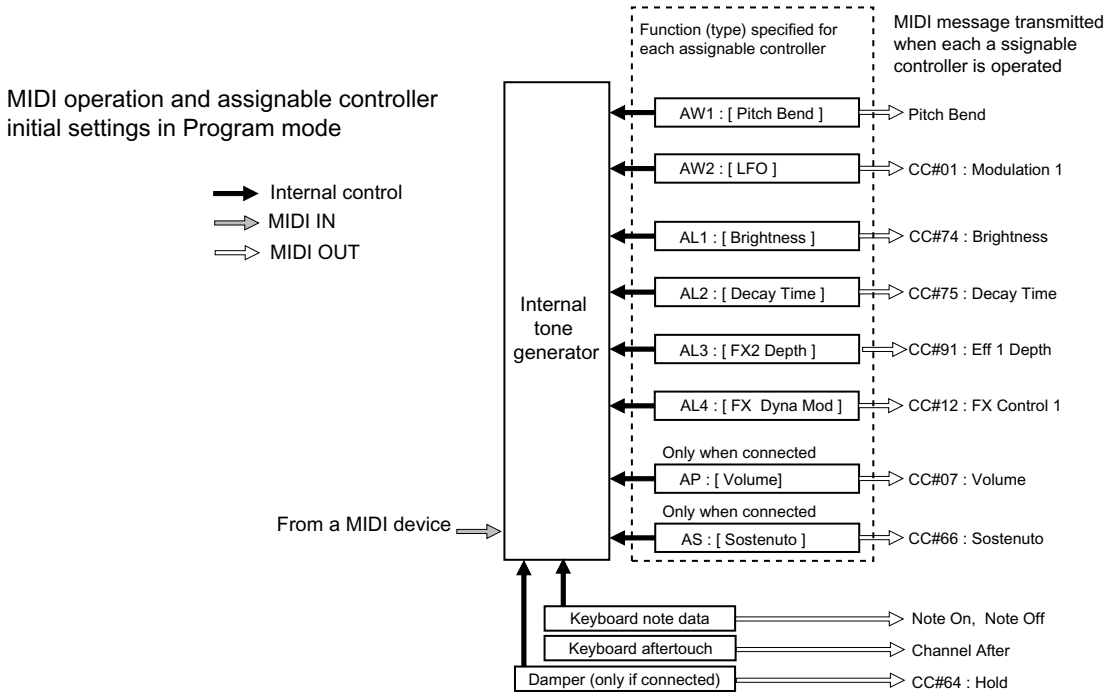
Operate the assignable controllers

Try moving the SGproX's assignable controllers (AW1/2, AL1 to AL4) while playing notes on the SGproX. The sound of the MIDI device connected to MIDI OUT will change.
This is because MIDI messages which correspond to the SGproX function specified for each assignable controller are being transmitted. (In Program mode, with the factory settings)
These settings can be changed in the Global mode ⟨CONTROLLER⟩ page (select switch 9). (☞ p.29)

Assignable controllers and MIDI functions

By assigning functions to each of the eight assignable controllers, you can freely control external MIDI devices.
The functions which can be specified include nearly all of the controllers defined by the MIDI specification, and sets of frequently-used messages are also provided.
For details refer to the **Controllers / MIDI** list (☞ p.58 and following).

If the controller function is selected from Individual or Set, it will not be possible to control the SGproX. If you wish to control the SGproX as well as simultaneously transmit MIDI messages, select one of the Internal functions enclosed in square brackets [ ].



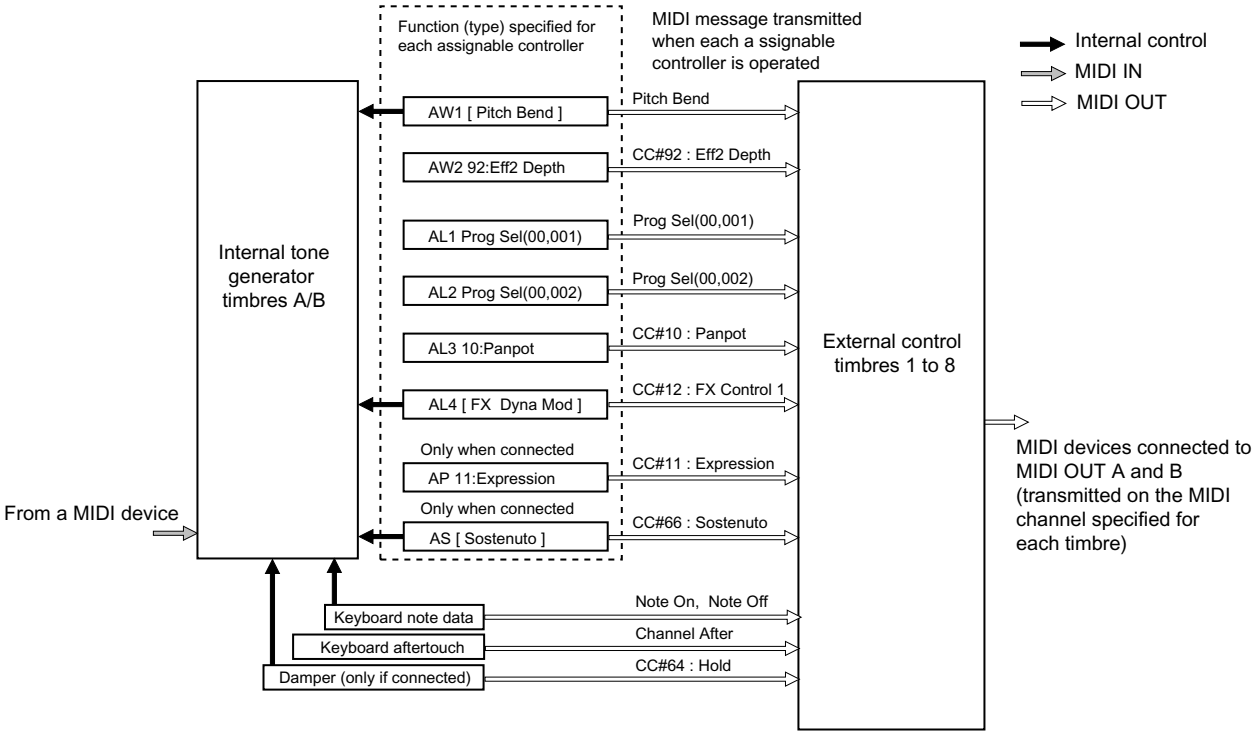
In this way, you can control MIDI devices even in Program mode. However you should use Performance mode if you wish to control two or more MIDI devices.

Features of Performance mode

- The SGproX provides eight timbres to control external MIDI devices.
- You can specify the MIDI channel for each timbre.
- MIDI channels can be selected from A1 to B16 or B1 to B16, for an actual total of 32 available channels.
- For each timbre you can enable/disable aftertouch and individual controllers.
- Two timbres are provided to control the internal tone generator.
- Assignable controller functions and settings can be specified independently for each performance.

Many other parameters can be specified for each timbre or Performance (☞ p.38).

MIDI operation in Performance mode



Program mode / Performance mode

The SGproX provides two playing modes: Program mode in which you will play mainly the internal tone generator, and Performance mode in which you can use the SGproX as a master keyboard.

Program mode

The SGproX contains 64 high-quality programs. With the factory settings, different banks of the same number will select similar sounds.

Here's how to select programs.

1) Press the ⟨PROGRAM⟩ switch (The LED will light) and you will enter Program mode.
2) Use the ⟨BANK⟩ switch and the select switches to choose a program.
   You can also use the ⟨+1/YES⟩ ⟨-1/NO⟩ switches to select programs.

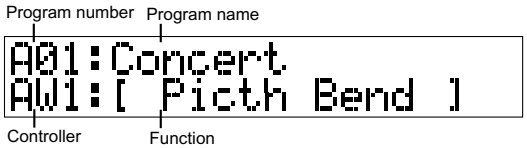
- You can use the front panel LAYER / SPLIT switch to select Single, Layer or Split. (☞ p.15)
- You can use the front panel TRANSPOSE /MASTER TUNE switch to adjust the tuning or transposition. (☞ p.16)
- You can use the front panel Effect switch to turn the effects on/off. (☞ p.14)

You can use the various controllers to control the internal tone generator and/or an external MIDI device.

Assignable controller settings are made in Global mode, and will be shared by all programs.
MIDI messages are transmitted/received on the Global MIDI channel (1 to 16). In Program mode, MIDI messages are transmitted from MIDI OUT A, but nothing will be transmitted from MIDI OUT B.

In Program mode, the upper line of the LCD will indicate the program number and program name. The lower line will indicate the function of one of the controllers (AW1/2, AL1 to 4, AP or AS).
At this time, you can use the ⟨CURSOR⟩ switches to step through the controllers to view the setting of each.

Program-related settings are made in Program Edit mode and in Global mode.



Assignable Wheel 2 function	A01:Concert AW2:[LFO]
Assignable Slider 1 function	A01:Concert AL1:[Brightness]
Assignable Slider 2 function	A01:Concert AL2:[Decay Time]
Assignable Slider 3 function	A01:Concert AL3:[FX2 Depth]
Assignable Slider 4 function	A01:Concert AL4:[FX Dyna Mod]
Assignable Pedal function	A01:Concert AP :[Volume]
Assignable Switch function	A01:Concert AS :[Sostenuto]

Performance mode

To allow you to control many external devices simultaneously, each of the 64 performances of the SGproX provides two timbres for control of the internal tone generator, and eight timbres for control of external MIDI devices.

Here's how to select a Performance.
1) Press the ⟨PERFORMANCE⟩ switch (The LED will light) and you will enter Performance mode.
2) Use the ⟨BANK⟩ switch and the select switches to select a Performance.
   You can also use the ⟨+1/YES⟩ ⟨-1/NO⟩ switches to select a Performance.

Each Performance consists of timbres A/B which control the internal tone generator, timbres 1 to 8 which control external devices, and settings for the various controllers etc.

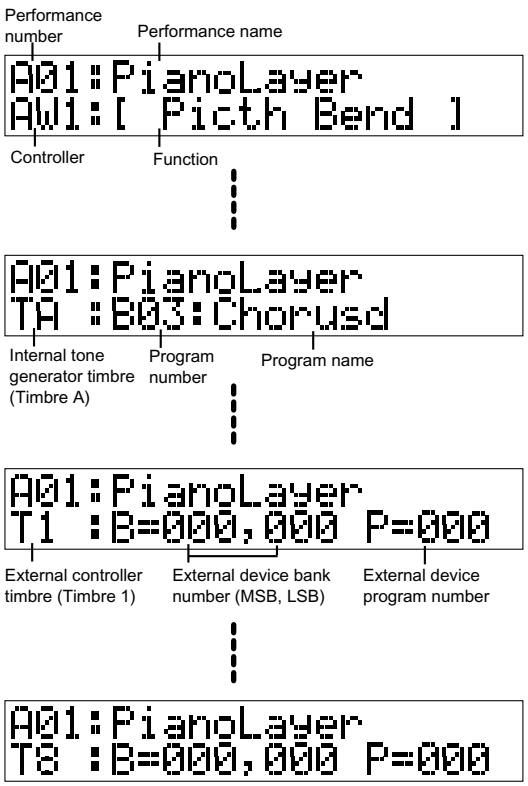
- Of the internal tone generator timbres A/B, the effect settings of timbre A will be used.
- You can specify whether or not the sound of the internal tone generator timbre B will be input to effect 1 (which will use the settings of timbre A), but effect 2 will apply to both timbres.
- Internal tone generator timbres A/B can be switched on/off from the front panel.

You can use the various controllers to control the internal tone generator and external MIDI devices.
Settings for the assignable controllers are made in Performance mode, and can be made independently for each performance.
You can specify the MIDI channel independently for each external timbre 1 to 8, so that each timbre will transmit MIDI data on the specified channel (A1 to A16, B1 to B16) when you play the SGproX's keyboard or operate its controllers.

In Performance mode, MIDI reception for internal tone generator timbres A/B will use the Global MIDI channel (1 to 16).

In Performance mode, the upper line of the LCD will indicate the performance number and performance name. The lower line of the LCD will indicate the function of controllers AW1/2, AL1 to 4, AP or AS, or the program of timbres A/B, or the bank and program number for timbres 1 to 8. Use the ⟨CURSOR⟩ switches to step through the various display items.

Performance-related settings are made in Performance Edit mode and in Global mode.



Global mode

The Global mode offers settings which affect the entire SGproX.
Changes you make are memorized as soon as they are made.
The sound etc. will be as it was in the mode in which you were before entering Global mode.

1. CHANNEL (Global MIDI channel setting)

Global channel

This setting specifies the MIDI channel that will be used to transmit/receive musical data in Program mode, to transmit data from assignable controllers which have been assigned to internal control, and to transmit/receive system exclusive messages.
The Global MIDI channel can be set from 1 to 16, meaning that only the rear panel MIDI OUT A is used.

Range of settings	1 to 16
Factory setting	1

```
01 Global Channel
    1
```

Changing a channel

This setting switches a timbre channel for all of the performances.
Specify the channel which is to be changed and the new desired channel, and press ⟨+ /YES⟩ in response to the "OK?" prompt. If the new channel is already being used by a timbre, the display will ask "Already used OK?." If not, the display will ask "Are you sure OK?" Use the ⟨+1/YES⟩ ⟨-1/NO⟩ switches to execute or terminate the operation.

Range of settings	Old channel	A1 to B16
	New channel	A1 to B16

```
01 Timb Ch Change
   A-01 → B-16 OK?
```

Since changes will apply to the performances that are in internal memory, you will need to re-select the performance after executing this command.

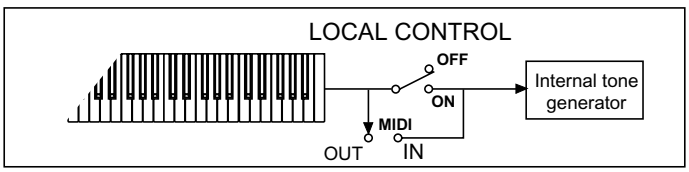
2. LOCAL (Local Control setting)

This setting specifies whether or not the SGproX's keyboard will control the internal tone generator. With a setting of OFF, the SGproX's keyboard will be disconnected from the internal tone generator, but will continue to transmit MIDI messages.
This setting allows you to prevent notes from being played in duplicate when a sequencer etc. is connected to the SGproX, and the sequencer echoes back the data (i.e., when the sequencer re-transmits the data that is receives). Normally you will leave this setting ON.

Range of settings	OFF, ON
Factory setting	ON

```
02 Local
   ON
```

If Local Control is turned OFF, operations of the damper pedal or of assignable controllers assigned to internal functions will have no effect on the SGproX's internal tone generator. (MIDI messages will be transmitted.)



3. EX FILTER (Exclusive Filter setting)

This setting specifies whether or not MIDI exclusive data will be received. With a setting of DIS, exclusive data will not be received. Universal exclusive data (master volume and master volume) will be transmitted and received regardless of this setting.
Also, system exclusive data will be received regardless of this setting if you are in page 7 ⟨DATA DUMP⟩.
Normally you will leave this set to DIS, but set it to ENA when you wish to edit the SGproX from an external device such as a computer. While exclusive data is being received, the lower line of the LCD will indicate "now receiving ..."

Range of settings	DIS, ENA
Factory setting	DIS

```
03 MIDI Exclusive
   DIS
```

4. AFT.T FIL (Aftertouch Filter setting)

This setting specifies whether or not the SGproX will transmit keyboard aftertouch data.
With a setting of DIS, aftertouch data will not be transmitted.
Since aftertouch messages are produced when even slight pressure is applied to the keyboard, you should set this to DIS if you are recording on an external sequencer and do not need to record aftertouch. (This will conserve sequencer memory.)

Range of settings DIS, ENA
Factory setting ENA

```
04 MIDI After Touch
   ENA
```

5. DAMP. P POL (Damper Pedal polarity setting)

Specify the polarity of the damper (sustain) pedal that is connected to the rear panel Damper jack.
Either closed (↓) or open (↑) type pedals can be used. If you are using a Korg DS-1H damper pedal (sold separately), set this to "closed" (–).
If notes are not sustained when you press the foot pedal, try reversing the polarity setting. If a pedal is not connected, we recommend that you set this to "–".

Range of settings –, + (closed type, open type)
Factory setting –

```
05 Damper Pedal Pol
   -
```

6. ASGN. SW. POL (Assignable Pedal Switch polarity setting)

Specify the polarity of the pedal switch that is connected to the rear panel Assignable Pedal Switch jack.
Either closed (↓) or open (↑) type pedals can be used. If you are using a Korg PS-1 pedal switch (sold separately), set this to "closed" (–). If a pedal is not connected, we recommend that you set this to "–".

Range of settings –, + (closed type, open type)
Factory setting –

```
06 Assign SW Pol
   -
```

7. DATA DUMP (Transmit a MIDI Data Dump)

A data dump transmits SGproX exclusive data (program or performance settings) to an external MIDI data dump filer or computer connected to MIDI OUT A.

Data transmission procedure

1) Connect the SGproX's MIDI OUT A to the MIDI IN of an external MIDI device that is able to receive a MIDI data dump.
2) Set the SGproX's Global MIDI channel to match the channel of the external MIDI device (another SGproX or a personal computer which is running sound editing software etc.). However, if you are transmitting data to a MIDI data filer, most receive on all MIDI channels.
3) Select the data that you wish to dump, move the cursor to "OK?" and press the ⟨+1/YES⟩ to execute the data dump. When the data dump has been completed, the display will indicate "Completed."

Dump type	Transmitted data	Size	Transmission time
ALL PROG	Settings for all programs A1 to D16	3665 bytes	2 seconds
ALL PERF	Settings for all performances A1 to D16	17854 bytes	6 seconds
GLOBAL	Part of the global data	118 bytes	0.1 seconds
ALL	ALL PROG, ALL PERF, GLOBAL	21637 bytes	9 seconds

While a data dump is in progress, do not touch the SGproX.

While you are in this page, system exclusive data can be transmitted and received even if the 3. EX FILTER setting is "DIS."

Range of settings ALL PROG, ALL PERF, GLOBAL, ALL

```
07 MIDI Data Damp
   ALL PROG      OK?
```

* When "ALL" is selected, the data will be transmitted in the order of "GLOBAL," "ALL PERF" and "ALL PROG."
* Details of data dump are provided in the **SGproX MIDI Implementation**.
* Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.

8. MIDI RESET (Transmit messages for MIDI reset)

This function allows you to transmit messages to reset the MIDI settings of an external device connected to the SGproX's MIDI OUT.
Press the ⟨+1/YES⟩ switch and you will be asked "Are You Sure OK"? Press ⟨+1/YES⟩ again, and the following MIDI messages will be transmitted, and the display will indicate "Completed."

Message contents
All Notes Off for all channels
Note Off for all channels
Hold (Damper) Off for all channels
Sostenuto Off for all channels
Reset All Controllers for all channels

```
08 MIDI Reset
                OK?
```

9. CONTROLLER (Controller settings)

These settings specify the function that each controller will have in Program mode. (These settings are shared by all programs.)

Assignable wheels/switches	⟨AW1⟩ ⟨AW2⟩
Assignable sliders/switches	⟨AL1⟩ ⟨AL2⟩ ⟨AL3⟩ ⟨AL4⟩
Assignable pedal	(AP)
Assignable switch	(AS)

Functions can be assigned independently to each of the above eight controllers.
Depending on the type of controller, there are some restrictions on the function which can be selected. Refer to **Controllers / MIDI** (☞ p.55).

```
09 Prog Control Sel▶
   A.WHEEL1
```

When you move from Performance mode into Global mode, the operation and sound will be the same as in Performance mode. If you wish to verify the operation of the controllers as you make settings, you will need to enter Global mode from Program mode.

10. VEL. CURVE (Velocity curve settings)

These settings specify how the force with which you play the keyboard will be applied to the volume or tone. These settings will affect the way in which the internal tone generator will sound, and will also affect transmission of MIDI Note On messages. However, they will not affect MIDI reception.
The velocity curve is determined by the minimum (p) and maximum (f) velocity values, and by the shape of the curve (Fig.) that connects these two points. With an (f) setting of 150, a velocity of 127 (the maximum for MIDI) will be transmitted even when you do not play very hard.

VEL. FIGURE

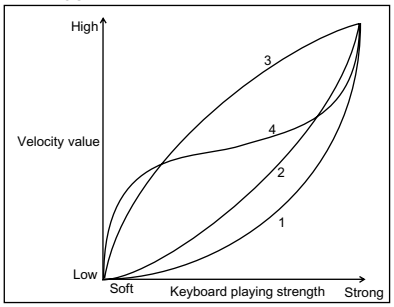
1: Significant effect will not occur for medium-strength notes.
2: Standard curve
3: Substantial effect will occur even for medium-strength notes.
4: There will be little change for medium-strength notes, and the effect will be fairly even.

Range of settings 1 to 4
Factory setting 2

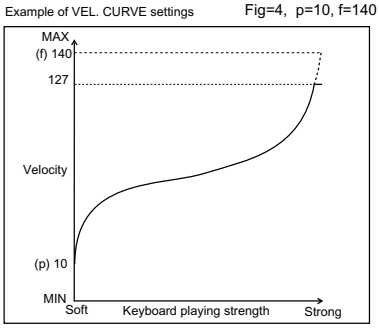
```
10 Prog Vel Curve  ▶
   Fig:2
```

```
10 Prog Vel Curve  ◀
   p:001    f:140
```

VEL. FIGURE



Example of VEL. CURVE settings Fig=4, p=10, f=140



VELOCITY (p), VELOCITY (f)

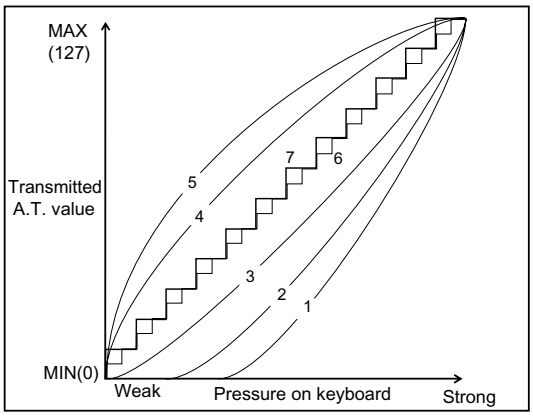
Range of settings (p) 1 to 127, (f) 1 to 150
Factory setting (p) 001, (f) 140

11. A.T CURVE (Aftertouch Curve selection)

You can select one of 8 types of curve to specify the relation between the pressure that is applied to the keyboard and the Aftertouch values that will be transmitted in Program mode.

1: Significant effect will not result unless you press hard.
2: A curve between 1 and 3
3: Standard curve
4: A curve between 3 and 5
5: An effect will result even with light pressure
6: A rough curve (24 steps)
7: An even rougher curve (12 steps)
8: Random

11 Prog A.T Curve
3



Curves 6 and 7 will change in 24 and 12 steps respectively, creating rougher (less continuous) change, but this allows you to conserve sequencer memory. Curve 8 is random. Use it when you wish to use aftertouch to apply irregular modulation.

Range of settings 1 to 8
Factory setting 3

12. PROG PROTECT (Program memory protect setting)

This setting lets you protect Program memory from being accidentally rewritten.
With a setting of "ON," it will not be possible to write data into any program memory of banks A, B, C or D.

Range of settings OFF, ON
Factory setting ON

12 Prog Mem Protect
ON

13. PERF PROTECT (Performance memory protect setting)

This setting lets you protect Performance memory from being accidentally rewritten.
With a setting of "ON," it will not be possible to write data into any performance memory of banks A, B, C or D.

Range of settings OFF, ON
Factory setting ON

13 Perf Mem Protect
ON

14. PAGE MEM (Page memory setting)

PAGE MEMORY

If this setting is "ON", the page (parameter) that was last-selected in a mode will be selected when you return to that mode from a different mode.
If this is "OFF", the first page of a mode will be selected whenever you enter that mode.

Range of settings OFF, ON
Factory setting OFF

14 Page Memory ▶
OFF

POWER ON MODE

If this setting is set to "RESET", program A01 of Program mode will always be selected when the power is turned on.
If it is set to "MEMORIZE", the state in which the SGproX was when the power was turned off (the mode, program number, performance number) will be recalled when the power is turned on.

Range of settings RESET, MEMORIZE
Factory setting RESET

14 Power On Mode ▶
RESET

Preload

```
14 Preload
   ALL PROG      OK?
```

This operation loads the preloaded data (factory settings) into the settings of the specified mode.
ALL PROG will load settings for programs A01 to D16, ALL PERF will load performance settings for A01 to D16, GLOBAL will load settings for parameters 1 to 6 and 9 to 15, and ALL will restore Global data, all programs, and all performances to their factory settings.
Before loading ALL PROG, ALL PERF or ALL data, turn the applicable memory protect setting "OFF." (☞ p.30)
After selecting the type of data to be loaded, move to "OK?" and press the [+/YES] key. A message of "Are You Sure OK?" will appear. Press [+1/YES] once again, and the display will show "Completed," indicating that the Preload operation has been executed.
Range of settings: ALL PROG, ALL PERF, GLOBAL, ALL

15. SYS NAME (System name setting)

This function allows you to specify the system name that will appear when the power is turned on. Up to 10 characters can be displayed.
Use the ⟨CURSOR⟩ switches to move among the character locations, and use the ⟨VALUE⟩ switches or ⟨VALUE⟩ slider to change the character at that location. You can also use the assignable sliders and switches as follows.

```
15 System Name
   KORG Inc.
```

AL1 slider: Select uppercase alphabetical characters (26 types)
AL2 slider: Select lowercase alphabetical characters (26 types)
AL3 slider: Select numerals (10 types)
AL4 slider: Select symbols (34 types)
AL1 switch: Convert the lowercase character at the cursor to uppercase
AL2 switch: Convert the uppercase character at the cursor to lowercase
AL3 switch: Delete the character/numeral/symbol at the cursor location
AL4 switch: Insert the previously-deleted character at the cursor location

Available characters

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
 !"#$%&'()*+,-./:;<=>?@[¥]
^_`{|}→←
```

16. CALIB (Calibrate each controller)

This function allows you to adjust the operating range of the control wheels, keyboard aftertouch, damper pedal and assignable pedal. If you feel that the sensitivity of these controllers needs adjustment, use the following procedures to adjust them for optimal operation.
Use the ⟨CURSOR⟩ switches to select the controller to be calibrated.

Control wheel calibration

Control wheel 1

```
16 Wheel 1  Calib
   L←       →H  OK?
```

1) Rotate control wheel 1 upward until it stops. Then rotate it downward until it stops. As you do so, asterisks ✻ will be displayed to indicate the movement of the wheel.

```
16 Wheel 1  Calib
   L←✻✻✻✻✻✻✻✻✻→H  OK?
```

2) Release wheel 1 so that it returns to the center. Then answer the "OK?" prompt by pressing the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?" Press the ⟨+1/YES⟩ switch once again, and the display will indicate "Completed."

```
16 Wheel 1  Calib
   Are You Sure OK?
```

```
16 Wheel 1  Calib
      Completed
```

Control wheel 2

1) Rotate control wheel 2 upward until it stops. Then rotate it downward until it stops. As you do so, asterisks ✻ will be displayed to indicate the movement of the wheel.

```
16 Wheel 2  Calib
   L←       →H  OK?
```

2) Answer the "OK?" prompt by pressing the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?" Press the ⟨+1/YES⟩ switch once again, and the display will indicate "Completed."

Be sure to rotate the control wheel all the way until it stops. If the display indicates "Invalid Data," the calibration has failed. Perform the procedure once again. If the display repeatedly indicates "Invalid Data," it is possible that a malfunction has occurred. Please contact a Korg authorized service center or your dealer.

Aftertouch calibration

1) Play the keyboard applying pressure as you normally would during use. (You may press multiple notes if desired.) Asterisks ❋ will be displayed to indicate the pressure.
2) Take your hand off of the keyboard. Answer the "OK?" prompt by pressing the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?" Press the ⟨+1/YES⟩ switch once again, and the display will indicate "Completed."

```
16 A.Touch  Calib
   L←       →H  OK?
```

Damper pedal calibration

Perform this adjustment if you are using a pedal that supports half-damping (DS-1H).
If you are using a damper switch, this adjustment is not necessary.

1) Connect the half-damper pedal to the damper jack.
2) Press the pedal fully. Then, completely release the pedal.
   Asterisks ❋ will be displayed to indicate operation of the pedal.
3) Answer the "OK?" prompt by pressing the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?" Press the ⟨+1/YES⟩ switch once again, and the display will indicate "Completed."

```
16 Damper   Calib
   L←       →H  OK?
```

Since the operation of the half-damper pedal is subtle, please use a DS-1H (sold separately). With other pedals, the appropriate effect may not be produced, or calibration may not be possible.

Assignable pedal calibration

1) Connect the assignable pedal (XVP-10 etc.) to the assignable pedal jack.
2) Press the pedal fully. Then, completely release the pedal.
   Asterisks ❋ will be displayed to indicate operation of the pedal.
3) Answer the "OK?" prompt by pressing the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?" Press the ⟨+1/YES⟩ switch once again, and the display will indicate "Completed."

```
16 A.Pedal  Calib
   L←       →H  OK?
```

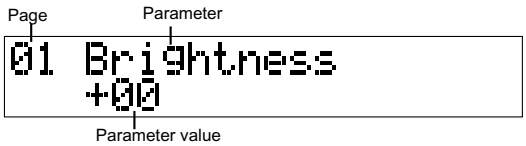
If the pedal is not pressed sufficiently, the display will indicate "Invalid Data." Perform the procedure once again. If the display repeatedly indicates "Invalid Data," it is possible that a malfunction has occurred. Please contact a Korg authorized service center or your dealer to check the pedal and the keyboard.

Program Edit mode

In the Program Edit mode you can modify the sound of a program, change settings for keyboard touch and scale, and modify the program name etc.

How to enter Program Edit mode

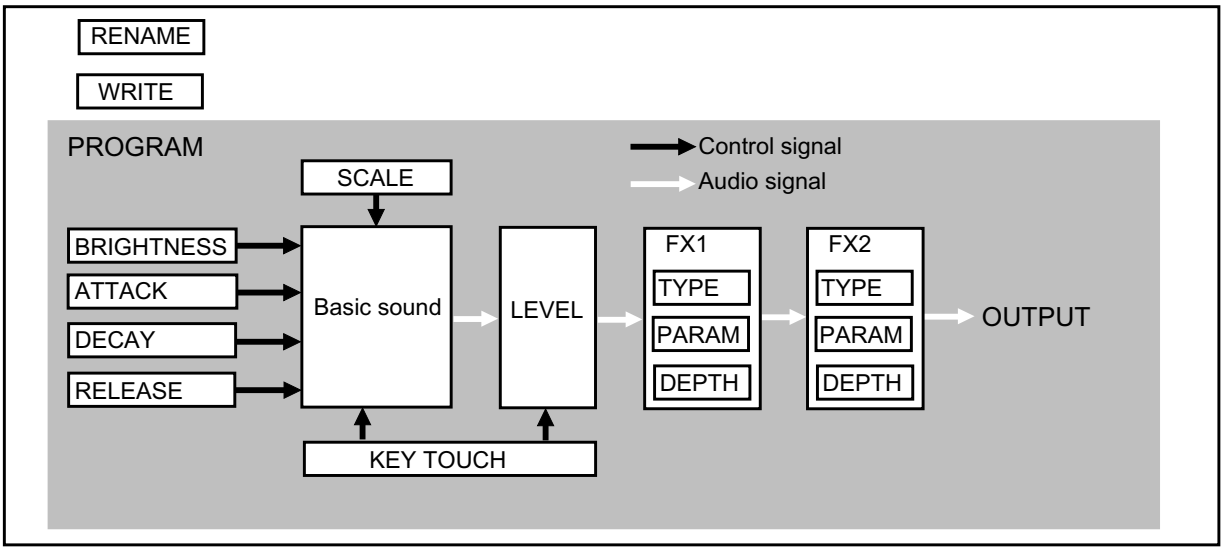
1) In Program mode, first select the program that you wish to edit.
2) Press the ⟨PROG EDIT⟩ switch.
   An LCD screen like the one shown at right will appear.



Caution when editing a program

Program settings that you have finished editing are remembered until you select a different program in Program mode or turn the power off.
If you wish to keep an edited program, you must Write it (☞ p.37).

Structure of the Program Edit mode



1. BRIGHTNESS (Brightness setting)

This parameter adjusts the brightness of the sound. Negative (–) settings will cut the high frequency range, making the tone softer and darker.
Positive (+) settings will make the tone louder and brighter.

Range of settings –99 to +99
Factory setting +00

```
01 Brightness
   +00
```

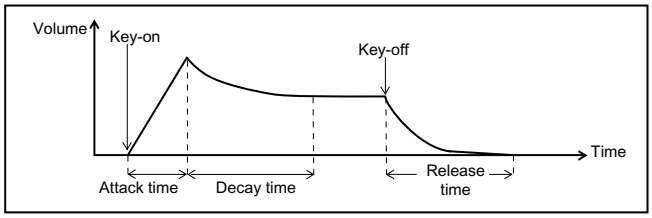
2. LEVEL (Level setting)

This parameter adjusts the volume. Positive (+) settings will increase the volume, and negative (–) settings will decrease it.

Range of settings –99 to +99
Factory setting +00

```
02 Level
   +00
```

For some sounds, increasing the Level setting may cause the sound to be distorted when chords are played. If this occurs, reduce the level.



The three following parameters are Envelope Time settings. Negative (–) settings will shorten the time and positive (+) settings will lengthen the time.

3. ATTACK (Attack time setting)

This parameter specifies the time from the key-on until the maximum volume is reached. It can can be adjusted to create fast and slow attack strings sounds etc.

Range of settings –99 to +99
Factory setting +00

```
03 Attack
   +00
```

4. DECAY (Decay time setting)

This parameter specifies the time over which the volume will decay while you continue to press the key. It can be used to adjust the sustain for sounds like piano, etc.

Range of settings –99 to +99
Factory setting +00

```
04 Decay
   +00
```

5. RELEASE (Release time setting)

Release

This parameter specifies the time from when the note is released until the volume decays.

Range of settings –99 to +99
Factory setting +00

```
05 Release
   +00
```

Damper mode

For conventional piano and electric piano sounds, set this to “PIANO.” For other sounds, set this to “Nomal.”

PIANO In addition to normal operation (decay will be slow while the pedal is pressed), pressing the damper pedal during the release (while a released note is decaying) will cause the decay to be slower (redamp). If a pedal that supports half-damping (DS-1H recommended) is used, the degree to which the pedal is pressed will regulate the decay time.

NORMAL Normal operation (decay will be slow while the pedal is pressed), and redamping will not occur.

```
05 Damp Mode
   NORMAL Hi:NORMAL
```

Damper Mode High Notes Damp

High note damp

PIANO In the high note range of A6 and above, notes will always sound as though the damper pedal were being pressed, regardless of the actual operation of the damper pedal.

NORMAL Even in the high note range of A6 and above, notes will sound in the same way as lower notes (i.e., they will decay more slowly while the damper pedal is pressed).

6. KEY TOUCH (Key touch setting)

This parameter specifys how the force with which you play the keyboard will affect changes in volume and tone. With positive (+) settings, your playing dynamics will produce greater change in volume and tone. With negative (–) settings, the volume and tone will be constant, regardless of your keyboard playing dynamics.

Range of settings –99 to +99
Factory setting +00

```
06 Key Touch
   +00
```

7. FX1 DEPTH (FX1 effect balance setting)

This parameter sets the balance between the original sound and effect 1. With a setting of FX, only the effect will be heard. However if no effect is selected for FX1, the display will indicate "NO EFFECT."

Range of settings DRY, 99:01 to 01:99, FX

When "Hyper Enhancer" is selected as the FX1 effect type, only "DRY" or "FX" can be selected.

```
07 Effect1 Depth
        80:20
```

8. FX2 DEPTH (FX2 effect balance setting)

This parameter sets the balance between the original sound and effect 2. With a setting of FX, only the effect will be heard. However if no effect is selected for FX2, the display will indicate "NO EFFECT."

Range of settings DRY, 99:01 to 01:99, FX

```
08 Effect2 Depth
      No Effect
```

✻ The display when No Effect is selected for FX2

9. FX1 TYPE (FX1 effect type selection)

This parameter selects the effect type for FX1.
You can choose one of 12 types: Reverb, Early Reflection, Stereo Delay, Stereo Chorus, Stereo Flanger, Overdrive, Stereo Phaser, Rotary Speaker, Auto Pan, Wah, Flanger-Delay, and Hyper Enhancer. (Refer to **Effects** ☞ p.50)

```
09 FX1 TYPE
03:Stereo Delay
```

10. FX1 PARAM (FX1 effect parameter settings)

These settings adjust the parameters for the effect that you selected for FX1 TYPE. The type of parameters and the range of each parameter will depend on the selected effect type. (Refer to **Effects**, ☞ p.50)

```
10 Stereo Delay    ▶
D.Time L480 R290
```

However if "NO EFFECT" is selected for FX1, no parameters will be displayed.

11. FX2 TYPE (FX2 effect type selection)

This parameter selects the effect type for FX2. Eleven different types are available: the same as for FX1 with the exception of Hyper Enhancer. (Refer to **Effects** ☞ p.50)

```
11 FX2 TYPE
00:No Effect
```

✻ The display when No Effect is selected for FX2

12. FX2 PARAM (FX2 effect parameter settings)

These settings adjust the parameters for the effect that you selected for FX2. The type of parameters and the range of each parameter will depend on the selected effect type. (Refer to **Effects**, ☞ p.50)

```
12 No Effect
```

✻ The display when No Effect is selected for FX2

However if "NO EFFECT" is selected for FX2, no parameters will be displayed.

13. SCALE/BEND (Scale type / Pitch bend range settings)

Scale

This parameter specifies the scale type (temperament) and the scale key (the tonic for the selected scale). You can select from seven different temperaments. The scale key can be set in the range of C to B.

EQUAL TEMP (Equal temperament)

This is the conventional scale most widely used by keyboard instruments. It allows transposition to occur freely.

PURE MAJOR

This temperament makes the principle triads of the major scale harmonize perfectly. However, triads in other keys will not harmonize, so you will need to set the Scale Key to the key of the song you are playing.

PURE MINOR

This temperament makes the principle triads of the minor scale harmonize perfectly. However, triads in other keys will not harmonize, so you will need to set the Scale Key to the key of the song you are playing.

PYTHAGOREAN

This is a temperament based on ancient Greek musical theory, and is especially effective for playing melodic lines. Set the Scale Key to specify the desired tonic.

```
13 Scale
   Equal Temp    C
```

WERKMEISTER

This is an equal temperament which was developed in the later Baroque period mainly for use on harpsichords. Set the Scale Key to specify the desired tonic.

KIRNBERGER

This temperament was developed in the 18th century and is used mainly on harpsichords. Set the Scale Key to specify the desired tonic.

STRETCH

Stretched tuning is used on acoustic pianos to allow a more natural sound. It tunes the low range slightly lower than equal temperament, and the high range slightly higher. Scale Key settings do not apply to stretched tuning.

Pitch Bend Range

This parameter specifies the range over which pitch bending will occur. With the factory settings, assignable wheel ⟨AW1⟩ is set to [Pitch Bend], so you can operate this wheel to change the pitch while you are playing bass or strings sounds etc. This setting specifies the width of the pitch change that will occur, in semitone steps over a ±1 octave range.

```
13 P.Bend Range
   +00
```

Range of settings –12 to +12

Depending on the program or switch location, the pitch may not rise by an entire octave.

14. PRELOAD (Loading the preload data)

This function loads the original factory setting data into the currently selected program number.
This will restore parameters 1 to 13 and 15 to their factory settings.

Select a program number, and move the cursor to “OK?” Then press ⟨+1/YES⟩. The display will ask “Are You Sure OK?” Press the ⟨+1/YES⟩ switch, and the factory data will be loaded and an indication of “Completed” will appear.

```
14 Preload
   A01            OK?
```

Range of settings A01 to D16

When you are in this display page, the program number that was the basis for the currently selected sound will be displayed.
For example if you edited program A01 and wrote it into A05, and then selected A05 and accessed the Preload page, A01 will be automatically displayed as the loading source. If you then execute the Preload operation, A05 will be restored to the factory setting for A01. However you are free to select a different number, so that the factory settings of the selected number will be reloaded.

If you do not perform the Write operation, the factory settings that were loaded will be lost.

15. RENAME (Program name setting)

Here you can modify the name of a program. The name can consist of up to 10 characters.
Use the ⟨CURSOR⟩ switches to move between character locations, and use the ⟨VALUE⟩ switches or ⟨VALUE⟩ slider to change the character at that location. You can also use the assignable sliders and switches as follows.

```
15 Rename
   Concert
```

AL1 slider:	Select uppercase alphabetical characters (26 types)
AL2 slider:	Select lowercase alphabetical characters (26 types)
AL3 slider:	Select numerals (10 types)
AL4 slider:	Select symbols (34 types)
AL1 switch:	Convert the lowercase character at the cursor to uppercase
AL2 switch:	Convert the uppercase character at the cursor to lowercase
AL3 switch:	Delete the character/numeral/symbol at the cursor location
AL4 switch:	Insert the previously-deleted character at the cursor location.

Available characters

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
 !"#$%&'()*+,-./:;<=>?@[¥]
^_`{|}→←
```

16. WRITE (Write a program)

The settings for parameters 1 to 13 and 15 of a program that you edited can be written (stored) into the program number that you specify.

```
16 Prog Write
   Write→A02     OK?
```

Select a program number, move the cursor to “OK?,” and press ⟨+1/YES⟩. The display will ask “Are You Sure OK?” so press ⟨+1/YES⟩ again. The data will be written, and the display will indicate “Completed.”

Range of settings A01 to D16

Before you attempt to write data into memory, remember to turn “OFF” the Global mode page 12 ⟨PROG PROTECT⟩ setting. (☞ p.30)

You are free to choose any writing destination, but we suggest that you write the data into a program number of the same type, so that the sounds printed on the front panel match the sounds that are actually in memory.

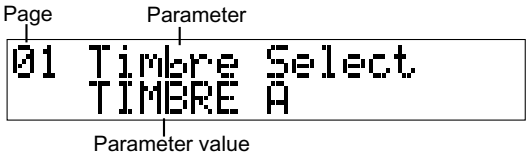
When you write data, the program that previously occupied that memory will be erased.

Performance Edit mode

In Performance Edit mode you can change the program numbers that are assigned to each timbre of a Performance, and modify the controller settings etc. The diagram below shows the parameters that can be set for each timbre, and how a Performance is organized.

How to enter Performance Edit mode

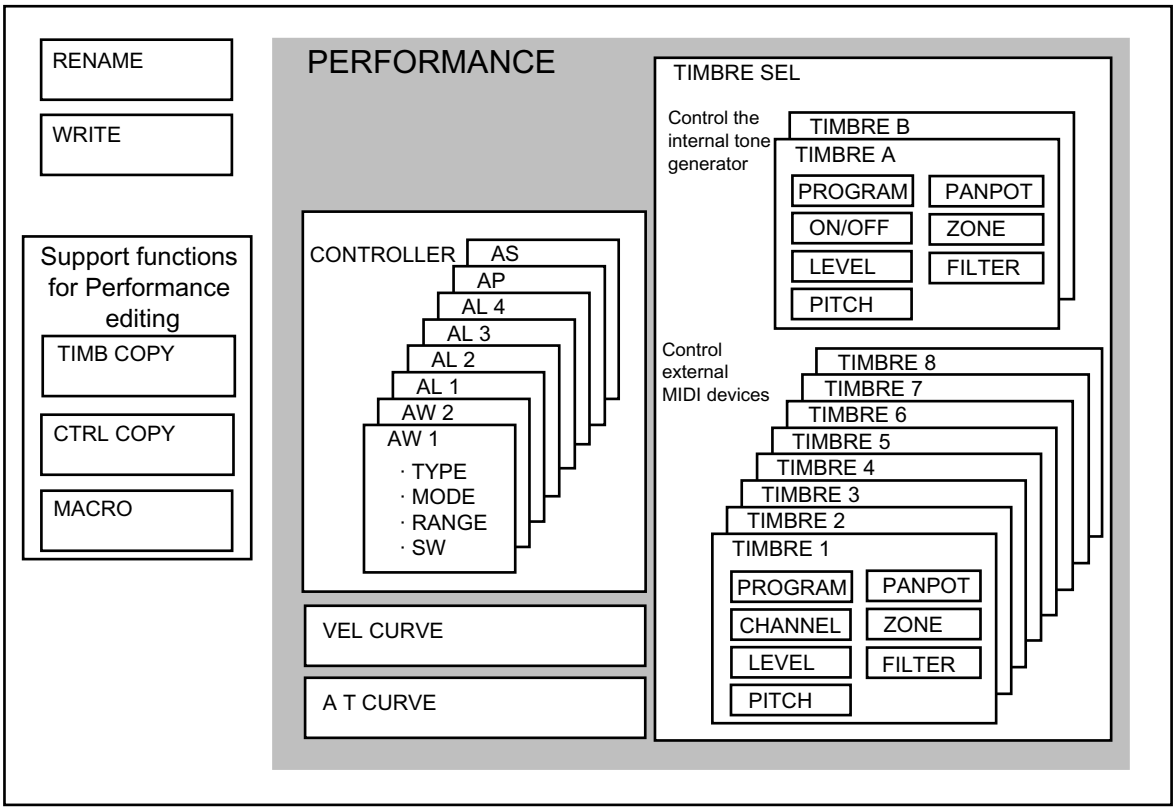
1) In Performance mode, first select the performance that you wish to edit.
2) Press the ⟨PERF EDIT⟩ switch. An LCD like the one to the right will appear.



Caution when editing a Performance

A performance that you have finished editing will be preserved until you select a different performance in Performance mode, or turn off the power.
If you wish to keep a performance that you edited, you must Write the performance (☞ p.46).
The programs for each timbre of a performance are stored only as program numbers; the actual data for the programs is not contained in the performance data. This means that if you edit a program that is used by a performance, or exchange it with another program, the sound of the performance will also change.

Structure of the Performance Edit mode



1. TIMBRE SEL (Timbre select)

Use the ⟨VALUE⟩ switches or the ⟨VALUE⟩ slider to select the timbre that you wish to edit.
In addition, while you are in pages 1 to 8 you can select a timbre (1 to 8, A, or B) by holding down the ⟨PERF EDIT⟩ key and pressing a select key 1 to 8, 9 or 10.
The parameters available for editing will be different depending on whether you have selected a timbre A or B, or a timbre 1 to 8.

```
01 Timbre Select
   TIMBRE A
```

Range of selections TIMBRE A/B, 1 to 8

When TIMBRE A/B is selected

2. PROGRAM (Program select)

```
02 TA Program
   A01:Concert
```

Selects the program for the internal tone generator. In this case, the ⟨BANK⟩ switch cannot be used.

Range A1 to D16

3. SW/CHANNEL (Tone generator setting)

```
03 TA Timb On/Off
   On
```

Specifies whether the tone generator will sound (ON) or not (OFF).

Range OFF, ON

4. LEVEL (Level setting)

```
04 TA Level
   127
```

Specifies the output level.

Range 0 to 127

When TIMBRE 1 to 8 is selected

2. PROGRAM (Program number select)

```
02 T1 Program
 BNK=000,000 PRG=000
```

Specifies the numbers of the Bank Select (MSB, LSB) and Program Change messages that will be transmitted when you select this Performance. Refer to the external MIDI device's manual for the proper settings

Range	BANK (MSB: upper)	00 to 127, ---
	BANK (LSB: lower)	00 to 127, ---
	PROGRAM	00 to 127, ---

When "PRG" is set to "---," none of these messages (including Bank) will be transmitted.

Example 1. If you wish to transmit only a Program Change message (and no Bank Select message), select "---" for both "BNK" MSB and LSB.

Example 2. If you do not wish to transmit a Program Change, set "---" for "PRG." (Bank Select messages will also not be transmitted even if they are set to other than "---.")

3. SW/CHANNEL (MIDI channel setting)

```
03 T1 Channel
   A-01
```

Specifies the MIDI channel that the timbre will use. With a setting of A-01 to A-16, messages will be transmitted from the rear panel MIDI OUT A. With a setting of B-01 to B-16, the rear panel MIDI OUT B will be used. With a setting of "OFF," no messages (including Note On/Off) will be transmitted.

Range A-01 to B-16, OFF

4. LEVEL (MIDI volume setting)

```
04 T1 Level
   127
```

Specifies the volume message (control change #07) that will be transmitted when the performance is selected.

Range 0 to 127, ---

With a setting of "---," this message will not be transmitted.

When TIMBRE A/B is selected

5. PITCH (Pitch setting)

```
05 TA Pitch
  Trans=+00 Tune=+00
```

Adjusts the pitch of the tone generator in steps of semitones (Trans) and cents (Tune).

Range (Trans) –12 to +12 (–1 octave to +1 octave)
(Tune) –50 to +50 (–50 cents to +50 cents)

6. PANPOT (Specify the stereo position)

```
06 TA Panpot
   PROGRAM
```

Specifies the stereo position of the sound. For stereo programs, selecting a value L to R will cause the program to sound in monaural, so be sure to select "PROGRAM" for such programs.

Range L, L1 to L63, CNT, R65 to R126, R, PROGRAM

When you select "PROGRAM," the pan settings of the selected program will be used.

When TIMBRE 1 to 8 is selected

5. PITCH (Pitch setting)

```
05 T1 Pitch
  Trans=+00 Tune=+00
```

Specifies how pitch-related messages will be transmitted.

Trans Range –12 to +12 (–1 octave to +1 octave)
Note numbers of the note on/off messages produced when you play the keyboard will be shifted by the amount you specify here.

Tune Range –50 to +50, --- (–50 cents to +50 cents)
When you select this performance, the specified pitch setting will be transmitted as an RPN Fine Tune message. With a setting of "---," a Fine Tune message will not be transmitted.

6. PANPOT (Specify the stereo position)

```
06 T1 Panpot
   127
```

Specifies the panpot message (control change #10) that will be transmitted when you select this performance or each time you play the keyboard.

Range 0 to 127, ---

Normally, 0 will be left, 64 will be center, and 127 will be right.

If you do not wish to transmit a Panpot message to change the stereo location of the sound, set this to "---."

```
06 T1 Random Pan
   000
```

Centered at the panpot setting you specified above, the transmitted panpot value will change randomly within the range that you specify here.

Range 0 to 127, :---

When Random Panpot is "---," a Panpot message will be transmitted only when you select the Performance.

When Random Panpot is other than "---," a Panpot message will be transmitted immediately before each Note On message. At this time, the transmitted value will be as follows:

Panpot value + Random value × Random Panpot setting

Example 1. If you do not want Panpot messages to be transmitted, set Panpot to "---." (Random Panpot settings will be ignored.)

Example 2. If you wish to transmit a Panpot message when the Performance is selected, set Panpot to the desired value, and set Random Panpot to "---."

Example 3. If you want to transmit a Panpot message each time a note is played, set Panpot to the desired value, and Random Panpot to a value other than "---."
In this case, greater values of Random Panpot will cause the transmitted Panpot values to be more random.

Depending on the functionality and settings of the receiving device, individual notes may not be panned separately.

When TIMBRE A/B is selected

7. ZONE (Keyboard zone settings)

Here you can specify keyboard zones to create splits and velocity switches.
This setting can be changed using the ⟨VALUE⟩ switches (or slider), or by holding down the ⟨PERF EDIT⟩ switch and pressing a note on the keyboard.

Split Zone

```
07 TA Key Zone
   BTM=C-1   TOP=G9
```

Range	Key Zone Bottom	C–1 to G9
	Key Zone Top	C–1 to G9

Notes in the keyboard area between the Bottom note and the Top note will sound.

Velocity Zone

```
07 TA Vel Zone
   BTM=001   TOP=127
```

Range	Vel Zone Bottom	1 to 127
	Vel Zone Top	1 to 127

Notes played with a velocity (playing strength) between the Bottom and Top values will sound.

It is not possible to set the Top value below the Bottom value, nor the Bottom value above the Top value.

8. FILTER (Settings for various filters)

Damper/Sostenuto

```
08 TA Filter
   Damp/Sost  :DIS
```

Specifies whether the damper/sostenuto effects will be applied (ENA) or not (DIS).

Controller

```
08 TA Filter
   Controller :ENA
```

Specifies whether modulation Control such as pitch bend, vibrato and tremolo will be applied (ENA) or not (DIS).

Timbre B FX routing

```
08 TA TimbA--+-FX1---
      TimbB-^
```

Specifies whether or not the signal from timbre B will be sent through effect 1(☞ p.50).

When TIMBRE 1 to 8 is selected

7. ZONE (Keyboard zone settings)

Here you can specify the range of the note messages that will be transmitted.
This setting can be changed using the ⟨VALUE⟩ switches (or slider), or by holding down the ⟨PERF EDIT⟩ switch and pressing a note on the keyboard.

Split Zone

```
07 T1 Key Zone
   BTM=C-1   TOP=G9
```

Range	Key Zone Bottom	C–1 to G9
	Key Zone Top	C–1 to G9

Note messages will be transmitted for notes played in the keyboard area between Bottom and Top notes.

Velocity Zone

```
07 T1 Vel Zone
   BTM=001   TOP=127
```

Range	Vel Zone Bottom	1 to 127
	Vel Zone Top	1 to 127

Note messages will be transmitted for notes played with a velocity (playing strength) between the Bottom and Top values.

It is not possible to set the Top value below the Bottom value, nor the Bottom value above the Top value.

8. FILTER (Settings for various filters)

You can specify whether or not each of the SGproX's controllers will transmit MIDI messages.(☞ p.55).

```
08 T1 Trans Filter
   A.WHEEL1  : DIS
```

A.WHEEL1	DIS, ENA
A.WHEEL2	DIS, ENA
A.SLIDER1	DIS, ENA
A.SLIDER2	DIS, ENA
A.SLIDER3	DIS, ENA
A.SLIDER4	DIS, ENA
A.PEDAL	DIS, ENA
A.PEDAL SW	DIS, ENA
DAMPER	DIS, ENA
AFT.TOUCH	DIS, ENA

When you operate a controller which is set to "ENA," the message assigned to that controller will be transmitted on the MIDI channel of that timbre. For each controller, refer to **Controllers / MIDI** (☞ p.55).

Parameters 9 to 11 are settings for the entire Performance (common to all timbres).

9. CONTROLLER (Controller settings)

Specifies the function that each controller will have in Performance mode.

Assignable wheels/switches ⟨AW1⟩ ⟨AW2⟩
Assignable sliders/switches ⟨AL1⟩ ⟨AL2⟩ ⟨AL3⟩ ⟨AL4⟩
Assignable pedal (AP)
Assignable switch (AS)

```
09 Control Select
   A.WHEEL1
```

A function can be assigned separately for each of the above eight controllers.
Depending on the type of controller, there are some limitations on the functions and settings that are available. Refer to **Controllers / MIDI** (☞ p.55).

10. VEL CURVE (Velocity curve setting)

These settings specify how the force with which you play the keyboard will be reflected in changes in volume or tone.
These settings will affect the way in which the internal tone generator will sound, and will also affect transmission of MIDI Note On messages. However, they will not affect MIDI reception.
The velocity curve is determined by the minimum (p) and maximum (f) velocity values, and by the shape of the curve (Fig.) that connects these two points. With an (f) setting of 150, a velocity of 127 (the maximum for MIDI) will be transmitted even when you do not play very hard.

```
10 Velocity Curve
   Fig:2
```

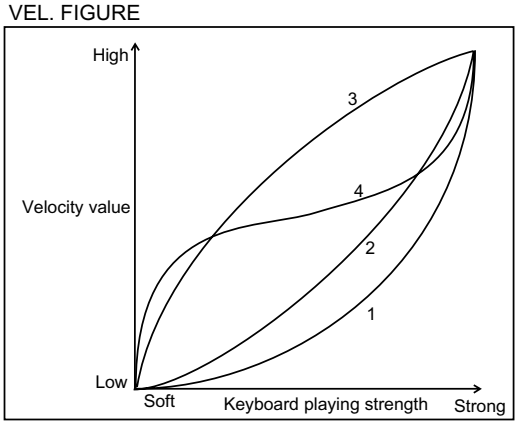
VEL FIGURE

```
10 Velocity Curve
   p:001    f:127
```

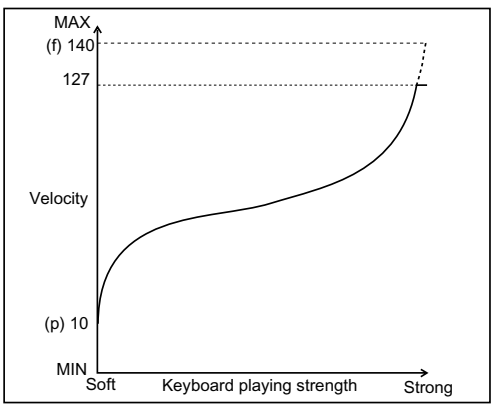
1: Significant effect will not occur for medium-strength notes.
2: Standard curve.
3: Substantial effect will occur even for medium-strength notes.
4: There will be little change for medium-strength notes, and the effect will be fairly even.
GLOBAL: The settings made in Global mode will be used.

Range of settings 1 to 4, GLOBAL

VEL. FIGURE



Example of VEL. CURVE settings Fig=4, p=10, f=140

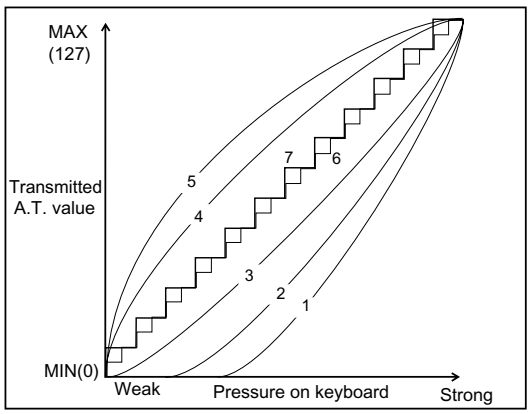


VELOCITY (p), VELOCITY (f)
Range of settings (p) 1 to 127, (f) 1 to 150

11. A.T CURVE (Aftertouch Curve selection)

This setting specifies how aftertouch data will be transmitted when you apply pressure to the SGproX's keyboard after playing a note.
You can select one of eight curves to specify how aftertouch data will be transmitted.

1: Significant effect will not result unless you press hard
2: A curve between 1 and 3
3: Standard curve
4: A curve between 3 and 5
5: An effect will result even with light pressure
6: A rough curve (24 steps)
7: An even rougher curve (12 steps)
8: Random
GLOBAL: The setting in Global mode will be used.



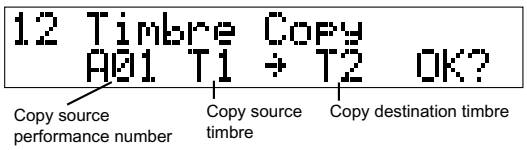
Curves 6 and 7 will change in 24 and 12 steps respectively, creating rougher (less continuous) change, but this allows you to conserve sequencer memory. Curve 8 is random. Use it when you wish to use aftertouch to apply irregular modulation.

Range of settings 1 to 8, GLOBAL

12 to 14 are support functions which help you create a Performance more efficiently.

12. TIMB COPY (Copy timbre settings)

This function copies timbre settings (the settings of pages 2 to 8) to another timbre. Specify the copy source performance and timbre, and the copy destination timbre. Then move the cursor to "OK?" and press the ⟨+1/YES⟩ switch. The display will ask "Are You Sure OK?" Press ⟨+1/YES⟩ and the settings will be copied, and the display will indicate "Completed."



Range	Copy source	Performance	A01 to D16
		Timbre	TA, TB, T1 to T8
	Copy destination	Timbre	TA, TB, T1 to T8

You are free to select the copy source Performance, but the copy destination will be the Performance that you are currently editing.

It is not possible to copy between timbres A/B and timbres 1 to 8.
When you copy timbre A → B, Timbre B FX will be sent through FX1.
When you copy timbre B → A, the timbre copied to A will pass through FX1 even if timbre B had been set to bypass FX1.

13. CTRL COPY (Copy assignable slider settings)

This function copies assignable slider settings to another assignable slider.

Select the copy source assignable slider and the copy destination assignable slider. Then move the cursor to "OK?" and press the ⟨+1/YES⟩ switch. The display will ask "Are You Sure OK?" Press ⟨+1/YES⟩ and the settings will be copied, and the display will indicate "Completed."

Range	Copy source	AL1 to AL4
	Copy destination	AL1 to AL4

14. MACRO (Loading/preloading the macro settings)

Loading macro settings

As a convenience when you are creating a new performance or editing an existing performance, the SGproX provides "macro settings" (frequently-used combinations of timbre settings) which you can load into the timbres that you specify.

```
14 Macro
   T:AB1[23456]78
```

The settings will be loaded into the timbre(s) that are enclosed by square brackets [ ]. (For example, if the display indicates "AB1[23456]78," the macro data will be loaded into timbres 2, 3, 4, 5 and 6.)
For the timbres which are not specified (for example when the display indicates "AB1[23456]78," timbres A, B, 1, 7 and 8), you can choose whether to maintain their previous settings (UNTOUCH) or to turn the timbre off (OFF). Then, refer to the macro setting table (☞ p.45), choose the desired type of macro, and load it.

Procedure for macro settings

1. Select the timbre(s) for which you wish to make settings.
   Use the ⟨CURSOR⟩ switches to make the "[" or "]" blink, and use the ⟨VALUE⟩ switches to move them in the display.
   Timbres enclosed by the "[" and "]" in the display will be selected for setting. (For example, if the display indicates "AB1[23456]78," timbres 2, 3, 4, 5 and 6 will be selected.)
2. Press the ⟨CURSOR⟩ switches to make the unselected timbres (if the display indicates "AB1[23456]78," timbres A, B, 1, 7 and 8 are unselected) blink, and use the ⟨VALUE⟩ switches to specify either OFF or UNTOUCH for these timbres.
   OFF The unselected timbres will be set to "." The ⟨SW/CHANNEL⟩ setting of page 3 will be turned "OFF" for unselected timbres. (If the display indicates "...[23456].." timbres A, B, 1, 7, and 8 are OFF.)
   UNTOUCH Unselected timbres will be displayed as usual (characters or numerals). Even when macro data is loaded, the unselected timbres will retain their previous settings. (If the display indicates "AB1[23456]78," timbres A, B, 1, 7 and 8 are unselected.)
3. Press the ⟨CURSOR⟩ switches to move to the next screen, and use the ⟨VALUE⟩ switches to select the type of macro settings.
   LAYER: The Key Zone and Velocity Zone will be set to their full ranges for all selected timbres.
   SPLIT: The keyboard will be divided (in one-octave units) by the number of selected timbres. The Key Zone of each selected timbre will also be set so as to assign each timbre to its own area of the keyboard.
   VEL SW: The range of velocities will be equally divided by the number of selected timbres. The Velocity Zone of each selected timbre will also be set so as to assign each timbre to its own velocity zone.
   GM_A: Make settings for initializing an external MIDI device for GM operation. (Refer to the list on p.45)
   GM_B: Make settings for initializing an external MIDI device for GM operation. (Refer to the list on p.45)
   RESET: Initialize the timbre(s). (Refer to the list on p.45.)
4. Use the ⟨CURSOR⟩ switches to make "OK?" blink.
5. Press the ⟨+1/YES⟩ switch, and the display will ask "Are You Sure OK?"

```
14 Macro
   LAYER          OK?
```

6. Press the ⟨+1/YES⟩ switch. The display will indicate "Completed."

Timbre 8 and timbre A are considered to be connected, so when the display is "AB1]23456[78" the selected timbres are 7, 8, A, B and 1.

How the keyboard will be divided for SPLIT

The locations at which the division will occur will depend on the number of timbres. Lower-numbered timbres (in the order of 1 to 8, A, B) will be assigned to a lower area of the keyboard.
The settings made here may fall outside the playable range of notes for the internal tone generator or external MIDI devices. If this occurs, modify the values individually after you load the macro.
For your reference, (here are some notes and their note numbers) : C–1:00, C1:24, C2:36, C3:48, C4:60, C5:72, C6:84, C7:96, G9:127.

Example: With a display of "A].....[78" if you selected SPLIT, the entire range would be divided into three areas, with timbre 7 assigned to the low range (C–1 to B1), timbre 8 to the middle range (B2 to B5), and timbre A to the high range (C6 to G9). In this case, other timbres would be turned off, and will neither sound nor transmit.

Procedure

Resulting display after steps 1) through 6)

```
14 Macro
   T:A].......[78
```

1) Use the ⟨CURSOR⟩ switches to select "[" and make it blink.
2) Use the ⟨VALUE⟩ switches to move it between 6 and 7.
3) Use the ⟨CURSOR⟩ switches to select "]" and make it blink.
4) Use the ⟨VALUE⟩ switches to move it between A and B.
5) Use the ⟨CURSOR⟩ switches to select "123456" to make it blink.
6) Use the ⟨VALUE⟩ switches to turn the display to "....."

Resulting display after steps 7) through 9)

```
14 Macro
   SPLIT          OK?
```

7) Use the ⟨CURSOR⟩ switches to make Type blink.
8) Use the ⟨VALUE⟩ switches to select "SPLIT."
9) Use the ⟨CURSOR⟩ switches to make "OK?" blink.
10) Press ⟨+1/YES⟩ to get the "Are You Sure OK?" display.
11) Press ⟨+1/YES⟩ to execute the setting and get the "Completed" display.

How the velocity range is divided by VEL SW

The locations at which the division will occur will depend on the number of timbres. Lower-numbered timbres (in the order of 1 to 8, A, B) will be assigned to a lower velocity range.

Example: With a display of "AB[123]45678" if you selected VEL SW, the entire velocity range would be divided into three ranges, with timbre 1 assigned to the low range (velocity 1 to 42), timbre 2 to the middle range (velocity 43 to 84), and timbre 3 to the high range (velocity 85 to 127). In this case, the settings of other timbres will not change.

Procedure

Resulting display after steps 1) through 5)

```
14 Macro
   T:AB[123]45678
```

1) Use the ⟨CURSOR⟩ switches to select "[" and make it blink.
2) Use the ⟨VALUE⟩ switches to move it between B and 1.
3) Use the ⟨CURSOR⟩ switches to select "]" and make it blink.
4) Use the ⟨VALUE⟩ switches to move it between 3 and 4.
5) Use the ⟨CURSOR⟩ switches to select "AB 45678" and make sure that they are blinking.

List of macro settings

Settings in ( ) are for timbres A and B — : The setting before macro execution will be maintained Divide : Divide the range by the specified number of timbres.
Timbre No. : Set to the same value as the number of each timbre (Timbre 1 to 8 only)

	LAYER	SPLIT	VEL SW	GM_A	GM_B	RESET
BANK(MSB)	(–) –	(–) –	(–) –	056	000	000
BANK(LSB)	(–) –	(–) –	(–) –	(A) 000	(A) 000	(A) 000
PROGRAM	(–) –	(–) –	(–) –	(1) 000	(1) 000	(1) 000
SW/CHANNEL	(ON) –	(ON) –	(ON) –	(ON) TimbNo	(ON) TimbNo	(ON) TimbNo
LEVEL	(–) –	(–) –	(–) –	100(100)	100(100)	(127) 127
TRANSPOSE	(–) –	(–) –	(–) –	(00) 00	(00) 00	(00) 00
TUNE	(–) –	(–) –	(–) –	(00) 00	(00) 00	(00) 00
PANPOT	(–) –	(–) –	(–) –	(CNT) 64	(CNT) 64	(CNT) 64
RANDOM PAN	–	–	–	---	---	---
KEY BOTTOM	(C–1) C–1	(Divide) Divide	(C–1) C–1	(C–1) C–1	(C–1) C–1	(C–1) C–1
KEY TOP	(G9) G9	(Divide) Divide	(G9) G9	(G9) G9	(G9) G9	(G9) G9
VEL BOTTOM	(1) 1	(1) 1	(Divide) Divide	(1) 1	(1) 1	(1) 1
VEL TOP	127 (127)	127 (127)	(Divide) Divide	(127) 127	(127) 127	(127) 127
A.WHEEL 1 FILT	–	–	–	ENA	ENA	ENA
A.WHEEL 2 FILT	–	–	–	ENA	ENA	ENA
A.CONT 1 FILT	–	–	–	ENA	ENA	ENA
A.CONT 2 FILT	–	–	–	ENA	ENA	ENA
A.CONT 3 FILT	–	–	–	ENA	ENA	ENA
A.CONT 4 FILT	–	–	–	ENA	ENA	ENA
A.PEDAL FILT	–	–	–	ENA	ENA	ENA
A.PEDAL SW FIL	–	–	–	ENA	ENA	ENA
DAMPER FILT	(–) –	(–) –	(–) –	(ENA) ENA	(ENA) ENA	(ENA) ENA
AFT TOUCH FILT	–	–	–	ENA	ENA	ENA
CONTROLLER FILT	(–)	(–)	(–)	(ENA)	(ENA)	(ENA)
FX1 ROUTING	(–)	(–)	(–)	(USE)	(USE)	(USE)

6) Use the ⟨CURSOR⟩ switches to make Type blink.
7) Use the ⟨VALUE⟩ switches to select “VEL SW.”
8) Use the ⟨CURSOR⟩ switches to make “OK?” blink.
9) Press ⟨+1/YES⟩ to get the “Are You Sure OK?” display.
10) Press ⟨+1/YES⟩ to execute the setting and get the “Completed” display.

Resulting display after steps 6) through 8)

```
14 Macro
   VEL SW          OK?
```

Preload

This function loads the factory settings into the currently selected performance number.
This will restore parameters 2 to 11 and 15 to their factory settings.
Select a performance number, and then move to “OK?” and press the ⟨+1/YES⟩ switch. You will be asked “Are You Sure OK?” Press the ⟨+1/YES⟩ switch to execute the Preload function, and the display will indicate “Completed.”

```
14 Preload
   A01             OK?
```

Range of settings A01 to D16

When you enter this display page, the performance number that was the basis for the currently selected performance will be displayed.
For example, if you edited performance A01 and wrote it into A05, and then selected A05 and accessed the Preload page, A01 will be automatically displayed as the loading source. If you then execute the Preload operation, performance A05 will be restored to the factory setting for performance A01. However you are free to select a different number, so that the factory settings of the selected performance number will be reloaded.

The preload data (factory settings) that were recalled by the Preload operation will be lost unless you Write the data.

15. RENAME (Performance name setting)

Here you can modify the name of a performance. The name can consist of up to 10 characters.
Use the ⟨CURSOR⟩ switches to move between character locations, and use the ⟨VALUE⟩ switches or ⟨VALUE⟩ slider to change the character at that location. You can also use the assignable sliders and switches as follows.

```
15 Rename
   HyperPiano
```

AL1 slider: Select uppercase alphabetical characters (26 types)
AL2 slider: Select lowercase alphabetical characters (26 types)
AL3 slider: Select numerals (10 types)
AL4 slider: Select symbols (34 types)
AL1 switch: Convert the lowercase character at the cursor to uppercase
AL2 switch: Convert the uppercase character at the cursor to lowercase
AL3 switch: Delete the character/numeral/symbol at the cursor location
AL4 switch: Insert the previously-deleted character at the cursor location.

Available characters

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
 !"#$%&'()*+,-./:;<=>?@[¥]
^_`{|}→←
```

16. WRITE (Write a performance)

The settings for parameters 2 to 11 and 15 of a performance that you edited can be written (stored) into the performance number (in internal memory) that you specify.

```
16 Perf Write
   Write→A02       OK?
```

Select a performance number, move the cursor to “OK?,” and press ⟨+1/YES⟩. The display will ask “Are You Sure OK?” so press ⟨+1/YES⟩ again. The data will be written, and the display will indicate “Completed.”

Range of settings A01 to D16

Before you attempt to write data into memory, remember to turn “OFF” the Global mode page 13 ⟨PERF PROTECT⟩ setting. (p.30)

When you write data, the performance that previously occupied that memory will be erased.

Overview of Performance settings

In Performance mode, use the select switches to choose a performance.
Enter Program Edit mode. In the following lists, symbols such as ②, ③ and ④ refer to the select switch numbers.

① Selecs a timbre.

If a Timbre A or B was selected

② Selecs an internal tone generator program.
③ Specifies whether or not the internal tone generator will sound.
④ Specifies the output level of the internal tone generator.
⑤ Specifies the pitch of the internal tone generator.
⑥ Specifies the stereo location for the sound of the internal tone generator.
⑦ Specifies the range for which the internal tone generator will sound.
⑧ Specifies the damper/sostenuto effect, the controller effect, and the effect routing.

If a Timbre 1 to 8 was selected

② Specifies the bank/program that will be transmitted to the external device.
③ Specifies the MIDI channel of the data that will be transmitted to the external device (turn off if not using this timbre).
④ Specifies the output level of the external device.
⑤ Specifies the pitch of the external device.
⑥ Specifies the stereo location of the sound of the external device.
⑦ Specifies the range for which the external device will sound.
⑧ Specifies whether or not each assignable controller, the damper effect, and aftertouch will be used.

Make the above settings for each timbre as appropriate for the device(s) that you wish to control.

⑨ Selects the function of the internal tone generator or external device which will be controlled by each assignable controller.
⑩ Specifies the way in which velocity data will be transmitted to an external device (only for sound-producing devices).
⑪ Specifies how aftertouch messages will be transmitted to an external device (if the external device is a tone generator).
⑮ Assigns a name to the performance.
⑯ Writes the performance into memory.

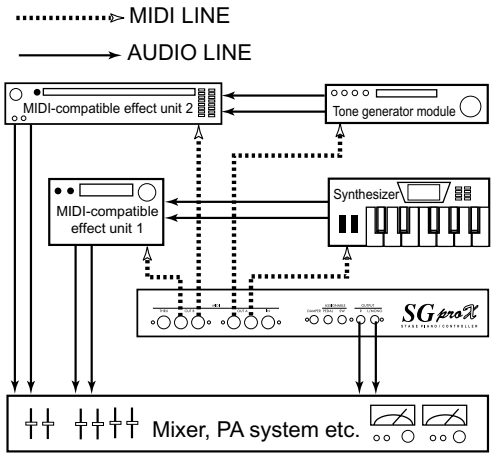
This completes performance settings.
Remenber to take advantage of the ⑫Timbre Copy, ⑬ Assignable Slider Copy and ⑭ Macro functions to make settings easier.

Example of actual operation

Here's an example of how to make performance settings for the system shown in the diagram below, in which we are using the two internal tone generators (program A1/A2), two external tone generators (a synthesizer and a sound module), and two external effects units (MIDI-compatible effects 1 and 2).

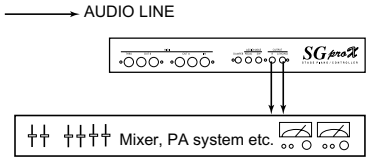
Settings

- The output of the SGproX (timbres A/B) goes into the mixer.
- The output of the synthesizer is processed by a program of effect unit 1, and the output of the effect is sent to the mixer.
- The output of the sound module is processed by a program of effect unit 2, and the output of the effect is sent to the mixer.
- Internal programs A1 and A2 are layered. Their key zones are both A0 to B5, and velocity zones are not used.
- Each external tone generator uses BNK=000,000 and PRG=000. Their key zones are C5 to C8, and they use velocity zones.
- Timbres 1, 2, 3 and 4 use MIDI channels A-1, A-2, B-1 and B-2 respectively. This means that the two external tone generators will be connected to MIDI OUT A, and the two effect units will be connected to MIDI OUT B.



✻ In the explanations that follow, "SS" is an abbreviation for Select switch.

Timbre A

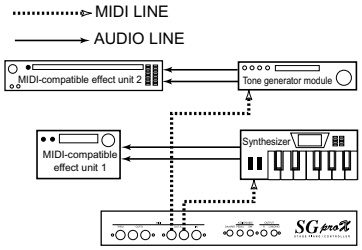


Press SS1 (Timbre) ..... select TIMBRE A
Press SS2 (Program for internal tone generator timbre A) .... select program A01
Press SS3 (Internal tone generator used/unused) ..... select ON
Press SS4 (Output level) ..... set to 127
Press SS5 (Pitch) ..... set Trans=+00, Tune=+00
Press SS6 (Panning) ..... set to PROGRAM
Press SS7 (Note range) ..... set BTM=A0, TOP=B5
Press the ⟨CURSOR⟩ switch (Velocity Zone) ..... set BTM=1, TOP=127
Press SS8 (Damper/Sostenuto) ..... select DIS
Press the ⟨CURSOR⟩ switch (Controller) ..... select ENA
Press the ⟨CURSOR⟩ switch (Effect Routing) .... send Timbre B through FX1

In the same way, make settings for timbre B. You could make the settings in the same way as you did for timbre A, but since the settings will be essentially the same, you can speed things up by using the Timbre Copy function.

Press SS12 (Timbre Copy) ..... Copy the settings of timbre A to timbre B
Press SS1 (Timbre) ..... select TIMBRE B
Press SS2 (Program for internal tone generator timbre B) .... select program A02

Next make settings for timbres 1 to 4.
In this example we will use timbres 1 and 2 for the external tone generators, and timbres 3 and 4 for the external effect units.

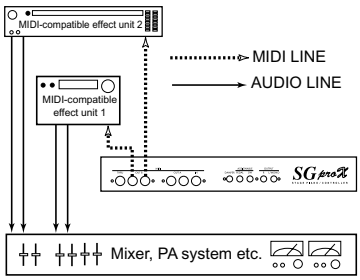


Press SS1 (Timbre) ..... select TIMBRE 1
Press SS2 (Synthesizer program) ..... select BNK=000,000, PRG=000
Press SS3 (MIDI channel) ..... select A-01
Press SS4 (Output level) ..... set to 127
Press SS5 (Pitch) ..... set Trans=+00, Tune=+00
Press SS6 (Panpot) ..... set to "---" (not transmitted)
Press the ⟨CURSOR⟩ switch (Panpot/Random) ..... set to "---" (not transmitted)
Press SS7 (Key Zone) ..... set BTM=C5, TOP=C8
Press the ⟨CURSOR⟩ switch(Velocity Zone) ..... set BTM=1, TOP=127
Press SS8 (Controllers) ..... set all to ENA

In the same way, make settings for timbre 2. You could make the settings in the same way as you did for timbre 1, but since the settings will be essentially the same, you can speed things up by using the Timbre Copy function.

Press SS12 (Timbre Copy) ..... copy the T1 settings to T2
Press SS1 (Timbre) ..... select TIMBRE 2
Press SS2 (Sound module program) ..... set BNK=000,000, PRG=000
Press SS3 (MIDI channel) ..... select A-02
Press SS7 (Key Zone) ..... set BTM=C5, TOP=C8
Press ⟨CURSOR⟩ switch (Velocity Zone) ..... set BTM=64, TOP=127

Next make settings for timbres 3 and 4



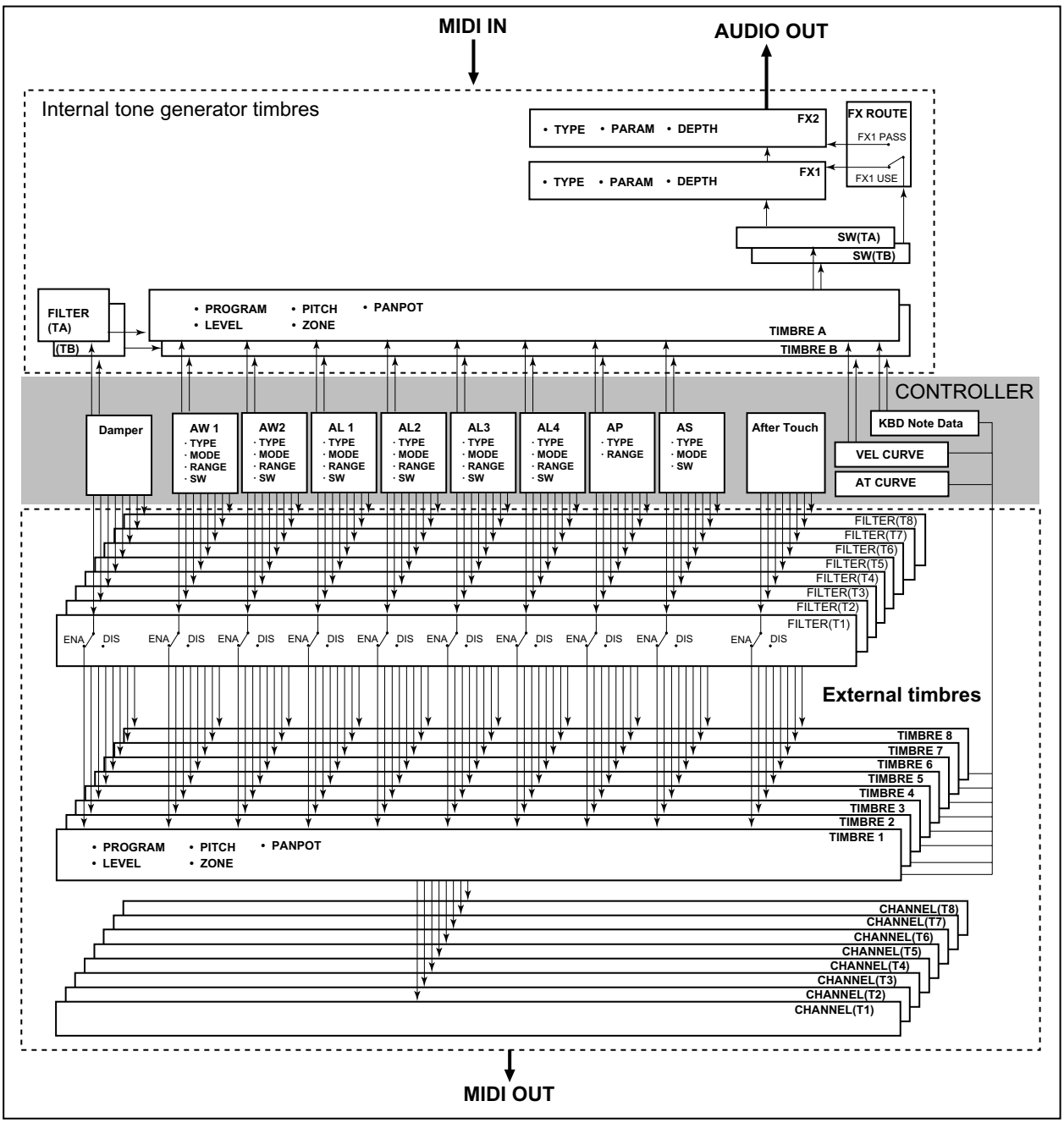
Press SS1 (Timbre) ..... select TIMBRE 3
Press SS2 (Program of effect unit 1) ..... set BNK=000,000, PRG=000
Press SS3 (MIDI channel) ..... select B-01
Press SS4 (Output level) ..... select "---" (not transmitted)
Press SS5 (Pitch) ..... setting not required
(ignored, since external device does not sound)
Press SS6 (Panpot) ..... select "---" (not transmitted)
Press ⟨CURSOR⟩ switch (Panpot/Random) . select "---" (not transmitted)
Press SS7 (Key Zone) setting not required
..... (ignored, since external device does not sound)
Press ⟨CURSOR⟩ switch (Velocity Zone) ..... setting not required
(ignored, since external device does not sound)
Press SS8 (Controllers) ..... set all to ENA
Press SS12 (Timbre Copy) ..... copy T3 → T4
Press SS1 (Timbre) ..... select TIMBRE 4
Press SS2 (Program of effect unit 2) ..... set BNK=000,000, PRG=000
Press SS3 (MIDI channel) ..... select B-02

Settings for each timbre are now complete. Make the following settings to complete the performance.

Press SS9 (Controllers) ..... make settings for each controller
(refer to **MIDI / Controllers** on p.55)
Press SS10 (Velocity Curve Figure) ..... select GLOBAL
Press ⟨CURSOR⟩ switch (Velocity Curve: p) ..... select 001
Press ⟨CURSOR⟩ switch (Velocity Curve: f) ..... select 127
Press SS11 (Aftertouch Curve) ..... select GLOBAL
Press SS15 ..... specify the performance name
Press SS16 ..... specify the writing destination for the performance

When you write your new performance into the specified destination, the performance that had occupied that destination will be erased. However you will be able to bring back the factory preset performance by using the page 14 ⟨MACRO⟩ function Preload.

Structure of a performance



Effects

The SGproX offers two effect units connected in series: effect 1 (FX1) and effect 2 (FX2).

Effect 1 lets you select one of 12 types of effect, and effect 2 lets you select one of 11 types.
Effect settings can be made independently for each program, and effect routing can be set for each performance.

When using a layer or split in Program mode, or when playing two programs at the same time (timbres A and B), the settings of the first program (timbre A) will control the effect. You will need to select whether the second program (timbre B) will be input at a point before or after effect 1.

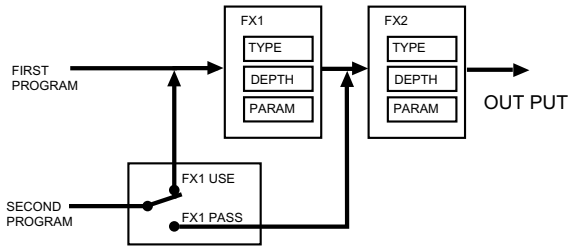
Depending on the sound and the effects which you are using, the output may be distorted. If this occurs, adjust the Program Edit mode “2. Level” setting, and/or the effect parameters “Effect Depth” and “Trim” etc.

● EFFECT ON/OFF switch

Effects 1 and 2 can be simultaneously switched on/off from the front panel.
When the effect type is set to “NO EFFECT,” the switch can still be turned on/off, but there will be no effect when this switch is turned on.

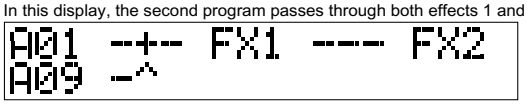
In the case of the 3. Stereo Delay, 4. Stereo Chorus and 9. Auto Pan effects, the equalizer (EQ Low, EQ Hi) settings will remain valid even when the effect is turned off.

PROGRAM MODE (Layer, Split)

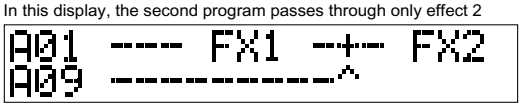


Effect routing display for Program mode (Layer, Split)

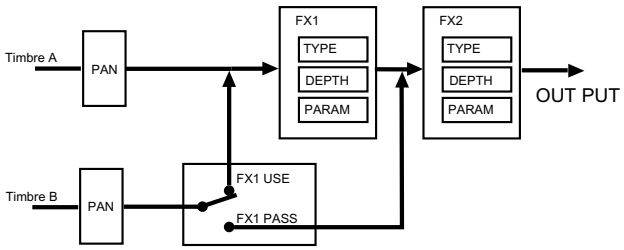
In this display, the second program passes through both effects 1 and 2



In this display, the second program passes through only effect 2

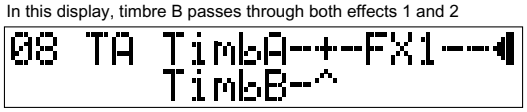


PERFORMANCE MODE

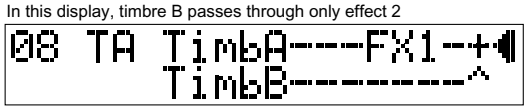


Effect routing display for Performance mode

In this display, timbre B passes through both effects 1 and 2



In this display, timbre B passes through only effect 2



● Dynamic modulation

For the Rotary Speaker and Wah effects, you can apply modulation to the effect itself. Specific effect parameters such as modulation speed or cutoff frequency can be controlled while you play, giving you more expressive control.

The modulation source that will be used for control can be selected from the assignable controllers (AW1,2, AL1to 4, AP, AS), Damper, Amp-EG, and MIDI (CC#12).

In order to select an assignable controller as the modulation source, you will need to set the function of the selected controller to [Fx Dyna Mod]. Refer to **Controller / MIDI** (☞p.55).

0. No Effect

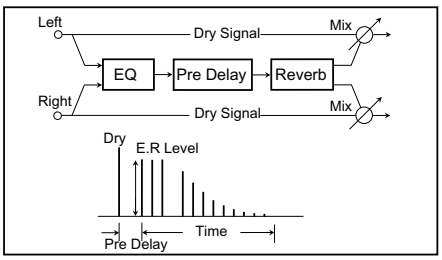
Select this when you do not wish to use an effect.

1. Reverb

This effect simulates the acoustics of a hall, giving the sound a natural acoustic ambiance. This provides the reverberation of a mid-sized hall, and a natural feeling of space.

Parameters

Parameter name		Range
Time	Time over which the reverb will decay	0.2 to 9.9 sec
Hi Damp	Attenuation of the high frequency range	0 to 99%
Pre Dly	Time between direct sound and early reflections	0 to 200 ms
E.R	Level of the early reflections	0 to 99
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX



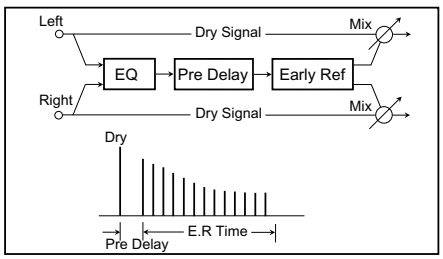
2. Early Reflection

Early reflections determine how the character of the acoustic space are isolated from the reverberation effect.

A wide variety of effects can be produced by adjusting the early reflection time, such as adding thickness to the sound, or adding an echo-like reflection.

Parameters

Parameter name		Range
E.R Time	Length of the early reflections (10 ms steps)	100 to 800 ms
Pre Delay	Time between the direct sound and early reflections	0 to 200 ms
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX



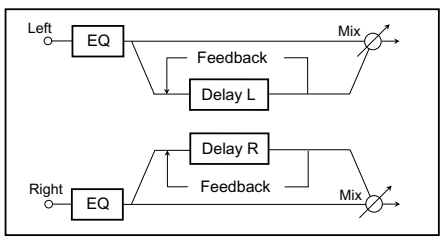
3. Stereo Delay

The stereo delay effect with feedback lets you specify an independent delay time for the left and right channels. High Damp settings allow you to add a natural-sounding decay to the repeated sounds.

The equalizer (EQ Low, EQ High) settings will be valid even when Effect Depth is set to “DRY.”

Parameters

Parameter name		Range
Time L	Left channel delay time	0 to 500 ms
Time R	Right channel delay time	0 to 500 ms
FB	Amount of feedback returned to the effect (negative settings invert the phase)	–99 to +99%
Hi Damp	Attenuation of the high frequency range	0 to 99%
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX



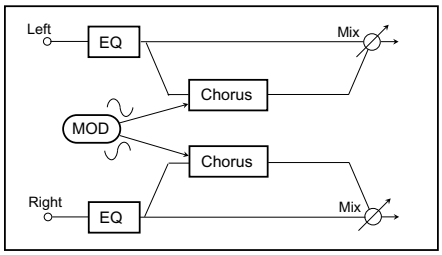
4. Stereo Chorus

This is a stereo effect that combines two chorus blocks.
The right channel is modulated in opposite phase than the left channel.
Stereo Chorus adds a natural spaciousness and depth to any sound, such as piano or strings.

The equalizer (EQ Low, EQ High) settings will be valid even when Effect Depth is set to “DRY.”

Parameters

Parameter name		Range
D.Time	Delay time	0 to 200 ms
LFO	Select the modulation waveform	SIN, TRI
Mod	Modulation depth	0 to 99
Mod SP	Modulation speed	0.03 to 30 Hz
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX

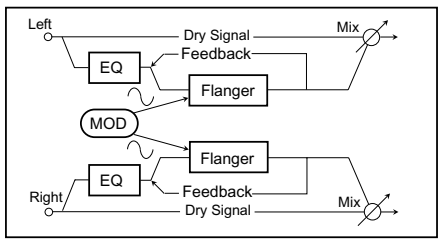


5. Stereo Flanger

Stereo Flanger adds feedback to the chorus effect, and applies the same phase modulation to the left and right channels. When applied to sounds that contain many overtones, the flanger produces a distinctive sense of pitch in addition to the modulation.

Parameters

Parameter name		Range
D.Time	Delay time	0 to 20.0 ms
Res	Amount of the output that will be fed back to the input (negative values invert the phase)	–99 to +99%
Mod	Modulation depth	0 to 99
Mod SP	Modulation speed	1 to 99
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX

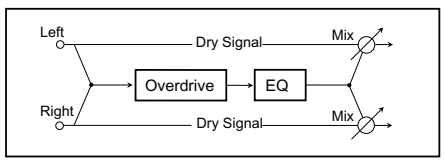


6. Overdrive

This effect applies a smooth overdrive type of distortion.
A wide variety of overdrive tones can be produced by adjusting the center frequency (Hot Spot) of the band-boost filter and the gain (Res).

Parameters

Parameter name		Range
Drive	Amount of overdrive	1 to 111
Res	Filter gain	0 to 99
Hot Spot	Center frequency of the filter	0 to 99
Level	Output level of the effect	0 to 99
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX

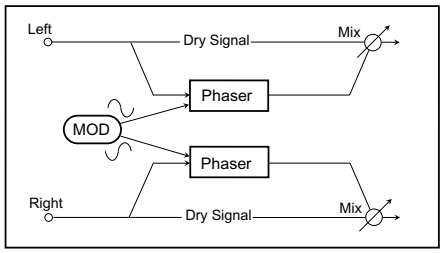


7. Stereo Phaser

While a chorus or flanger creates an effect by modulating the delay time, a phaser modulates the phase of the input signal. This creates a modulation or swelling effect that has a different character than either a chorus or flanger. This is especially effective when applied to electric piano or bass sounds.
The maximum effect will be obtained when Effect Depth is set to 50:50.
Since the left channel and right channel are modulated in opposite phase, a spacious phasing effect is produced.

Parameters

Parameter name		Range
Manual	Center frequency at which the phase shift effect will apply	0 to 99
Mod	Depth of phase shift modulation	0 to 99
Mod SP	Modulation speed	0.03 to 30 Hz
FB	Amount of signal that is fed back into the effect (negative values invert the phase)	–99 to +99%
LFO	Select the modulation waveform	SIN, TRI
Effect Depth	Effect balance	DRY to FX

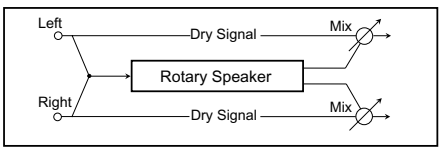


8. Rotary Speaker

This effect simulates the sound of the rotary speakers that are often used with an electric organ.
Independent LFOs are used to simulate the rotation of the rotor and the horn. The controller selected for Src can be used to switch the speed between fast and slow. When this occurs, the speed of rotation will change at the rate specified by Acceleration, regardless of the speed at which the controller was moved.

Parameters

Parameter name		Range
Src	Select the control source	NONE to Ctrl#12
Vibrato Depth	Depth of the vibrato effect	0 to 15
Acceleration	Time required to change speeds	0 to 15
SpeedSlow	Speed of slow rotation	1 to 99
SpeedFast	Speed of fast rotation	1 to 99
Effect Depth	Effect balance	DRY to FX



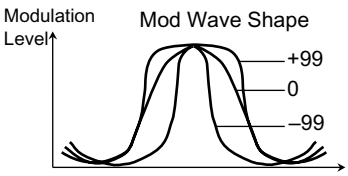
9. Auto Pan

This is a stereo effect that combines two tremolo blocks. Opposite-phase modulation is applied to each tremolo block, causing the sound to be panned cyclically between left and right.

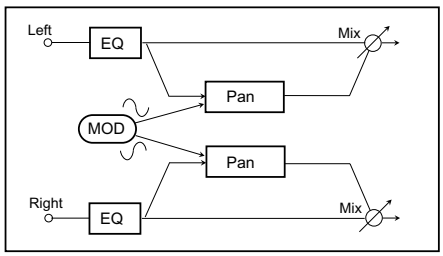
The equalizer (EQ Low, EQ High) settings will be valid even when Effect Depth is set to “DRY.”

Parameters

Parameter name		Range
LFO	Select the modulation waveform	SIN, TRI
ModShape	Adjust the modulation waveform	–99 to +99%



Mod	Modulation depth	0 to 99
Mod SP	Modulation speed	0.03 to 30 Hz
EQ Lo	Cut/boost amount of the low frequency range	–12 to +12 dB
EQ Hi	Cut/boost amount of the high frequency range	–12 to +12 dB
Effect Depth	Effect balance	DRY to FX

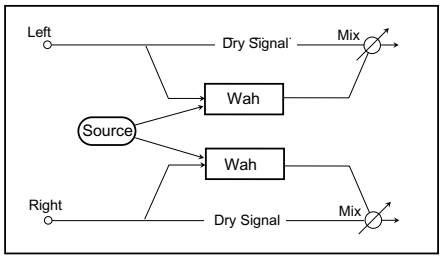


10. Wah

The controller selected for Src can be used to control the wah effect. If you specify Amp EG as the Src, an auto-wah (touch-wah) effect will be produced.

Parameters

Parameter name		Range
Src	Select the control source	NONE to Ctrl#12
I (Intensity)	Mid-frequency sweep amount	–15 to +15
Freq	Center frequency of the filter	0 to 99
Peak Gain	Peak gain of the filter band	–12 to +12
Peak Width	Filter bandwidth	00 to 99
Effect Depth	Effect balance	DRY to FX

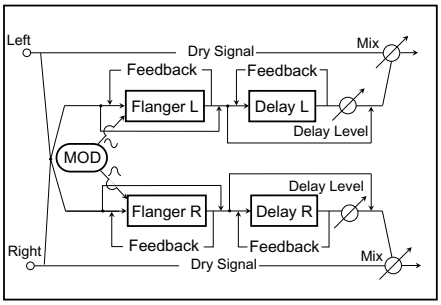


11. Flanger-Delay

This applies a stereo delay to the output of a mono-in/stereo-out flanger which uses LFOs that are 90 degrees out of phase. You can specify the feedback independently for the flanger and for the delay.

Parameters

Parameter name		Range
Fln.DT	Flanger delay time	0 to 50 ms
FB	Amount of feedback to the flanger (negative values invert the phase)	–99 to +99%
Fln.Mod	Modulation depth of the flanger	0 to 99
Mod SP	Modulation speed of the flanger	1 to 99
Dly. DT	Delay time	0 to 450 ms
FB	Amount of feedback to the delay (negative values invert the phase)	–99 to +99%
Delay Level	Delay level	0 to 99
Effect Depth	Effect balance	DRY to FX



12. Hyper Enhancer (available only for FX1)

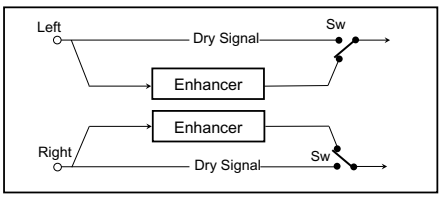
This is a stereo enhancer. Unlike a conventional equalizer, this effect independently adds low frequency and high frequency components as desired, producing a very clear sound with excellent presence.
Since this effect can increase the perceived loudness of the low range and emphasize the attacks, it is especially effective for piano.

When this effect is used, the page 7 ⟨FX1 DEPTH⟩ value can be set only to “DRY” or “FX.”

For some sounds, increasing the “Lo Blend” and “Hi Blend” values may cause the output sound to be distorted. If this occurs, adjust the “Trim” setting.

Parameters

Parameter name		Range
Trim	Input level	0 to 100
Lo Freq	Cutoff frequency of the low range	1 to 70
Lo Blend	Blend (boost) amount of the low range	0 to 100
Hi Freq	Cutoff frequency of the high range	1 to 40
Hi Blend	Blend (boost) amount of the high range	0 to 100
Effect Depth	Effect switch	DRY, FX



Controllers / MIDI

Each of the controllers of the SGproX can be assigned their own control function.
The controllers can be used to control the internal tone generator, or to transmit MIDI messages to control external MIDI devices.

Assignable wheels/switches	⟨AW1⟩ ⟨AW2⟩
Assignable sliders/switches	⟨AL1⟩ ⟨AL2⟩ ⟨AL3⟩ ⟨AL4⟩
Assignable pedal	(AP)
Assignable switch	(AS)

Functions can be selected independently for each of the above eight controllers. (Depending on the type of controller, some functions are not available. Refer to the tables on p.58.)

If the controller function is selected from Individual or Set, it will not be possible to control the SGproX. If you wish to control the SGproX as well as simultaneously transmit MIDI messages, select one of the Internal functions enclosed in square brackets [ ].

Control via MIDI may be limited by the functionality of the external MIDI device.

Controllers will function in a different way in Program mode and Performance mode. The MIDI data that is transmitted will also differ.

Program mode / MIDI

The function of the assignable controllers, the velocity curve, and the aftertouch curve are set in Global mode. Since all programs share these settings, selecting a different program in Program mode will not affect these settings (assignable controller settings, velocity curve, aftertouch curve).

The MIDI transmit channel for Program mode is specified in Global mode.
When you select a different program, play the SGproX's keyboard or operate its controllers, MIDI messages will be transmitted on the channel (Global MIDI channel) that you specified in Global mode.

Performance mode / MIDI

The function of the assignable controllers for each performance can be specified in Program Edit mode.
In addition, you can specify for each of the external MIDI timbres (T1 to T8) whether the controller will be transmitted or not.

In Program Edit mode, the MIDI transmit channel that will be used in Performance mode can be specified separately for each timbre (T1 to T8).
When you select a different Performance, or play the SGproX's keyboard or operate its controllers, MIDI data will be transmitted on the channel that was specified for each timbre.
The number of the performance itself that was selected will not be transmitted. Only the program numbers that were specified for each timbre of the newly selected performance will be transmitted.
When you select a performance, the bank number, program number, volume, pan and RPN fine tune data that are specified for each timbre 1 to 8 will be transmitted on the specified channel for each timbre.
When you play the keyboard, note data will be transmitted on the MIDI channel that has been specified for each timbre, and the program selected for timbres A and B will be sounded by the internal tone generator.
MIDI reception for timbres A and B will occur on the Global MIDI channel.
Velocity curve and aftertouch curve settings can be made independently for each performance. These settings are shared by all timbres, and the same velocity values will be used both for MIDI transmission and to play the internal tone generator.

Transmission of messages which use all MIDI channels (Omni On, Start/Stop etc.) are not affected by channel settings.

When the same MIDI channel has been specified for two or more timbres, keyboard data will be transmitted in duplicate on the same MIDI channel for the corresponding number of timbres.
However, transmission of two or more controllers which are set to the same message on the same channel will occur only once on that channel.

Assignable controller parameter settings

Select the desired controller

- In the first screen of the controller setting page, select the desired controller.
  While you are in this screen, operating a controller will cause that controller to automatically be selected.

```
09 Control Select
   A.SLIDER1
```

Controller whose function you wish to specify

Specify the controller function (Type)

- Move to the next screen, and select the function (Type) that will be performed by the selected controller (refer to the tables on p.58 and following).

```
09 A.SLIDER1
 Master Balance
```

Selected function (Type)

Depending on the variety of controller, some functions may not be available.

Specify the form of control (Mode)

- Move to the next screen, and select the way in which MIDI messages will be transmitted (and/or the internal tone generator will be controlled).

```
09 A.SLIDER1
 Mode:Slider Value
```

The control modes that can be selected for each type of controller are shown in the table below.

O: Available ×: Unavailable –: No setting

	One Shot	Slide Value	Lock	Alternate	Momentary
AW1	O	O	O	O	O
AW2	O	O	×	O	O
AL1	O	O	×	O	O
AL2	O	O	×	O	O
AL3	O	O	×	O	O
AL4	O	O	×	O	O
AP	–	–	–	–	–
AS	O	×	×	O	O

One Shot

When you operate a wheel or slider, the MIDI data value corresponding to the operation will be transmitted.
When you press a controller key, the SW value (☞ p.57) will be transmitted.
The switch LED will light briefly when the SW value is transmitted.
Assignable switches will transmit the SW value each time they are pressed.

Slider Value

When you press the switch of a wheel or slider, the MIDI data value for the current position of the wheel or slider will be transmitted.
At this time, the switch LED will light briefly.
Simply operating the wheel or slider will not transmit anything.

In this mode, the SW VALUE setting is ignored.

Lock

This is used only for assignable wheel 1. When the switch of assignable wheel 1 is pressed, the LED will light, and while the LED is lit, operating the wheel will not cause MIDI data to be transmitted. (Locked condition)
Pressing the switch once again will make the LED go dark, and operations of the wheel will once again transmit MIDI data.

Alternate

Operating the wheel or slider will transmit the corresponding MIDI data values.
Each time the switch of the wheel or slider is pressed, the SW value and the FIX value will be transmitted alternately.
The switch LED will light when the SW value is transmitted, and will go dark when the switch is pressed once again to transmit the FIX value.
An assignable switch will alternately transmit the SW value and the FIX value.

Momentary

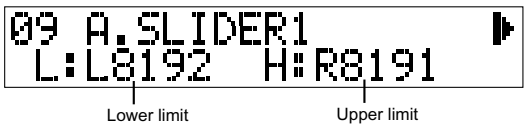
Operating a wheel or slider will transmit the corresponding MIDI data (VALUE data).
When the switch of a wheel or slider is moved, the SW VALUE will be transmitted, and when it is released the FIX VALUE will be transmitted. The switch LED will be lit as long as you continue pressing the switch.
For an assignable switch, pressing the switch will transmit the SW VALUE, and releasing it will transmit the FIX VALUE.

FIX VALUE setting

Each controller function (TYPE) has a fixed value. This value cannot be modified. (Refer to the tables on p.58 and following.)
This value will be used when either **Alternate** or **Momentary** is selected as the control method (MODE).

Lower limit (L) and upper limit (H) settings for a controller

- Use the ⟨CURSOR⟩ switches to move to the next screen, and set the lower limit and upper limit of the values which will be transmitted by that wheel or slider, etc. The available range will depend on the function (TYPE) that is assigned.



The assignable switches (AS) do not have these settings.

The VALUE settings (low limit and high limit) will be set to the default values for the respective controller each time you change the controller TYPE.

SW VALUE setting for switch operations

- Use the ⟨CURSOR⟩ switches to move to the next screen, and specify the SW value which will be transmitted when you operate the switch (switch) for that controller.

The assignable pedal (AP) does not have this setting.

The SW VALUE setting will be set to the default SW value for the respective controller each time you change the controller TYPE.

Here we will give an example of how to set A.SLIDER1 ⟨AL1⟩ to Master Balance.

Procedure

1) In Global mode or Program Edit mode, press select switch 9.
2) Use the ⟨VALUE⟩ slider to select “A.SLIDER1.” (You can also select this by moving A.SLIDER1.)
3) Use the ⟨CURSOR⟩ switches to select the next screen. Make the function in the lower line of the LCD blink.
4) Use the ⟨VALUE⟩ switches (or slider) to select “Master Balance.”
5) Use the ⟨CURSOR⟩ switches to move to the next screen. “Mode:...” will blink.
6) Use the ⟨VALUE⟩ switches (or slider) to select “Mode: Slider Value.”
7) Use the ⟨CURSOR⟩ switches to move to the next screen. “L:...” will blink.
8) Use the ⟨VALUE⟩ switches (or slider) to select “L:L8192”
9) Use the ⟨CURSOR⟩ switches to select “H:...” and make it blink.
10) Use the ⟨VALUE⟩ switches (or slider) to specify “H:R8191”
11) Use the ⟨CURSOR⟩ switches to move to the next screen. “SW Val:...” will blink.
12) Use the ⟨VALUE⟩ switches (or slider) to specify “SW Val:R8191”

With these completed settings, the ⟨AL1⟩ of the SGproX will control the output balance of the device connected to MIDI OUT.

The following three tables show controller settings separately for external control (Individual), sets of messages for external control (Set), and for controlling the SGproX itself (Internal). When you make this setting, the selections will be displayed in the order of Individual, Set, and Internal.

Available types, ranges, initial values, and MIDI transmit values (Individual)

Use with a controller O: available ×: unavailable

FIX: fixed value S(L): initial setting for controller lower limit value S(H): initial setting for controller upper limit value SW: initial SW setting W/L: AW1,2/AL1-4

TYPE	RANGE	VALUE FIX	S(L)	S(H)	SW	CONTROLLER W/L	AP	AS	MIDI (n:Channel)
Off									
Program Change	00 to 127	00	00	02	01	O	×	O	[Cn,vv]
After Touch	00 to 127	00	00	127	127	O	O	O	[Dn,vv]
Pitch Bend	–8192 to +8191	00	–8192	+8191	+8191	O	O	O	[En,vv,vv] (vv,vv:LSB,MSB)
Master Volume	00 to 16383	16383	00	16383	4096	O	O	O	[F0,7F,0n,04,01,vv,vv,F7] (vv,vv:LSB,MSB)
Master Vol(Omni)	00 to 16383	16383	00	16383	4096	O	O	O	[F0,7F,7F,04,01,vv,vv,F7] (〃)
Master Balance	–8192 to +8191	00	L8192	R8191	R8191	O	O	O	[F0,7F,0n,04,02,vv,vv F7] (〃)
Master Bal(Omni)	–8192 to +8191	00	L8192	R8191	R8191	O	O	O	[F0,7F,7F,04,02,vv,vv F7] (〃)
Song Posit Point	00 to 16383	00	00	1584	16	O	×	O	[F2,vv,vv] (vv,vv:LSB,MSB)
Song Posit (4/4)	00 to 1023	00	00	99	01	O	×	O	[F2,vv,vv](vv,vv:LSB, MSB Measure for Time Sig=4/4)
Song Posit (3/4)	00 to 1365	00	00	99	01	O	×	O	[F2,vv,vv](vv,vv:LSB, MSB Measure for Time Sig=3/4)
Song Select	00 to 127	00	00	02	01	O	×	O	[F3,vv]
GM System On	(Fixed)					O	×	O	[F0,7E,7F,09,01,F7]
GM System Off	(Fixed)					O	×	O	[F0,7E,7F,09,02,F7]
Start/Stop	(Fixed)					O	×	O	[FA/FC]
Clock (Tapping)	(Fixed)					O	×	O	[F8....] (1tapping =24)
Tune Request	(Fixed)					O	×	O	[F6]
P.Key Press C–1	00 to 127	00	00	127	64	O	O	O	[An,00,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[An,??,vv] (Total 128 keys)
P.Key Press G9	00 to 127	00	00	127	64	O	O	O	[An,7F,vv]
00:BankSel(MSB)	00 to 127	00	00	02	01	O	O	O	[Bn,00,vv]
01:Modulation 1	00 to 127	00	00	127	64	O	O	O	[Bn,01,vv]
02:Modulation 2	00 to 127	00	00	127	64	O	O	O	[Bn,02,vv]
03: –	00 to 127	00	00	127	64	O	O	O	[Bn,03,vv]
04:Foot Control	00 to 127	00	00	127	64	O	O	O	[Bn,04,vv]
05:Porta Time	00 to 127	00	00	127	64	O	O	O	[Bn,05,vv]
06:D.Entry(MSB)	00 to 127	00	00	127	64	O	O	O	[Bn,06,vv]
07:Volume	00 to 127	127	00	127	32	O	O	O	[Bn,07,vv]
08:Balance	L64 to R63	00	L64	R63	R63	O	O	O	[Bn,08,vv]
09: –	00 to 127	00	00	127	64	O	O	O	[Bn,09,vv]
10:Panpot	L64 to R63	00	L64	R63	R63	O	O	O	[Bn,0A,vv]
11:Expression	00 to 127	127	00	127	32	O	O	O	[Bn,0B,vv]
12:FX Control 1	00 to 127	00	00	127	64	O	O	O	[Bn,0C,vv]
13:FX Control 2	00 to 127	00	00	127	64	O	O	O	[Bn,0D,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[Bn,??,vv]
32:BankSel(LSB)	00 to 127	00	00	02	01	O	O	O	[Bn,20,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[Bn,??,vv]
38:D.Entry(LSB)	00 to 127	00	00	127	64	O	O	O	[Bn,26,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[Bn,??,vv]
64:Hold	00 to 127	00	00	127	127	O	O	O	[Bn,40,vv]
65:PortamentoSW	00 to 127	00	00	127	127	O	O	O	[Bn,41,vv]
66:Sostenuto	00 to 127	00	00	127	127	O	O	O	[Bn,42,vv]
67:Soft Pedal	00 to 127	00	00	127	127	O	O	O	[Bn,43,vv]
68:Legato SW	00 to 127	00	00	127	127	O	O	O	[Bn,44,vv]
69:Hold 2	00 to 127	00	00	127	127	O	O	O	[Bn,45,vv]
70:Sound Variat	00 to 127	00	00	127	64	O	O	O	[Bn,46,vv]

TYPE	RANGE	VALUE FIX	S(L)	S(H)	SW	CONTROLLER W/L	AP	AS	MIDI (n:Channel)
71:Harmonic Int	00 to 127	00	00	127	64	O	O	O	[Bn,47,vv]
72:Release Time	–64 to +63	00	–64	+63	–64	O	O	O	[Bn,48,vv]
73:Attack Time	–64 to +63	00	–64	+63	–64	O	O	O	[Bn,49,vv]
74:Brightness	–64 to +63	00	–64	+63	+63	O	O	O	[Bn,4A,vv]
75:Decay Time	00 to 127	00	00	127	64	O	O	O	[Bn,4B,vv]
76:Vibrato Rate	00 to 127	00	00	127	64	O	O	O	[Bn,4C,vv]
77:Vibrato Depth	00 to 127	00	00	127	64	O	O	O	[Bn,4D,vv]
78:Vibrato Delay	00 to 127	00	00	127	64	O	O	O	[Bn,4E,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[Bn,??,vv]
84:Porta Ctrl	C-1 to G9	C–1	C–1	G9	C4	O	O	O	[Bn,54,vv]
⋮	00 to 127	00	00	127	64	O	O	O	[Bn,??,vv]
91:Eff 1 Depth	00 to 127	00	00	127	64	O	O	O	[Bn,5B,vv]
92:Eff 2 Depth	00 to 127	00	00	127	64	O	O	O	[Bn,5C,vv]
93:Eff 3 Depth	00 to 127	00	00	127	64	O	O	O	[Bn,5D,vv]
94:Eff 4 Depth	00 to 127	00	00	127	64	O	O	O	[Bn,5E,vv]
95:Eff 5 Depth	00 to 127	00	00	127	64	O	O	O	[Bn,5F,vv]
96:Increment	(Fixed)					O	×	O	[Bn,60,00]
97:Decrement	(Fixed)					O	×	O	[Bn,61,00]
98:NRPN(LSB)	00 to 127	00	00	02	01	O	×	O	[Bn,62,vv]
99:NRPN(MSB)	00 to 127	00	00	02	01	O	×	O	[Bn,63,vv]
100:RPN(LSB)	00 to 127	00	00	02	01	O	×	O	[Bn,64,vv]
101:RPN(MSB)	00 to 127	00	00	00	00	O	×	O	[Bn,65,vv]
⋮	00 to 127	00	00	127	64	O	×	O	[Bn,??,vv]
120:A.Sound Off	(Fixed)					O	×	O	[Bn,78,00]
121:Reset A.Cntl	(Fixed)					O	×	O	[Bn,79,00]
122:Local Off/On	OFF,ON	ON	OFF	ON	OFF	O	×	O	[Bn,7A,vv]
123:A.Notes Off	(Fixed)					O	×	O	[Bn,7B,00]
124:Omni Off	(Fixed)					O	×	O	[Bn,7C,00]
125:Omni On	(Fixed)					O	×	O	[Bn,7D,00]
126:Mono On	00 to 16	06	00	16	01	O	×	O	[Bn,7E,vv]
127:Poly On	(Fixed)					O	×	O	[Bn,7F,00]

✻ Hexadecimal values are indicated by [ ]

● Explanation of MIDI transmission data (Individual)

When the selected controller is operated, the RANGE value is inserted at the vv portion of the MIDI column, and the message will be transmitted.
Messages whose RANGE value is (Fixed) will be transmitted only when the switch is operated. (They will not be transmitted by slider movements.)

❍ GM System On, GM System Off, Master Vol (Omni), Master Bal (Omni) are transmitted on channel = 127.
External MIDI devices will receive this message regardless of their receive channel.

❍ Concerning Song Posit (4/4)(3/4)
This message specifies the location at which a drum machine or sequencer will begin playback, in units of a measure.
With a setting of 4/4, you can specify the position in one-measure units for time signatures of 2/2, 4/4 or 8/8.
With a setting of 3/4, you can specify the position in one-measure units for time signatures of 3/4 or 6/8.
In either case, it is not possible to specify a position in greater detail than one measure.

If the song contains measures with different time signature before the specified location in the song, the location will not be accurate.

❍ In the case of Start/Stop, Start [FA] and Stop [FC] messages will be transmitted alternately each time you press that controller switch, regardless of the MODE setting.
If you also wish to transmit Clock [F8] messages, set the function of another controller to Clock (Tapping).

❍ Clock (Tapping) will transmit MIDI Clock [F8] messages at a tempo determined by the interval at which you press that controller switch, regardless of the MODE setting.
Even while clock messages are being transmitted, you can press the switch twice to change the interval (tempo) at which the clock messages are transmitted.
If the switch is pressed at an interval longer than 1.5 seconds (equivalent to ♩= 40), this will be ignored and the tempo will not change.
Conversely, if the interval is less than 0.2 seconds, this will be considered to be an interval of 0.2 seconds (equivalent to ♩= 300).

- O P.Key Press allows aftertouch to be applied independently to an individual key. You can specify the key to be transmitted, and assign it to a controller which will control its value. (The SGproX's keyboard does not support polyphonic key pressure.)

Available types, ranges, initial values, and MIDI transmit values (Set)

Some types of MIDI message are used in conjunction with other messages.
The SGproX provides frequently-used combinations of MIDI messages as sets.

Use with a controller O: available ×: unavailable
FIX: fixed value S(L): initial setting for controller lower limit value S(H): initial setting for controller upper limit value SW: initial SW setting W/L: AW1,2/AL1-4

TYPE	RANGE	VALUE FIX	S(L)	S(H)	SW	CONTROLLER W/L	AP	AS	MIDI (n:Channel)
Bank Select	00 to 16383	00	00	02	01	O	×	O	[Bn,00,vv,20,vv]
Prog Sel(0,000)	00 to 127	00	00	02	01	O	×	O	[Bn,00,00,20,00,Cn,vv] (Bank(MSB)=0)
⋮	00 to 127	00	00	02	01	O	×	O	[Bn,00,00,20,??,Cn,vv] (〃)
Prog Sel(0,127)	00 to 127	00	00	02	01	O	×	O	[Bn,00,00,20,7F,Cn,vv] (〃)
Prog Sel(000,0)	00 to 127	00	00	02	01	O	×	O	[Bn,00,01,20,00,Cn,vv] (Bank(LSB)=0)
⋮	00 to 127	00	00	02	01	O	×	O	[Bn,00,??,20,00,Cn,vv] (〃)
Prog Sel(127,0)	00 to 127	00	00	02	01	O	×	O	[Bn,00,7F,20,00,Cn,vv] (〃)
Data Entry	00 to 16383	00	00	16383	8192	O	O	O	[Bn,06,vv,26,vv]
RPC P.Bend Range	00 to 127	02	00	12	12	O	O	O	[Bn,65,00,64,00,06,vv]
RPC Fine Tune	–100 to +100	00	–100	+100	–52	O	O	O	[Bn,65,00,64,01,06,vv,26,vv]
RPC Coarse Tune	–64 to +63	00	–12	+12	+12	O	O	O	[Bn,65,00,64,02,06,vv]
Start/Stop/Clock	40 to 250	120	40	250	240	O	×	×	[FA/FC/F8....]

✱ Hexadecimal values are indicated by [ ]

● Explanation of MIDI transmission data (Set)
When you operate the selected controller, a value within the corresponding RANGE will be inserted in vv of the MIDI column (Start/Stop/Clock are exceptions), and transmitted.

❍ Bank Select
This set transmits the upper and lower bytes of Bank Sel together. This is used to select a bank number.

❍ Program Select
Bank Select upper and lower bytes and the Program Change are transmitted together.
Sets with a Bank Select upper (MSB) value fixed at 00[00], and sets with the lower (LSB) value fixed at 00[00] are provided. Select a set with the desired bank number, and you can control the program number in realtime.

❍ Data Entry
This set transmits the upper and lower bytes of Data Entry together. This can also be used to enter data for undefined RPC (RPN) messages.

RPN (Registered Parameter No.) are messages used to make common settings that extend beyond individual manufacturers.
The SGproX provides the following three sets of frequently-used RPC (Registered Parameter Control) messages. These allow you to control the corresponding function simply by selecting a function and assigning the value.

❍ RPC Pitch Bend Range
This set transmits RPC Pitch Bend Range and the upper value of Data Entry.
This is used to specify the width of pitch bending. A value in the range of 0 to +127 can be specified. With a value of +12, the pitch bend range will be +12 semitones (one octave).

❍ RPC Fine Tune
This set transmits RPC Fine Tune and the upper and lower values of Data Entry.
The fine tune value is specified in units of one cent. A value in the range of –100 to +100 can be specified.

❍ RPC Coarse Tune
This set transmits the RPC Coarse Tune and the upper value of Data Entry.
This is used to specify the coarse tuning (transposition). A value in the range of –64 to +64 can be specified. With a value of +12, the coarse tuning will be +12 semitones.

❍ Start, Stop, Clock [F8, F8, F8..., FA, F8, F8, F8..., FC, F8, F8, F8...]
This set differs from the others in the way in which the switch and slider will be used. (The Mode setting will be ignored.)
Press the switch, and START [FA] will be transmitted. Press the switch again, and STOP [FC] will be transmitted. The value specified as the SW value will transmitted as MIDI Clock [F8] at the initial tempo (in the range of ♩= 40 to 250), but you can use the slider to modify this while it is being transmitted.

Available types, ranges, initial values, and MIDI transmit values (Internal)

Use with a controller O: available ×: unavailable
FIX: fixed value S(L): initial setting for controller lower limit value S(H): initial setting for controller upper limit value SW: initial SW setting W/L: AW1,2/AL1-4

	VALUE					CONTROLLER			
TYPE	RANGE	FIX	S(L)	S(H)	SW	W/L	AP	AS	MIDI (CC:Control Change)
[Volume]	0 to 127	127	00	127	32	O	O	O	CC#07:Volume
[FX Dyna Mod]*	0 to 127	00	00	127	64	O	O	O	CC#12:FX Control 1
[Sostenuto]	OFF,ON	OFF	OFF	ON	ON	O	O	O	CC#66:Sostenuto
[Brightness]*	–64 to +63	00	–64	+63	+63	O	O	O	CC#74:Brightness
[Attack Time]*	–64 to +63	00	–64	+63	–64	O	O	O	CC#73:Attack Time
[Decay Time]*	–64 to +63	00	–64	+63	–64	O	O	O	CC#75: Deeay Time
[FX1 Depth]*	0 to 127	00	00	127	64	O	O	O	CC#93:Eff 3 Depth
[FX2 Depth]*	0 to 127	00	00	127	64	O	O	O	CC#91:Eff 1 Depth
[Pitch Bend]	–8192 to +8191	00	–8192	+8191	+8191	O	O	O	Pitch Bend
[LFO]	0 to 127	00	00	127	64	O	O	O	CC#01:Modulation 1

Explanation of Internal control settings

- These settings are for controlling the internal tone generator. The TYPE name shown in the LCD will be enclosed in [ ].
- Although these are for internal control, operating the assigned controller will also cause the corresponding MIDI message to be transmitted.
- If [FX Dyna Mod] is selected, you will also need to specify (in the effect settings) that controller as the modulation source (☞p.50).
- These controls are not related to program parameters. Even if you use the sliders etc. to modify the sound, the modified sound cannot be written.
- In the case of functions marked by asterisk (*), the values will be reset when program is changed in Program mode.

About MIDI

✻ "CC#" is an abbreviation for Control Change number.

1. MIDI channels

In a way similar to channels on a television, MIDI data that is transmitted on a specific channel is received by a device that is set to receive on that channel.

- In Program mode, all transmission and reception will occur on the Global MIDI channel. (Transmission occurs only from MIDI OUT A.)
- In Performance mode, reception will occur on the Global MIDI channel. When the SGproX's keyboard and assignable controllers are operated, data will be transmitted on the MIDI channel that is specified for each timbre.

2. Note numbers

When a keyboard note is pressed, the location of the note (note number) and the force with which it was played (velocity) are transmitted as a Note On message [9n, kk, vv] (n: channel, kk: note number, vv: velocity). When a note is released, a Note Off [8n, kk, vv] message is sent. However, very few instruments transmit or receive note-off velocity, nor does the SGproX transmit or receive note-off velocity.

- In Program mode, these messages are transmitted on the Global MIDI channel.
- In Performance mode, these messages are transmitted on the MIDI channel that is specified for each timbre.
- Regardless of the mode, reception will occur only for note-on/off messages that match the Global MIDI channel.

For your reference, here are some notes and their note numbers: C-1:00, C1:24, C2:36, C3:48, C4:60, C5:72, C6:84, C7:96, G9:127.

3. Selecting a program

If you wish to select a sound (program), use a Program Change message [Cn, vv] (vv: a program number that selects one of up to 128 sounds). In conjunction with program change messages, you can use CC#00:Bank Sel (MSB) [Bn, 00, vv] (vv: upper byte of bank number) and CC#32:Bank Sel (LSB) [Bn, 20, vv] (CC#32 vv: lower byte of bank number) to select from a total of 16384 banks, so that programs can be selected from other banks.

The SGproX does not respond to Bank Select messages.

In Program mode, program change messages are transmitted and received on the Global MIDI channel.

Program numbers of the SGproX correspond to MIDI program change numbers as shown in the table at right.

SGproX program number	Program Change number
A1 to A16	00 to 15
B1 to B16	16 to 31
C1 to C16	32 to 47
D1 to D16	48 to 63

4. Polyphonic key pressure control

Polyphonic Key Pressure can be selected as a function of an assignable controller.

When P.Key Press C1 to G9 [An, kk, vv] (kk: note number, vv: value) is assigned to an assignable controller, you can operate that controller to control an external device which responds to polyphonic key pressure. The SGproX itself not respond to this message.

5. Damper (hold) pedal

When a damper pedal connected to the SGproX is pressed, the damper effect will apply. When it is released, the effect will be canceled. Simultaneously with these operations, a message of CC#64: Hold [Bn, 40, vv] (control change #64) will be transmitted.

If a pedal that supports half-damping (DS-1H recommended) is connected, the intermediate values (vv=01 to 126) will also be transmitted. However if a damper switch is connected, only vv=00 (off) or 127 (on) will be transmitted.

When this message is received, the effect will be turned OFF if "vv" is 79 [4FH] or less, and ON if "vv" is 80 [50H] or greater.

In a performance, you can specify for each timbre whether or not this message will be transmitted/received.

6. Aftertouch

When you apply additional pressure to the keyboard of the SGproX after playing a note, After Touch messages [Dn, vv] (vv: value) will be transmitted.
The MIDI Filter settings of Global mode allow you to specify whether or not aftertouch messages will be transmitted.
There is also another type of aftertouch called Polyphonic switch Pressure (refer to "4. Polyphonic key pressure control"), which allows aftertouch to be applied to a specific key. The SGproX does not support this message, so aftertouch messages mentioned in this manual refer to the first-mentioned Channel After [Dn, vv].

7. Pitch bend

When an assignable controller of the SGproX whose function has been set to [Pitch Bend] (internal control type) or Pitch Bend (external control type) is operated, or when the SGproX's ⟨AW1⟩ is operated in Program mode (with the factory setting of [Pitch Bend]), Pitch Bend messages [En, vv, vv] (vv, vv: lower and upper value bytes, together conveying a range of 16384 steps, with a central value of 8192 [vv, vv= 00H, 40H]) will be transmitted.
On bass programs etc., this message will apply a pitch bend effect. The range in which pitch bend will occur (i.e., the depth of the effect) can also be specified via MIDI. (Refer to 19. Changing the pitch bend range or **Controllers / MIDI**.)

8. Volume control

When an assignable controller whose function has been set to [Volume] (internal control type) or 07:Volume (external control type) is operated, or when a volume/expression pedal connected to the SGproX's assignable pedal jack is operated in Program mode (with the factory settings of [Volume]), CC#07:Volume messages [Bn, 07, vv] (vv: value) will be transmitted.
When this message is received, the volume will change. The volume of the SGproX is specified by the product of the Volume value and the value of CC#11: Expression [Bn, 0B, vv] (vv: value), so if increasing the volume value does not increase the actual volume, or if there is no sound, try transmitting an Expression message with a value of 127 to the SGproX.
When you select a performance, volume messages will be transmitted from timbres for which a MIDI channel has been specified.
By using the Universal Exclusive message Master Volume (refer to 23. System exclusive messages), you can adjust the volume of an external device without upsetting the volume balance between its timbres or tracks.

9. Vibrato (Pitch MG)

When an assignable controller whose function has been set to [LFO] (internal control type) or 01:Modulation 1 (external control type) is operated, or when the SGproX's ⟨AW2⟩ is operated in Program mode (with the factory settings of [LFO]), CC#01: Modulation 1 messages [Bn, 01, vv] (vv: value) will be transmitted.
For programs such as strings, a vibrato effect will be applied when this message is received.

10. Stereo position (Panpot)

When an assignable controller whose function has been set to 10:Panpot (external control type) is operated, CC#10: Panpot messages [Bn, 0A, vv] (vv: value, where 00 is left, 64 is center, and 127 is right) will be transmitted.
Stereo programs that receive this message will switch to mono.
If this message is received while a note is sounding, the currently-sounding note will not be affected, and the panpot setting will change beginning with the next-played note.

11. Effect 1 depth

When you operate an assignable controller whose function has been set to [FX1 Depth] (internal control type) or 93: Eff3 Depth (external control type), CC#93 Eff 3 Depth messages [Bn, 5D, vv] (vv: value) will be transmitted.
When this message is received, the depth of effect 1 will change.

12. Effect 2 depth

When an assignable controller whose function has been set to [FX2 Depth] (internal control type) or 91: Eff 1 Depth (external control type) is operated, or when the SGproX's ⟨AL3⟩ is operated in Program mode (with the factory settings of [FX2 Depth]), CC#91: Eff 1 Depth messages [Bn, 5B, vv] (vv: value) will be transmitted.
When this message is received, the depth of effect 2 will change.

13. Effect dynamic modulation

When an assignable controller whose function has been set to [FX Dyna Mod] (internal control type) or 12: FX Control 1 (external control type) is operated, or when the SGproX's ⟨AL4⟩ is operated in Program mode (with the factory setting of [FX Dyna Mod]), CC#12: FX Control 1 messages [Bn, 0C, vv] (vv: value) will be transmitted.
When this message is received, effects such as Rotary Speaker or Wah for which Ctrl#12 is selected as the modulation source will be controlled.

14. Tone adjustment

When an assignable controller whose function has been set to [Brightness] (internal control type) or 74:Brightness (external control type) is operated, or when the SGproX's ⟨AL1⟩ is operated in Program mode (with the factory settings of [Brightness 1]), MIDI CC#74:Brightness messages [Bn, 5B, vv] (vv: value) will be transmitted. When "vv" is 64 [40H], there will be no change in the tone. Values lower than 64 will darken the tone, and values higher than 64 will brighten the tone.
When this message is received, the tone will change.
However since this message was defined relatively recently, some instruments do not support it.

15. Attack time adjustment

When an assignable controller whose function has been set to [Attack Time] (internal control type) or 73:Attack Time (external control type) is operated, CC#73:Attack Time messages [Bn, 49, vv] (vv: value) will be transmitted. When "vv" is 64 [40H], there will be no change in the attack time. Values lower than 64 will speed up the attack time, and values higher than 64 will slow down the attack time.
When this message is received, the attack time will change.
However since this message was defined relatively recently, some instruments do not support it.

16. Decay time adjustment

When an assignable controller whose function has been set to [Decay Time] (internal control type) or 75:Decay Time (external control type) is operated, or when the SGproX's ⟨AL2⟩ is operated in Program mode (with the factory setting of [Decay Time]), CC#75:Decay Time messages [Bn, 4B, vv] (vv: value) will be transmitted. When "vv" is 64 [40H], there will be no change in the decay time. Values lower than 64 will speed up the release time, and values higher than 64 will slow down the release time.
However since this message was defined relatively recently, some instruments do not support it.

17. Editing using RPN

RPN (Registered Parameter No.) messages are used to make common settings that extend beyond individual manufacturers. NRPN (Non-registered Parameter No.) and System Exclusive messages can be freely defined by individual manufacturers.
When using RPN messages to remotely edit a device, first transmit CC#100:RPN (LSB) [Bn, 64, rr] and CC#101:RPN (MSB) [Bn, 65, mm] (rr, mm: lower and upper bytes of the parameter number) messages to select the parameter.
Then use CC#06:Data.Entry (MSB) [Bn, 06, mm] and CC#38:Data.Entry (LSB) [Bn, 26, vv] (mm, vv: lower and upper data bytes, together expressing 16384 steps) to specify the value.
In addition, you can also use CC#96:Increment [Bn, 60, 00] or CC#97:Decrement [Bn, 61, 00] value fixed at 00) to increase or decrease the value in steps of one.
The SGproX receives the two RPN messages explained in items 18 and 19.

18. Tuning

You can use RPN Fine Tune messages to adjust the master tuning of the SGproX.
First select RPN 01 by transmitting a message of [Bn, 64, 01, 65, 00] (control change #100 with data 01, #101 with data 00) to the SGproX. Then use data entry to specify the value by transmitting a message of [Bn, 06, mm, 26, vv] (control change #06 and 38) to the SGproX. In this case, a value of 8192 [mm, vv=40H, 00H] will be the normal tuning value, 0 will be -100 cents, and 16383 [mm, vv=7FH, 7FH] will be +100 cents.

19. Changing the pitch bend range

You can use RPN Pitch.Bend Range messages to adjust the pitch bend range of the SGproX.
First select RPN 00 by transmitting a message of [Bn, 64, 00, 65, 00] (control change #100 with data 00, #101 with data 00) to the SGproX. Then use data entry to specify the value. Normally, however, only the upper byte is used. Transmit a message of [Bn, 06, mm] to the SGproX. In this case, a value of 00 will produce a setting of 00, a value of 1536 (mm=12=0CH) will produce a setting of +12 semitones. The SGproX allows you to specify a negative setting, but only positive values can be set using RPN messages.

20. If notes are stuck

If for some reason a malfunction occurs on an external device, causing notes to stick or hang, you can reset the notes either by using the SGproX's Global mode ⟨RESET⟩ page, or by selecting a different mode.
If a note played via MIDI is "stuck," you can also disconnect the MIDI cable. MIDI transmits a message called Active Sensing [FE] at regular intervals, in order to notify devices which receive this message that another device is connected. If no MIDI messages are received for longer than a specific interval of time, the receiving device assumes that the connection has been broken, and will turn off notes and reset controllers that have been turned on or set via MIDI.

21. Turning off all notes on a channel

When a CC#123:All. Notes Off message [Bn, 7B, 00] (control change #123 with data of 00) is received, all currently-sounding notes on that channel will be turned off (as though the keyboard had been released).
When a CC#120:All. Sound Off message [Bn, 78, 00] (control change #120 with data of 00) is received, all currently-sounding notes on that channel will be silenced. While All Note Off allows the decay portion of the notes to continue, All Sound Off will mute the sound immediately.
However, these messages are intended for use only in an emergency, and are not for use during a performance.

22. Reset all controllers on a channel

When a CC#121:Reset All Controllers message [Bn, 79, 00] (control change #121 with data of 00) is received, all controller values on that channel will be reset.

23. System exclusive messages

Since these messages can be used distinctively by each manufacturer, they are used mainly to transmit and receive data that is unique to particular models, such as sound data parameters and editing data.

The SGproX's system exclusive message data format is [F0, 42, 3n, 4B, ff, ..., F7] (n: Global MIDI channel, ff: function code, or type of message).

However, some system exclusive messages have been defined for general use, and these are called Universal System Exclusive messages.

The SGproX can use the following four universal system exclusive messages. However, 1), 3) and 4) is transmitted and received, and 2) are only transmitted.

1) When an Inquiry Message Request [F0, 7E, nn, 06, 01, F7] message is received, the SGproX will transmit an Inquiry Message Reply of [F0, 7E, nn, 06, 02, (9 bytes), F7] which means "I am a Korg SGproX, with system version ..."
2) When a GM System On [F0, 7E, nn, 09, 01, F7] message is transmitted from the SGproX, a connected GM-compatible tone generator will be initialized for GM.
3) When a master volume message [F0, 7F, nn, 04, 01, vv, mm, F7] (vv: lower value byte, mm: upper value byte, in combination representing a range of 16384 values) is transmitted from the SGproX, the volume of a receiving device can be adjusted without disturbing the balance between timbres of the combination, or the volume balance between tracks of a song.
4) When a master balance message [F0, 7F, nn, 04, 02, vv, mm, F7] (vv: lower value byte, mm: upper value byte, in combination representing a range of 16384 values where 8192 is the default setting and lower values will move toward the left) is transmitted from the SGproX, the stereo position of a receiving device can be adjusted without disturbing the relative panning for timbres of the combination, or the relative panning between tracks of a song.

Details of the above are given in the **SGproX MIDI Implementation** section**.**

Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.

24. Transmitting data such as sound settings (Data Dump)

Data for programs, performances, and global settings can be transmitted as MIDI exclusive data, and stored on an external device.

Transmission of this data is performed in the Global mode ⟨DATA DUMP⟩ page.

This data will also be transmitted in response to a dump request message.

This data is transmitted and received on the Global MIDI channel.

For details on the data, refer to the **SGproX MIDI Implementation** section**.**

Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.

25. Connecting external devices

An external device can be connected in the following ways to play the SGproX.

- MIDI messages from the external device can play the SGproX in Program mode. Use Program Change messages [Cn, pp] (pp: program number) to select overall settings (program, level and effects etc.) by switching programs.
- MIDI messages from external device can play the SGproX in Performance mode (using the SGproX as a two-timbre tone generator).

In either case, messages will be received on the Global MIDI channel.

Troubleshooting

Power does not come on when you press the POWER switch!

- Is the power cable correctly connected to the SGproX's AC inlet and to an AC outlet?

No sound!

- Are connections to the amp, mixer or headphones correct?
- Is the power of the amp and mixer on, and are their settings correct?
- Is the volume of the SGproX raised?
- Is the Local Control setting ON? (☞ p.27)
- Does the MIDI channel of the messages being transmitted by the external device match the Global MIDI channel (set in Global mode) of the SGproX? (☞ 27)
- In a keyboard split performance, are you playing an area of the keyboard that produces no sound? (☞ p.15)

Sound does not stop!

- Is the damper polarity setting correct? (☞ p.28)
- On sustain-type programs such as strings or organ, has the Damper mode been set to "PIANO"? (☞ p.34)

Can't control using MIDI!

- Is the MIDI cable connected correctly?
- Is MIDI data being received on the same channel that the transmitting device is transmitting?
- In Program mode, make sure that you are not using the OUT B connector.
- Make sure that the various MIDI filters in Global mode are not set to "DIS."
- In Performance mode when using assignable controllers, make sure that the MIDI channel settings and controller filters are set to "ENA" for the timbres which use those controllers. (☞ p.41)

Exclusive data is not received!

- Is the Global MIDI channel set correctly? (☞ p.27)
- Is the Global mode exclusive filter set to "ENA"? (☞ p.27)
- Is the memory protect setting "OFF"? (☞ p.30)

Can't write programs or performances!

- Make sure that the memory protect setting is "OFF." (☞ p.30)

Specific keys do not sound!

- In a Performance for which you have made Key Zone settings, are you playing an area which does not sound? (☞ p.40)

Error messages

Error messages	Content of error
Battery Low	The internal battery has run down. Contact a Korg service center or a nearby dealer.
Memory Protected	Protect is "ON" for the program or performance memory into which you attempted to write, etc.
Type Mismatch	The Timbre Copy settings you made are a combination of copy source and copy destination which is not permitted (TA, TB → T1 to 8, or T1 → 8 to TA, TB).
Copy to Self	When copying Timbre or Assignable Slider data, the specified source and destination were identical.
Can not Copy	Assignable Slider settings cannot be copied when Start/Stop or Clock are specified as the control function of the copy source.

Specifications

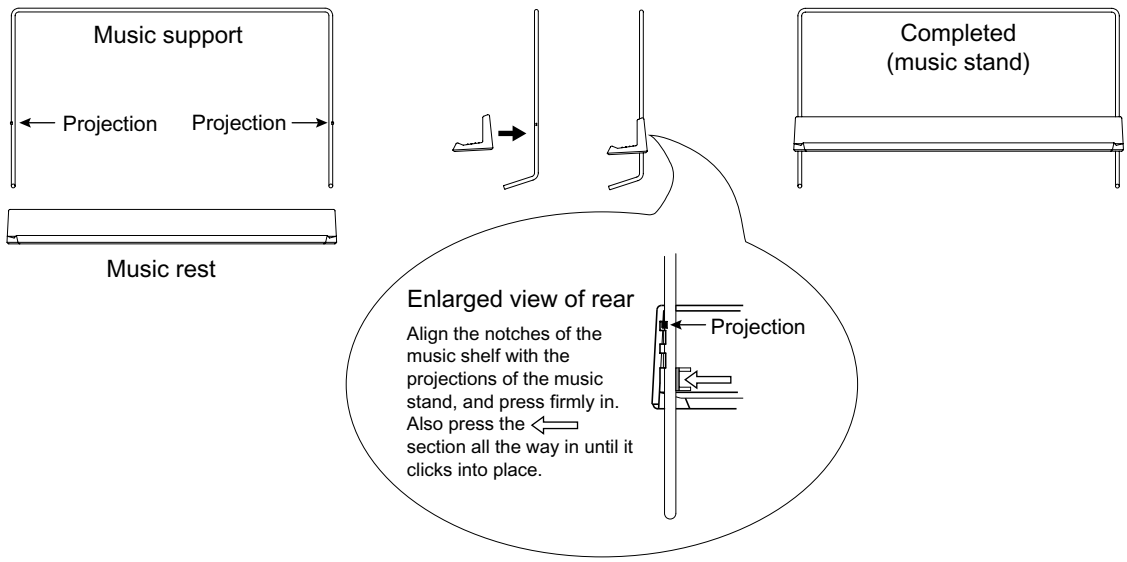
Tone generator method	AI squared synthesis system (full digital processing)
Tone generator	64 voice, 64 oscillator (for a monaural program) 32 voice, 64 oscillator (for a stereo program)
Keyboard	88 note weighted
Waveform memory	PCM 24 Mbytes
Number of programs	64
Number of performances	64
Effects	Two digital multi-effect units
Effect types	Effect 1 (12 types), Effect 2 (11 types)
Control inputs	Damper pedal, Assignable pedal, Assignable pedal switch
Outputs	L/MONO, R, PHONES (phone jacks)
MIDI connectors	IN, OUT (A × 2, B × 2), THRU
Display	20 character × 2 line LCD (backlit)
Power supply	100 V
Power consumption	10W
Dimensions	1322 (W) × 392 (D) × 139.7 (H) mm
Weight	24.1 kg
Included items	AC cable, music stand

Specifications and appearance are subject to change without notice for product improvement.

Options

PS-1	Pedal switch
PS-2	Dual pedal switch
DS-1H	Damper pedal
EXP-2	Expression pedal
XVP-10	Expression / volume pedal

Assembling the music stand



PROGRAM NAME LIST

*Monaural Program

A01		Concert	B01		Bright	C01		Classic	D01		Dynamic
A02		Studio	B02		Rock Piano	C02		Jazz Piano	D02		Ballad
A03	*	DancePiano	B03	*	Chorused	C03		Mix Piano	D03		StagePiano
A04		Dyna-Stage	B04		Classic EP	C04	*	Stage Bell	D04	*	Stage Tine
A05	*	Wurly EP	B05	*	Dyno Bell	C05	*	FM EP 2	D05	*	FM EP 3
A06		FM EP 1	B06	*	Wave EP 1	C06		Motion EP	D06	*	Wave EP 2
A07		Piano & EP	B07		PF&Strings	C07		MIDI Grand	D07		Power Keys
A08	*	Funkamatic	B08		FM&Analog	C08		EP&Strings	D08	*	EP Magic
A09		SGX Organ	B09	*	Velo “B”	C09	*	Perc Organ	D09	*	Full Organ
A10	*	R&B Organ	B10	*	CX-3 Organ	C10	*	Gospel Org	D10		Pipe Organ
A11	*	Clav	B11		PhaserClav	C11		Mutronics	D11		Clavitar
A12		Vibraphone	B12	*	Bellphonic	C12		Crystaline	D12		BellString
A13		TheStrings	B13		Symphonic	C13		PadStrings	D13		StringsL&R
A14		WhisperVox	B14		Slow Waves	C14		BreathyVox	D14		Voices
A15		SynthFlute	B15		SynthBrass	C15		Synth Air	D15		Synth Horn
A16	*	Acoustic	B16	*	Fretless	C16	*	FingerBass	D16	*	Synth Bass

PERFORMANCE NAME LIST

	PERFORMANCE.NAME Timbre A Timbre B		PERFORMANCE.NAME Timbre A Timbre B		PERFORMANCE.NAME Timbre A Timbre B		PERFORMANCE.NAME Timbre A Timbre B
A01	**PianoLayer** B03:Chorused C07:MIDI Grand	B01	**FMEP&Piano** A06:FM EP 1 A01:Concert	C01	**PowerWaves** C06:Motion EP D07:Power Keys	D01	**PF Air Pad** C07:MIDI Grand C15:Synth Air
A02	**PF&Strings** B08:FM&Analog B07:PF&Strings	B02	**PFHornPad** B07:PF&Strings D15:Synth Horn	C02	**PFBrassPad** B07:PF&Strings B15:SynthBrass	D02	**PF&Voices** B07:PF&Strings D14:Voices
A03	**A.Bass/PF** A16:Acoustic A02:Studio	B03	**BS/PF&Pad** B07:PF&Strings B16:Fretless	C03	**BS/PFLayer** A07:Piano & EP B16:Fretless	D03	**P&O-SPLIT** A09:SGX Organ A01:Concert
A04	**EP Layer** A06:FM EP 1 D08:EP Magic	B04	**Ballad EP** A06:FM EP 1 D05:FM EP 3	C04	**Whisper EP** A06:FM EP 1 A14:WhisperVox	D04	**Metalic EP** A06:FM EP 1 B12:Bellphonic
A05	**EP&Strings** B08:FM&Analog A04:Dyna-Stage	B05	**EP&BellPad** B08:FM&Analog B12:Bellphonic	C05	**EPHornPad** B08:FM&Analog D15:Synth Horn	D05	**EP&Analog** B08:FM&Analog A06:FM EP 1
A06	**BS/FM&Pad** B08:FM&Analog C16:FingerBass	B06	**BS/StageEP** B05:Dyno Bell C16:FingerBass	C06	**EP/SynHorn** D15:Synth Horn A04:Dyna-Stage	D06	**BS/EP&Pad** C08:EP&Strings B16:Fretless
A07	**PowerLayer** B02:Rock Piano C07:MIDI Grand	B07	**Piano & EP** A06:FM EP 1 D07:Power Keys	C07	**LayerGrand** C07:MIDI Grand C06:Motion EP	D07	**MondoLayer** B07:PF&Strings C15:Synth Air
A08	**Crystal EP** C12:Crystaline B06:Wave EP 1	B08	**Modern EP** B06:Wave EP 1 B04:Classic EP	C08	**Flange EP** A08:Funkamatic D06:Wave	D08	**Wurly EFX** B14:Slow Waves A05:Wurly EP
A09	**OrganSplit** B10:CX-3 Organ B09:Velo “B”	B09	**BS/Organ** C10:Gospel Org C16:FingerBass	C09	**SynthOrgan** B10:CX-3 Organ D15:Synth Horn	D09	**Full Pipes** D10:Pipe Organ D09:Full Organ
A10	**BrassLayer** C07:MIDI Grand B15:SynthBrass	B10	**PowerBrass** D15:Synth Horn B15:SynthBrass	C10	**Air Horns** A15:SynthFlute D15:Synth Horn	D10	**Air Brass** B15:SynthBrass C15:Synth Air
A11	**FlangeFunk** A08:Funkamatic B11:PhaserClav	B11	**StereoClav** B11:PhaserClav A11:Clav	C11	**Phat Clav** D16:Synth Bass A11:Clav	D11	**BellGuitar** B12:Bellphonic D11:Clavitar
A12	**ABass/Vibe** A12:Vibraphone A16:Acoustic	B12	**BellChimes** B12:Bellphonic C15:Synth Air	C12	**BellString** B12:Bellphonic D12:BellString	D12	**Air Bells** B12:Bellphonic B14:Slow Waves
A13	**SGXStrings** D13:StringsL&R B13:Symphonic	B13	**Symphony** D13:StringsL&R C13:PadStrings	C13	**Divisi** B13:Symphonic D13:StringsL&R	D13	**AirStrings** D13:StringsL&R C15:Synth Air
A14	**Fifth Wave** B14:Slow Waves B14:Slow Waves	B14	**Modern Pad** A14:WhisperVox B14:Slow Waves	C14	**Phaser Pad** B14:Slow Waves C14:BreathyVox	D14	**VoxVoices** D14:Voices C14:BreathyVox
A15	**Ensemble** B13:Symphonic D15:Synth Horn	B15	**Bows&Brass** B13:Symphonic B15:SynthBrass	C15	**StringPizz** B13:Symphonic A16:Acoustic	D15	**Orchestral** B13:Symphonic A15:SynthFlute
A16	**PIANO-SNGL** A01:Concert OFF	B16	**PD/LD-SPLT** B14:Slow Waves D15:Synth Horn	C16	**SFLUTE-LYR** A15:SynthFlute C15:Synth Air	D16	**BASS-OCTAV** D16:Synth Bass D16:Synth Bass

PERFORMANCE ASSIGNABLE CONTROLLER

PERFORMANCE No.	A01-A08, A10-A16, B01-B08, B10-B16, C01-C08, C10-C16, D01-D02, D04-D16						
AW1	AW2	AL1	AL2	AL3	AL4	AP	AS
[Pitch Bend]	[LFO]	[Volume]	[FX1 Depth]	[FX2 Depth]	[Brightness]	[Volume]	Off

PERFORMANCE No.	A09, B09, C09, D03						
AW1	AW2	AL1	AL2	AL3	AL4	AP	AS
[Pitch Bend]	[LFO]	[Volume]	[FX1 Depth]	[FX2 Depth]	[FX Dyna Mod]	[Volume]	Off

PERFORMANCE TEMPLATES FOR SETTING OF THE EXTERNAL TIMBRES

		Prog/Midi#	Key BTM	KeyTOP	VelBTM	VelTOP	Transpose
A16: PIANO-SNGL	Timbre A	A01	C–1	G 9	001	127	00
	Timbre B	OFF	C–1	G 9	001	127	00
	Timbre 1	A-01	C–1	G 9	001	127	00
	Timbre 2	B-01	C–1	G 9	001	127	00
B16: PD/LD-SPLT	Timbre A	B14	C–1	F#4	001	127	+12
	Timbre B	D15	G 4	G 9	001	127	–12
	Timbre 1	A-01	C–1	F#4	001	127	00
	Timbre 2	A-02	G 4	G 9	001	127	00
	Timbre 3	B-01	C–1	F#4	001	127	00
	Timbre 4	B-02	G 4	G 9	001	127	00
C16: SFLUTE-LYR	Timbre A	A15	C–1	G 9	001	127	00
	Timbre B	C15	C–1	G 9	001	127	00
	Timbre 1	A-01	C–1	G 9	001	127	00
	Timbre 2	A-02	C–1	G 9	001	127	00
	Timbre 3	B-01	C–1	G 9	001	127	00
	Timbre 4	B-02	C–1	G 9	001	127	00
D16: BASS-OCTAV	Timbre A	D16	C–1	G 9	001	127	+12
	Timbre B	D16	C–1	G 9	001	127	00
	Timbre 1	A-01	C–1	G 9	001	127	00
	Timbre 2	A-02	C–1	G 9	001	127	+12
	Timbre 3	B-01	C–1	G 9	001	127	00
	Timbre 4	B-02	C–1	G 9	001	127	+12

[64 note stage piano / controller]

SG proX MIDI Implementation Chart

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default	1 to 16	1 to 16	Memorized
	Changed	1 to 16	1 to 16	
Mode	Default		3	
	Messages	×	×	
	Altered	* * * * * *		
Note Number:		9 to 120	0 to 127	
	True voice	* * * * * *	0 to 127	
Velocity	Note ON	O 9n, V=1–127	O 9n, V=1–127	
	Note OFF	×	×	
After Touch	Key's	O	×	Transmitted by assignable controller
	Ch's	O *A*a	×	Transmitted by keyboard
Pitch Bender		O	O *m	Transmitted by assignable controller
Control Change	0, 32	O *1	×	Bank Select (MSB, LSB)
	1	×	O *m	Vibrato, Wah
	6, 38	×	O	Data Entry (MSB, LSB)
	7	O *1	O *m	Volume
	10	O *1	O *m	Panpot
	11	×	O *m	Expression
	12	×	O	Effect Dynamic Control
	64	O	O *d	Damper Pedal
	66	×	O *d	Sostenuto
	73, 74, 75	×	O *m	Attack Time, Brightness, Decay Time
	91, 92, 93, 94	×	O	Effect 2/1 Depth, Switch
	96, 97	×	O	Data increment, decrement
	100, 101	×	O	RPN (LSB, MSB) *2
	120, 121	×	O	All Sound Off, Reset All Controllers
	0 to 127	O	×	(transmitted by assignable controllers)
Program Change	: True #	O 0 to 63	O 0 to 63	0 to 127 when selecting Performances *1
		* * * * * *	0 to 63	
Exclusive		O	O *E	*3
Common	: Song Position	O	×	Transmitted by assignable controllers
	: Song Select	O 0 to 127	×	〃
	: Tune	O	×	〃
Real Time	: Clock	O	×	Transmitted by assignable controllers
	: Commands	O	×	〃
Other	: Local ON/OFF	O	O	Transmitted by assignable controllers
	: All Notes OFF	O	O 123 to 127	〃
	: Active Sense	O	O	
	: Reset	×	×	

Notes: *A, *E : Transmitted and received when Global mode filter (Aftertouch, Exclusive) is ENA
*m, *a, *d : For a Performance, transmitted and received when filter (Mod, A.Touch, Damper) is ENA
*1 When the Performance is changed, transmitted from each timbre for which transmission is specified
*2 LSB, MSB = 01, 00 : Fine Tune
*3 In addition to Korg exclusive messages, Inquiry Message, Master Balance and Master Volume are also supported, and GM System On/Off is transmitted

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.

SGproX Owner's Manual

NOTICE

KORG products are manufactured under strict specifications and voltages required by each country. These products are warranted by the KORG distributor only in each country. Any KORG product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

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