microSTATION
MUSIC WORKSTATION

Operation guide

EDS-i
Enhanced Definition
Synthesis – integrated

REMS

GENERAL
MIDI

KORG

E ②

Thank you for purchasing the Korg microSTATION Music Workstation. To help you get the most out of your new instrument, please read this manual carefully.

About this manual

About the documentation and how to use it

The microSTATION is shipped with the following documentation.
- microSTATION Easy Start Guide
- microSTATION Operation Guide (PDF)
- microSTATION Parameter Guide (PDF)
- microSTATION USB-MIDI Setup Guide (PDF)
- microSTATION Editor/Plug-In Editor User's Guide (PDF)
- microSTATION Voice Name List (PDF)

The above PDF files are in the "MANUALS" folder of the included disc. The manual for the KORG USB-MIDI driver is located in the same folder as the driver.

microSTATION Easy Start Guide

Read this first. It explains how to make connections and perform basic operations.

microSTATION Operation Guide

This explains what each part of the microSTATION does, how to make connections and perform basic operations, provides a summary of each mode, and explains the basic knowledge you'll need in each mode to edit sounds and record on the sequencer. This manual also explains the arpeggiator and effects.

In addition, it provides troubleshooting help, a list of error messages, and specifications.

microSTATION Parameter Guide

This provides a detailed explanation of the microSTATION's parameters, organized by mode and page. Refer to this guide when you would like to learn more about an unfamiliar parameter.

microSTATION USB-MIDI Setup Guide

This explains how to install the Korg USB-MIDI driver and set up the microSTATION.

microSTATION Editor/Plug-In Editor User's Guide

This explains how to set up and use microSTATION Editor/Plug-In Editor and microSTATION Editor/Plug-In Editor.

microSTATION Voice Name List

This lists the names of the multisamples, drum samples, and factory-set combinations, programs, drum kits, user arpeggio patterns, and demo songs inside the microSTATION. Refer to this when you want to learn more about the preloaded content.

Conventions in this manual

Abbreviations for the manuals: OG, PG

In the documentation, references to the manuals are abbreviated as follows.

OG: Operation Guide

PG: Parameter Guide

Parameters in the LCD display screen " "

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

Symbols ⚠, MIDI, Note, Tips

These symbols respectively indicate a caution, a MIDI-related explanation, a supplementary note, or a tip.

Example screen displays

The parameter values shown in the example screens of this manual are only for explanatory purposes, and may not necessary match the values that appear in the Display of your instrument.

MIDI-related explanations

CC# is an abbreviation for Control Change Number.

In explanations of MIDI messages, numbers in square brackets [ ] always indicate hexadecimal numbers.

What is *REMS* ?

REMS (**R**esonant structure and **E**lectronic circuit **M**odeling **S**ystem) is KORG's proprietary sound modeling technology which precisely reproduces the complex character and nature of both acoustic and electric instruments as well as electronic circuits in real world environments. *REMS* emulates a wide variety of sound generation characteristics including instrument bodies, speakers & cabinets, acoustic fields, microphones, vacuum tubes, transistors, etc.

- ∗ Apple and Mac are trademarks of Apple Inc., registered in the US. and other countries.
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Introduction to the microSTATION

Main features of the microSTATION

EDS-i (Enhanced Definition Synthesis - integrated)

This tone generation system integrates the main functionality of the **"EDS" (Enhanced Definition Synthesis)** system featured on the M3 and M50, including the oscillators, filters, amps, LFO/EG, and effects, delivering rich and vivid sounds.

The oscillator section uses 49 Mbytes (when calculated as 16-bit linear data) of high-quality PCM sources sampled at 48 kHz and covering a wide variety of sounds. The filter section that's so important to creative sound-making provides two high-quality filters for each oscillator, and allows you to freely combine four different types of filters: low-pass, high-pass, band-pass, and band-reject.

Modulation functionality is an indispensible part of this detailed design. The EDS-i tone generation system inherits numerous features from the EDS system including: the EG (envelope generator), LFO, key tracking generator, AMS (alternate modulation source), and AMS mixer, giving you an enormous range of synthesis potential.

The final touches to the sound are provided by the effect section, which gives you up to five insert effects, two master effects, and one total effect. In addition to delay and reverb, there are a total of 134 different effects including modulation-type effects such as chorus, phaser, and flanger, dynamic-type effects such as compression and limiting, and also effects such as amp modeling powered by Korg's proprietary "REMS" modeling technology. Effect dynamic modulation (Dmod) allows you to control the effects in a wide variety of ways.

Programs and combinations

The microSTATION provides 512 user programs as well as 256+9 (drums) GM2-compatible ROM preset programs. When shipped from the factory, the memory contains 480 preload programs organized into eight categories for convenient searching.

Drum programs use drum kits as the oscillator; there are 32 user drum kits and 9 GM2-compatible ROM drum kits. When shipped from the factory, the memory contains 27 preload drum kits that cover a broad range of musical styles.

There are 384 user combinations. When shipped from the factory, the memory contains 256 preload combinations organized into eight categories for convenient searching. A single combination lets you combine up to sixteen programs as layers, splits, or velocity-switches, and then add effects and two arpeggiators to create complex sounds that would not be possible for a single program. External audio sources can be played at the same time as a combination.

Sequencer and Auto Song Setup function

A high-performance 16-track MIDI sequencer is built into the microSTATION, allowing you to record up to 128 songs with a total of 210,000 notes. With a high-precision timing resolution of 1/480, it can capture every nuance of your performance.

The sequencer features intuitive operation, and provides numerous functions that allow you to produce music quickly. Template songs for every style of music, a loop recording function, grid sequence function, and arpeggiator will powerfully enhance your creativity.

Using the Auto Song Setup function, your performance using a program or combination plus the arpeggiator can easily be recorded to multiple tracks, instantly creating the basic tracks that form the core of your song production.

Dual polyphonic arpeggiator

For arpeggio patterns, five preset patterns and 640 user arpeggio patterns are built in. In addition to what a typical arpeggiator can do, the microSTATION's polyphonic arpeggiator can develop chords and phrases in a variety of ways depending on the pitch or timing at which you play the keyboard. You can use this to perform a wide variety of patterns including drum or bass phrases, or guitar or keyboard backing riffs. The arpeggiator is also useful as one element of creating sounds such as pads, synth sounds, and sound effects that involve subtle motion.

In Combination or Sequencer modes, the microSTATION provides dual arpeggiators that let you run two arpeggio patterns simultaneously. This allows powerful performance possibilities such as applying different arpeggio patterns to drums and bass programs, or using split or velocity to switch between arpeggio patterns.

Realtime control

The four realtime control knobs give you heightened expressiveness and realtime control for creating your sound or controlling the arpeggiator. They can also be used in an external mode setup for controlling your external MIDI devices.

Editor and Plug-In editor

The bundled "microSTATION Editor" and "microSTATION Plug-In Editor" software are applications that let you use your computer to edit the microSTATION's programs, combinations, drum kits, and arpeggio patterns.

These editors allow more detailed editing than is possible on the microSTATION itself. They also let you edit and create user arpeggio patterns and drum kits, which cannot be edited from the microSTATION.

"microSTATION Editor" is a standalone editor. "microSTATION Plug-In Editor" is an editor that supports VST, Audio Units, and RTAS formats. It allows you to use the microSTATION from within your DAW (Digital Audio Workstation) or other host application as a plug-in instrument.

Front and rear panels

Front panel
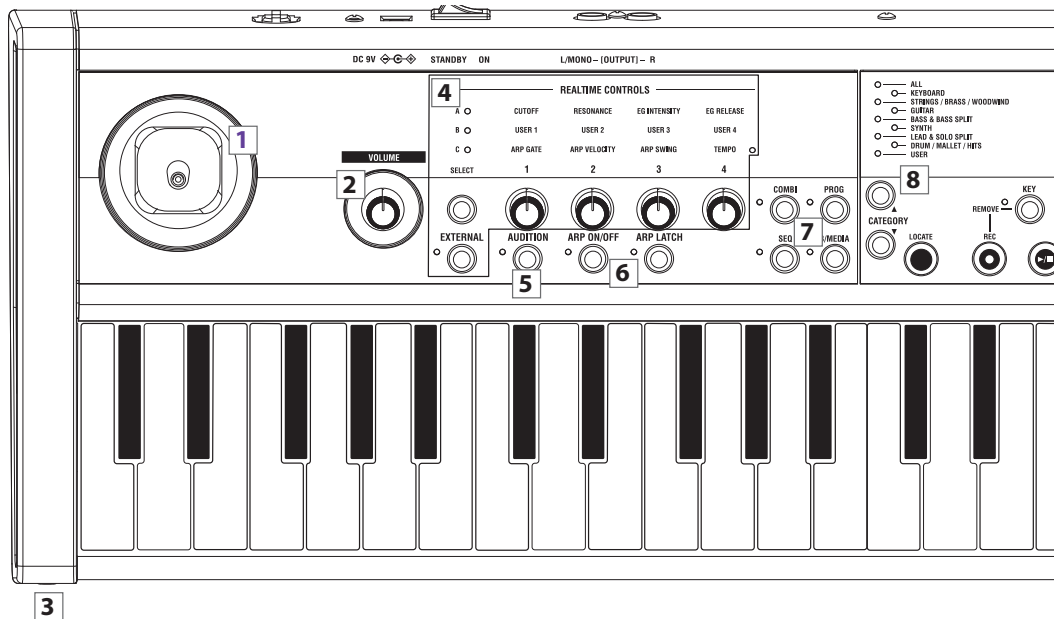
1. Joystick

You can control synthesis parameters or effect parameters by moving the joystick up/down/left/right. (☞p. 9)

2. VOLUME knob

This knob adjusts the volume of the OUTPUT L/MONO, R outputs, as well as the volume of the headphone jack. (☞p. 11)

3. PHONES jack

Connect your headphones here.

This jack will provide the same signal as the OUTPUT L/MONO and R jacks.

The headphone volume is controlled by the VOLUME knob.

4. REALTIME CONTROLS

This set of realtime controllers consists of four knobs and two buttons. You can use them in the following ways.

• To control the sounds and effects of programs or combinations.
• To transmit MIDI messages to control external MIDI devices.
• To control the arpeggiator and playback tempo.

SELECT button, knobs 1–4
Use the SELECT button to switch between realtime control A, B, and C mode, and use knobs 1–4 to control the sound, effects, and arpeggiator while you perform. (☞p. 9 "Realtime Controls")
(☞p. 17 "Using realtime controls to edit the sound or effects")

EXTERNAL button
If you press this button to turn it on (lit), knobs 1–4 will transmit MIDI messages that can control external MIDI devices. (☞p. 56)

TEMPO LED
If realtime control C mode is selected, and you use knob 4 to specify the tempo, this LED will blink at quarter-note intervals of the current tempo.

5. AUDITION button

In Program mode, this button repeatedly plays a riff (phrase) that's appropriate for the selected sound. When it is on, the LED at the left of the button will be lit-up.

6. Arpeggiator

ARP ON/OFF button
This button turns the arpeggiator on/off. The LED at the left of the button will light-up if the arpeggiator is on. (☞p. 50)

ARP LATCH button
If this is on, the arpeggiator will continue playing even after you take your hand off the keyboard. When it is on, the LED at the left of the button will light-up. (☞p. 50)

7. Mode

COMBI, PROG, SEQ, GLB/MEDIA buttons
Press one of these buttons to enter the corresponding mode. The microSTATION has four modes. When you enter a mode, the LED to the left of the button will light-up. (☞p. 7 "Selecting modes")
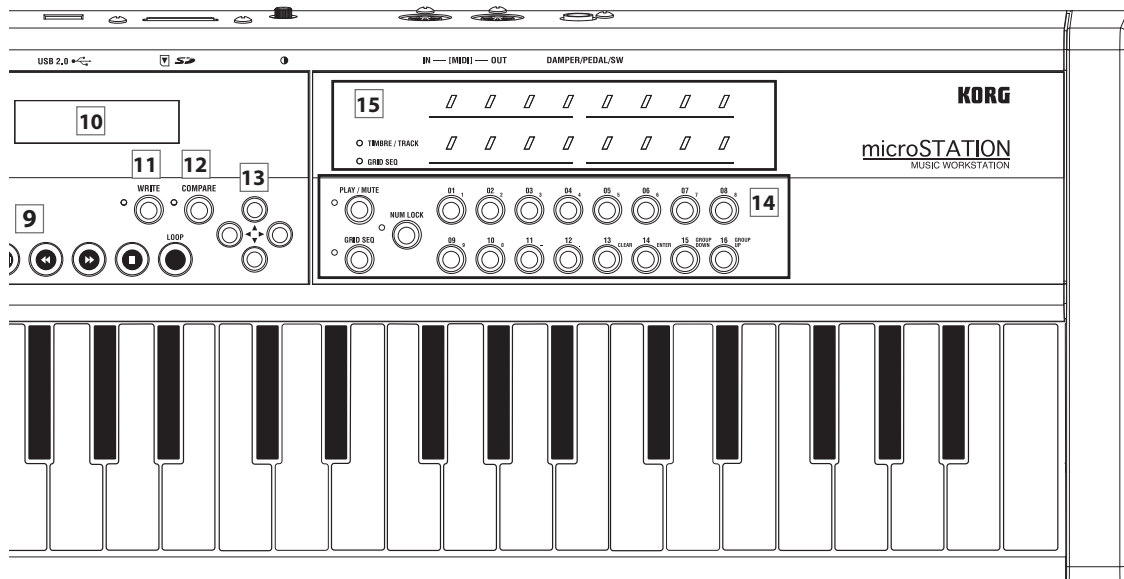
8. CATEGORY

CATEGORY SELECT buttons
When selecting programs or combinations, use these buttons to choose a category.

CATEGORY indicators
One of these indicators will light-up to show the category that is selected.

9. Sequencer

The buttons in this section are used for operations in Sequencer mode, such as recording and playback. (☞p. 32).

LOCATE button
REC button
KEY button
▶■ (Start/Stop) button
◀◀ (REW)/▶▶ (FF) button
❚❚ (Pause) button
LOOP button

10. Display

This shows the names of programs or combinations, or the values of parameters.

11. WRITE button

This button saves the program or combination.

12. COMPARE button

This button compares the sound or recording take with the unedited or previous take.

(☞p. 8 "COMPARE button - the Compare function")

13. CURSOR/VALUE

▲▼◀▶buttons
Use these buttons to select the page or parameter shown in the display, or to edit a value.

14. Function buttons

PLAY/MUTE button
If this button is on (the LED to the left of the button will light-up), you can use the function buttons 01–16 to control the play/mute status of the oscillators, timbres, and tracks. The function 01–16 LEDs will indicate play/mute status of the corresponding item.

GRID SEQ button
If this button is on (the LED to the left of the button will light-up), the Grid Sequence function in Sequencer mode will be on. This lets you use the function buttons 01–16 and LEDs 01–16 to easily create drum patterns.

NUM LOCK button
If this button is on (the LED to the left of the button will light-up), function buttons 01–16 will operate as numeric keys, a clear button, an enter button, and as group up/down buttons when selecting a program or combination.

Function buttons 01–16
When the three buttons described above are off (normal state), you can use these buttons to do the following.

• To select programs or combinations.
• (When the TIMBRE/TRACK LED is lit) To select a timbre or track.

15. Function LEDs

Function 01–16 LEDs
When the three buttons described above are off (normal state), these LEDs indicate the following.

• An LED will light-up to indicate the number within the currently selected program or combination category.
• (When the TIMBRE/TRACK LED is lit) An LED will light-up to indicate the timbre or track that's currently selected for editing.

TIMBRE/TRACK LED
This will light-up when the function 01–16 buttons and LEDs can be used to select timbres or tracks.

GRID SEQ LED
This will light-up in Sequencer mode when you press the GRID SEQ button to turn on the Grid Sequence function.

Rear panel
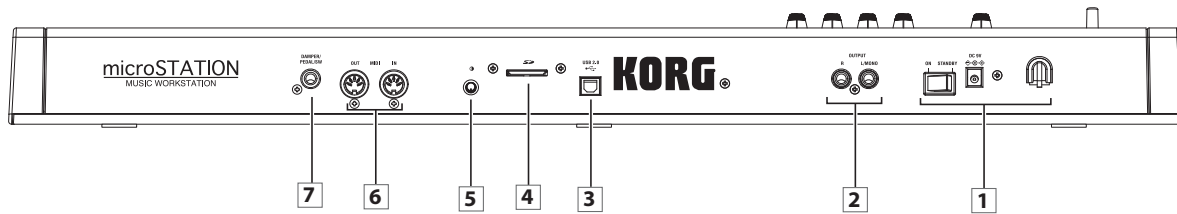
1. Power supply

Be sure to read the "Turning the power on/off" section on page 11 and follow the correct procedure described there.

Power switch
This switch turns the power on/off. (☞p. 11)

AC adapter connector
The included AC adapter is connected here. (☞p. 11)

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

Cable hook
Use this to secure the cable of the included AC adapter. After connecting the AC adapter, loop the cable around the hook located on the microSTATION's rear panel so that the cable won't get pulled out inadvertently. Leave enough slack on the plug end so that you can disconnect it if you want to. For details, please see ("Connections and power" on page 8 of Easy Start guide).

⚠ Be careful not to bend the base of the plug any more than necessary.

2. OUTPUT L/MONO, R jack

These are the main stereo audio outputs. Use the VOLUME knob to adjust the volume. (☞p. 12)

3. USB 2.0 jack

Use this jack to connect the microSTATION to your computer.

When running DAW software on your computer, you can use the microSTATION as a controller or as a MIDI sound module.

You can also use the dedicated editor to edit the parameters of the microSTATION from your computer as if it were plug-in software.

Note: The microSTATION's USB connector is only able to transmit and receive MIDI data.

4. SD card slot

You can insert an SD card here, and use it to save/load microSTATION programs, combinations, or song data. (☞p. 57)

5. Contrast knob

This knob adjusts the contrast of the display for the best viewing from any angle or under changing light conditions.

6. MIDI IN, OUT connector

MIDI lets you connect the microSTATION to a computer or other MIDI devices, for sending and receiving notes, controller gestures, sound settings, and so on. (☞p. 14)

7. DAMPER/PEDAL/SW connector

You can connect a damper pedal, foot switch, and foot pedal to this jack. (☞p. 13)

Basic Information

About the microSTATION's modes

The microSTATION has numerous functions that let you play and edit programs or combinations, record and play back sequence data, and manage media. These functions are grouped into "modes." The microSTATION has four modes.

Program mode

Programs are the basic sounds of the microSTATION.

In Program mode, you can:

- Select and play Programs
- Use one arpeggiator in your performance.
- Use the realtime controls to modify the sound and control the arpeggiator.
- Edit Programs

  You can adjust the parameters and settings of the oscillators, filters, amps, EGs, LFOs, effects, arpeggiator, etc.

  You can use up to five insert effects, two master effects, and one total effect.

Combination mode

Combinations are sets of up to 16 programs that can be played simultaneously, letting you create sounds more complex than a single Program.

In Combination mode, you can:

- Select and play Combinations
- Use two arpeggiators in your performance.
- Use the microSTATION as a sixteen-track multitimbral tone generator
- Edit Combinations

  You can assign Programs to each of the 16 Timbres, each with separate volume, pan, and keyboard and velocity zones, and make settings for effects and the arpeggiator.

  You can use up to five insert effects, two master effects, and one total effect.

Sequencer mode

Sequencer mode lets you record, playback, and edit MIDI tracks. You can:

- Use the sixteen-track MIDI sequencer to record and play back songs.
- Record a single MIDI track at a time, or record as many as all sixteen tracks simultaneously. You can also record system exclusive messages.
- Record using two arpeggiators.
- Create up to 128 songs.
- Use the microSTATION as a sixteen-track multi-timbral sound module.
- Adjust settings for each track

  Perform simple edits to the program used by each track.

  Edit the track volume, pan, effects, and arpeggiator settings.

  You can use up to five insert effects, two master effects, and one total effect.

Global/Media mode

In this mode you can adjust overall settings for the entire microSTATION, and save or load data.

In Global/Media mode you can:

- Adjust settings that affect the entire microSTATION, such as master tune and global MIDI channel.
- Specify the function of the assignable pedal and assignable switch.
- Format an SD card.
- Save or load sound data or sequencer data on an SD card.
- Save songs created in Sequencer mode as SMF format data, or load SMF files as Sequencer mode songs.
- Calibrate the half-damper pedal and foot pedal.

PROGRAM

OSC 1
- MS1 (Multisample) Drum Kit
- MS2 (Multisample)
- MS3 (Multisample)
- MS4 (Multisample)
- PITCH1 | FILTER1 | AMP1

OSC 2
- MS1 (Multisample) Drum Kit
- MS2 (Multisample)
- MS3 (Multisample)
- MS4 (Multisample)
- PITCH2 | FILTER2 | AMP2

Insert / Master / Total Effect
- IFX 1 | MFX 1
- MFX 2
- TFX
- IFX 5

Arpeggiator

GLOBAL/MEDIA MODE

DRUM KIT
Key Assign
- DS1 Drumsample
- DS2 Drumsample
- DS3 Drumsample
- DS4 Drumsample

ARPEGGIO PATTERN
- Preset Pattern: P0 - 4
- User Pattern

MEDIA
- PCG
- PCG / SNG

COMBINATION

TIMBRE1	PROGRAM	TIMBRE9	PROGRAM
TIMBRE2	PROGRAM	TIMBRE10	PROGRAM
TIMBRE3	PROGRAM	TIMBRE11	PROGRAM
TIMBRE4	PROGRAM	TIMBRE12	PROGRAM
TIMBRE5	PROGRAM	TIMBRE13	PROGRAM
TIMBRE6	PROGRAM	TIMBRE14	PROGRAM
TIMBRE7	PROGRAM	TIMBRE15	PROGRAM
TIMBRE8	PROGRAM	TIMBRE16	PROGRAM

Insert / Master / Total Effect
- IFX 1 | MFX 1
- MFX 2
- TFX
- IFX 5

Arpeggiator A
Arpeggiator B

SEQUENCER

MIDI TRACK 1...16

TRACK 1	PROGRAM	TRACK 9	PROGRAM
TRACK 2	PROGRAM	TRACK 10	PROGRAM
TRACK 3	PROGRAM	TRACK 11	PROGRAM
TRACK 4	PROGRAM	TRACK 12	PROGRAM
TRACK 5	PROGRAM	TRACK 13	PROGRAM
TRACK 6	PROGRAM	TRACK 14	PROGRAM
TRACK 7	PROGRAM	TRACK 15	PROGRAM
TRACK 8	PROGRAM	TRACK 16	PROGRAM

Insert / Master / Total Effect
- IFX 1 | MFX 1
- MFX 2
- TFX
- IFX 5

Arpeggiator A
Arpeggiator B

Basic operating methods

After you've turned on the power, use the following methods to select modes or pages, and edit the settings.

Selecting modes

- In order to use a function of the microSTATION, you must first select the appropriate mode. Press one of the front panel mode buttons to enter the corresponding mode.

COMBI button: Combination mode

PROG button: Program mode

SEQ button: Sequencer mode

GLB/MEDIA button: Global/Media mode

Selecting a combination, program, or song

Normally you'll use the COMBI PLAY or PROG PLAY page to select a combination or program.

The basic procedure is to use the CATEGORY SELECT buttons to specify a category, and then use the ▲▼ buttons or function buttons 01–16 to select a program or combination within that category.

For details on the procedure, refer to p. 15 "Selecting a program" and p. 24 "Selecting a combination"

For details on selecting a song, refer to p. 33 "Playback methods"

Editing in each mode

Each mode contains numerous parameters and commands, which are organized into groups and pages.

To edit a parameter or execute a command, use the CURSOR/VALUE ▲▼ ◄► buttons to move to the desired parameter or command.

Selecting a parameter and editing its value

We'll use Program mode as an example for this explanation.

1. **Press the PROG button to enter Program mode.**

```
PROG PLAY
⇡001:L/R PIANO  ⟩
```

The PROG PLAY page will appear. The upper line of the display shows the page name, and the lower line shows the name of the program that's currently selected.

The "⟩" shown at the right edge of the lower line indicates that you can press the ► button to move to another page (in this case, PROG EDIT).

2. **Press the ► button to enter PROG EDIT.**

```
‹PROG EDIT
⌄OSC Common      ⟩
```

When you enter PROG EDIT, the upper line of the display will indicate PROG EDIT. A " ‹ " symbol is shown at the left edge, indicating that you can use the ◄ button to move (return) to the previous page (in this case, PROG PLAY).

The lower line of the display shows the parameter group name or parameter name. In each mode, the editable parameters are organized into several groups. Depending on the mode, a group might be divided into multiple sub-groups, so there might be several levels of parameters.

The " ⌃ ", " ⌄ ", or "◇" symbols shown at the left edge of the lower line indicate that you can move to higher or lower parameter groups or parameters. Use the ▲▼ buttons to move.

The " ⟩ " symbol shown at the right edge of the lower line indicates that you can move to another page of the current parameter group, or select a parameter value. Use the ◄► buttons to move or select.

3. **Use the ▲▼ buttons or the ◄► buttons to move between groups and select the desired parameter.**

```
‹OSC Common
◇PtchStrtch:+00 ⟩
```

A "⬍", "⬆", or "⬌" shown at the left of the parameter value indicates that you can edit the value of that parameter.

4. **Use the ▲▼ buttons or function buttons 01–16 to edit the value of the parameter.**

▲▼ buttons
These buttons increase or decrease the value of the selected parameter in steps of one. If you hold down a button for several seconds, the value will increase or decrease consecutively.

Function buttons 01–16
If you press the NUM LOCK button to turn Num Lock on (LED lit), you can use function buttons 01–16 to enter a numerical value for a parameter. This method is useful when you know the value you want to enter.

Use the 01 (1)–10 (0) buttons to enter the value, and then press the 14 (ENTER) button to confirm.

The 11 (–) button switches the sign (+/–) of the parameter value.

The 12 (.) button enters a decimal point.

If you decide to cancel the value you're entering, press the 13 (CLEAR) button.

KEY button
The KEY button has a function that is available when the button is used in conjunction with a note of the keyboard.

When you're editing a parameter that specifies a note number (e.g., G4 or C#2) or a velocity value, you can specify the desired note number or velocity value by holding down the KEY button and playing a note on the keyboard.
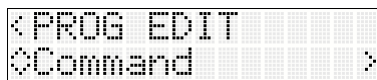
Note: By pressing the COMPARE button you can compare the sound before and after editing.

7

Selecting and executing a command

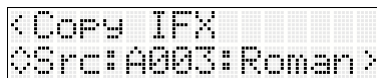Each mode allows you to execute various commands, such as Copy.

For example in Program mode, it is convenient to copy arpeggiator or effect settings when you're editing.

1. **In PROG PLAY, press the ▶ button to enter PROG EDIT.**

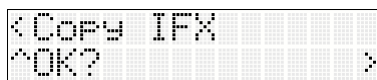2. **Use the ▲▼ buttons to choose "Command," and then press the ▶ button.**

```
‹PROG EDIT
◊Command              ›
```

3. **Use the ▲▼ buttons to select the desired parameter, and press the ▶ button.**

```
‹Copy IFX
◊Src:A003:Roman›
```

4. **Use the ▲▼ buttons to specify the value or copy-destination. To specify a numerical value such as a program or combination number, you can also turn NUM LOCK on and use function buttons 01–16 to enter the value.**

5. **When you've finished adjusting settings, press the ◀ button to return.**

6. **To execute, press the ▼ button to make the display indicate "OK?", and then press the ▶ button.**

   If you decide to cancel the operation, press the ◀ button.

```
‹Copy IFX
^OK?                  ›
```

COMPARE button - the Compare function

Program or Combination mode

Here's how to compare the sound of the program or combination you're editing with the original (unedited) sound.

1. **During editing, press the COMPARE button (the LED will light-up).**

   The sound that was saved before you began editing will be recalled.

2. **Press the COMPARE button once again (the LED will go dark).**

   The sound you were editing will reappear.

Note: If you edit the sound that's recalled by pressing the COMPARE button (i.e., the saved setting), the LED will go dark at that point, and you won't be able to return to the prior settings by pressing the COMPARE button again.

Sequencer mode

Here's how to compare the "before and after" state of your song recording or track editing.

For example, this is useful during recording.

1. **Record on a desired track (Take 1).**

2. **Record once again on the same track (Take 2).**

3. **When you press the COMPARE button (the LED will light-up), Take 1 will be recalled.**

4. **Press the button again (the LED will go dark), and Take 2 will be recalled.**

5. **If you record onto the same track again (Take 3) from the state of step 3, the Compare function will recall Take 1.**

6. **If you record onto the same track again (Take 3) from the state of step 4, the Compare function will recall Take 2. In this way, you can recall the state of the previous recording.**

Note: If you edit while the COMPARE button is lit, the button will go dark; that performance data will be the data that is recalled when the COMPARE button is dark. (☞PG p. 30 "The Compare function")

Global/Media mode

The Compare function is not available in Global/Media mode.

Writing/saving

After editing, you should write or save your changes as necessary.

For example if you've edited a program, your changes will be lost if you select another program or turn off the power. The same applies to a combination.

Settings that you edit in Global/Media mode will be remembered as long as the power is on, but your changes will be lost when you turn off the power, unless you write these changes into memory.

For details on the Write operations, see the following pages.

- Programs ☞p. 58
- Combinations ☞p. 58
- Global settings ☞p. 59
- User template songs ☞PG p.48
  Preset/user template songs are saved in internal memory even when the power is turned off. Track settings and effect settings of a song you create can be saved in internal memory by the song command **Save Template Song**.
- For details on writing to internal memory ☞p. 58
  Refer to the following pages for more about saving.
- Saving to media (Media– Save) ☞p. 58

Note: On the microSTATION, the action of writing to internal memory is called "Write," and the action of saving to an SD card device is called "Save."

Using Controllers

In addition to using the keyboard, the microSTATION lets you control the sound by using the joystick, knobs 1–4, damper pedal, and foot switch or foot pedal.

These controls let you modify the tone, pitch, volume, effects, etc. in realtime as you play.

Joystick

The joystick moves in four directions: left, right, up (away from yourself), and down (towards yourself).

Each of the four directions can be used to control a different function, such as modulating Program or effects parameters. These assignments can be different for every Program, but generally, they do the following:
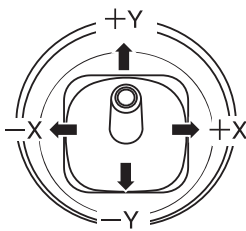
Standard Joystick functions

Move the joystick…	Controller Name	Normally controls…
Left	JS–X	Pitch bend down
Right	JS+X	Pitch bend up
Up (away from yourself)	JS+Y	Vibrato
Down (towards yourself)	JS–Y	Filter LFO (wah)

Keyboard

Velocity

Velocity is a measure of how hard you play a note on the keyboard. This can be used to modulate many different aspects of the sound, such as volume, brightness, or the character of the attack.

Note Number

Sounds can be programmed to change in character based on the note being played.

As you play higher or lower on the keyboard, the note number can modulate the timbre–such as becoming brighter as you play higher. Envelopes may also become faster or slower; the volume may change; and so on.

Realtime Controls

The realtime controls consists of four knobs and two buttons (SELECT and EXTERNAL).
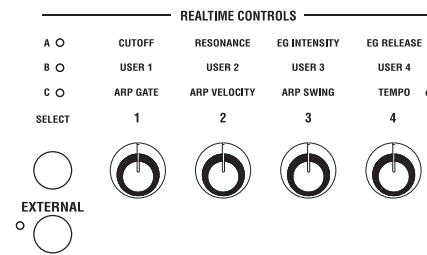
You can use the realtime controls to:

- Apply modulation to sounds, or control the tone.
- Control the arpeggiator.
- Control an external MIDI device.

1. **Press the REALTIME CONTROLS SELECT button to select the set of functions that you want to control (modes A–C), and then use knobs 1–4.**

   The REALTIME CONTROLS SELECT button lets you choose one of the following three sets of functions.

   A mode and B mode: The knobs will modify the sounds or effects.

   C mode: The knobs will control the arpeggiator and the tempo.

   You are free to switch between these sets of functions without affecting the content you've edited in each different realtime control mode.

2. **Press the REALTIME CONTROLS EXTERNAL button, and use knobs 1–4.**

   The realtime controls will be in External mode. Moving the knobs will transmit MIDI messages, allowing you to control an external MIDI device. The function of each knob can be specified in GLOBAL/MEDIA: MIDI - External Setup.

   When you move a knob in the region of its minimum or maximum value, there might be a slight discrepancy between the value and the knob's position.

Adjusting the tempo

In realtime control C mode, knob 4 (TEMPO) adjusts the overall tempo of the entire microSTATION, which will affect the items listed below.

When adjusting the tempo, the LED will blink at quarter-note intervals.

- Arpeggiator
- Sequencer mode songs
- Tempo sync LFO
- Tempo sync (BPM) delay effects

Note: Knob 4 (TEMPO) will not function if the GLOBAL/MEDIA: MIDI - MIDI Clock setting "Clock" is set to Ext.MIDI or Ext.USB, or if this is set to Auto and MIDI clock is being received.

   You cannot change the tempo of the program audition function. Knob 4 will not function while the audition is playing.

9

Damper pedal / Foot switch / Foot pedal

The microSTATION has a rear panel DAMPER/ PEDAL/SW jack where you can connect either a damper pedal, a foot pedal, or a foot switch.

Damper Pedal

The damper pedal is also sometimes called the sustain pedal. It acts like the similarly-named pedal on an acoustic piano; when you hold down the pedal, notes will continue to sustain even when you lift your hands off of the keyboard.

In Combination and Sequence mode, you can also choose settings so that the damper will affect some sounds but not other sounds.

Assignable Foot Switch

This lets you use a simple footswitch, such as the Korg PS-1, as an assignable controller. The footswitch can perform a wide variety of functions, such as:

- An assignable source for modulating sounds and effects
- Portamento on/off
- Program select up or down
- Sequencer start/stop or punch in/out
- Tap Tempo
- Arpeggiator on/off
- Operate various microSTATION controls (realtime control knobs, joystick, etc.)

Assignable Foot Pedal

This lets you use a continuous controller pedal, such as the Korg EXP-2 foot controller or Korg XVP-10 EXP/ VOL pedal, as an assignable controller.

Like the Assignable Foot Switch, described above, the Foot Pedal can be used for many different functions, including:

- Master Volume
- Channel Volume, Pan, or Expression
- Assignable sound modulation
- Effects Send level control
- Adjust various microSTATION controls (realtime control knobs, Joystick, etc.)

   If you use the DAMPER/PEDAL/SW jack, you'll need to choose the appropriate setting in Global/ Media mode to specify the type of option that's connected (damper pedal, foot pedal, or foot switch).

   To ensure that a half-damper pedal or foot pedal is operating optimally, please use the calibration function regularly.
   (☞PG p. 66 "HalfDmpr Calib (Half Damper Calibration)")
   (☞PG p. 66 "Pedal Calib (Pedal Calibration)")

Setup

Turning the power on/off

Connecting the AC adapter

Connect the AC adapter to the microSTATION. For details on this connection, please read the "Connections and power" on page 8 of Easy Start guide.

✎ You must use the included AC adapter only. Using any other AC adapter may cause malfunctions.

Turning the power on

1. **Lower the microSTATION's VOLUME knob.**

   If you have connected powered monitor speakers or a stereo amp, turn down the volume of these devices.

2. **Press the rear panel Power switch to turn on the power.**

   The display will show the model name and software version.

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

4. **Raise the microSTATION's VOLUME knob to an appropriate position, and adjust the volume of your powered monitor speakers or stereo amp.**

Turning the power off

✎ After you've finished editing, be sure to write (save) your changes.
If you edit a program and then select a different program or turn off the power, the changes you made will be lost. The same is true for a combination.
The settings you edit in Sequencer mode and Global/Media mode are remembered as long as the power is on, but will be lost when you turn off the power, so be sure to save all your data before turning the power off.

1. **Lower the microSTATION's VOLUME knob.**

   Also turn the volume of your powered monitor speakers or stereo amp down to zero.

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

3. **Press the rear panel Power switch to turn off the power.**

✎ The display will indicate "Now executing" while data is being written to internal memory. Never turn off the power during this procedure.
If you turn off the power during this process, writing to memory cannot be completed normally. In this case, the microSTATION might fail to operate correctly when you turn the power on again.
If this occurs, proceed as follows to initialize the microSTATION's internal memory.

   1. Power-off the microSTATION.
   2. While holding down the PLAY/MUTE button and the function 08 button, turn on the microSTATION.
      The microSTATION will be initialized, and internal memory will be written. The display will indicate "Initializing..." during this time. After initializing, you'll need to load the preload data. For details, refer to ("Loading the preloaded data" ☞p.63).

   Note: Initialization will require approximately 30 seconds to be completed.

Connections

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

Pedal connections etc.

ASSIGNABLE PEDAL
ASSIGNABLE SWITCH
DAMPER

Connections to computers

Computer

USB

MIDI OUT   MIDI IN
MIDI cable
MIDI IN   MIDI OUT
MIDI keyboard
Connections to MIDI equipment

AUDIO OUTPUT
R L/MONO
INPUT

Monitor OUTPUT
INPUT
Powered monitors, etc.
Mixer
Analog audio output

AC adapter power supply connector   to an AC outlet
Connecting the AC adapter
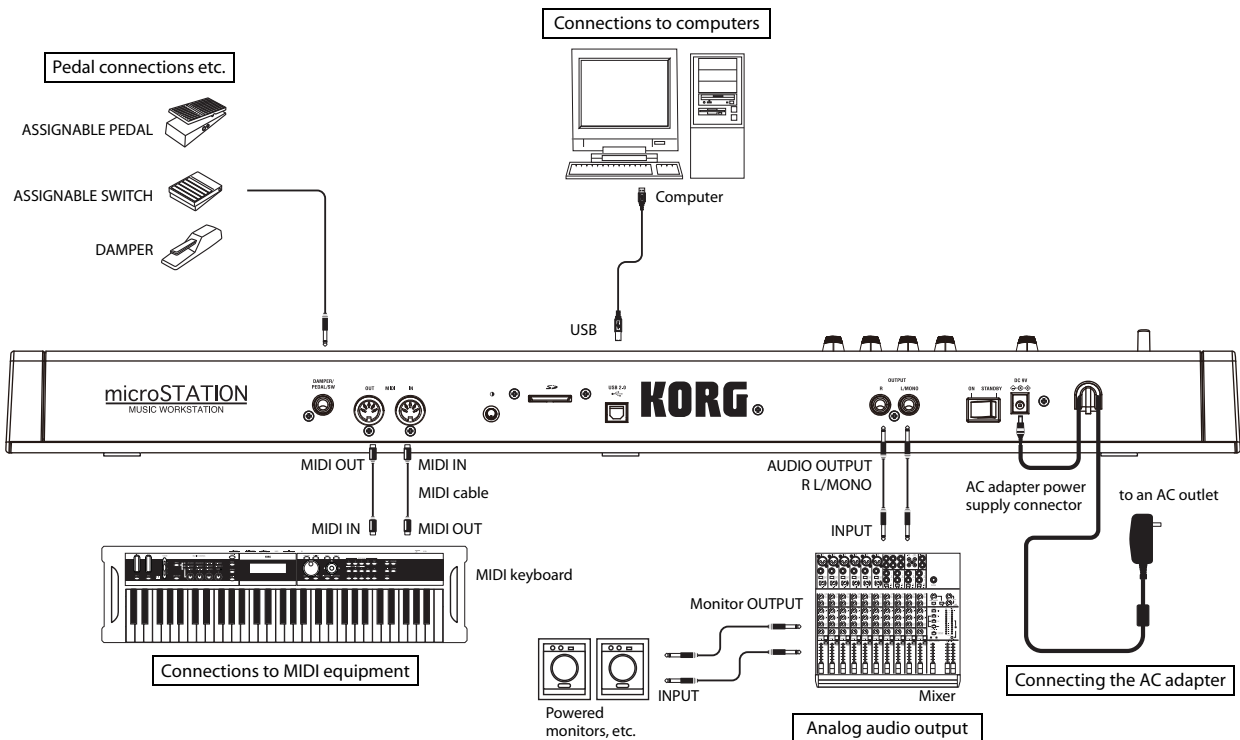
Connecting audio equipment

Here's how to connect the microSTATION to your analog amp or mixer.

⚠ If you've connected a stereo audio amp, be aware that playing at high volume may damage your speaker system. Be careful not to raise the volume excessively.
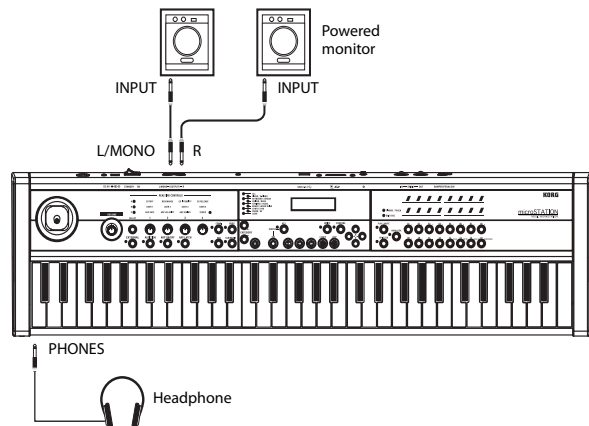
OUTPUT L/MONO and R

All of the factory sounds use these outputs.

1. **Connect the OUTPUT L/MONO and R outputs to the inputs of your powered monitor or mixer.**

   If you're using the microSTATION in stereo, use both the L/MONO and R jacks. If you're using the microSTATION in mono, use only the L/MONO jack.

   If you're playing back through a stereo audio amp or a cassette recorder that has an external input jack, connect the microSTATION to the jacks(s) labeled LINE IN, AUX IN, or external input. (Use an adapter cable with the appropriate type of plug.)

Powered monitor
INPUT   INPUT
L/MONO   R

PHONES
Headphone

Headphones

1. **If you're using headphones, connect them to the microSTATION's headphone jack.**

2. **Use the VOLUME slider to adjust the volume of the headphones.**

   The microSTATION's headphone jack outputs the same signal as the OUTPUT L/MONO and R jacks.
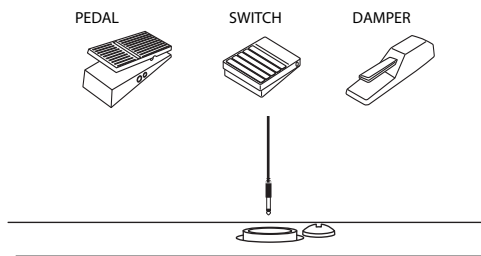
Connecting a damper pedal, foot pedal, or foot switch

You can connect either a damper pedal, a foot pedal, or a foot switch to the microSTATION's rear panel DAMPER/PEDAL/SW jack, and use it to control a variety of functions and effects.

You can use the damper pedal to apply a damper effect while you play.

You can use the foot switch to turn the sostenuto or soft pedal effect on/off, to turn the arpeggiator on/off, to switch programs or combinations, or to control tap tempo.

You can use the foot pedal to control volume or modulation.

PEDAL   SWITCH   DAMPER

✍ If you connect a pedal to the DAMPER/PEDAL/SW jack, you'll need to choose the appropriate setting in Global/Media mode to specify the type of option (i.e., damper pedal, foot pedal, or foot switch) that's connected.

✍ Settings that you edit in Global/Media mode are maintained until you turn off the power, but will not be saved when you turn off the power. If you want to keep these settings, you must write them. (☞p. 59)

Connecting a damper pedal

This pedal can provide a damper effect as you play. This instrument also supports half-damping. Here's how to connect an optional Korg DS-1H damper pedal to the DAMPER/PEDAL/SW jack and use it to control the half-damper effect.

1. **Connect an optional DS-1H damper pedal to the DAMPER/PEDAL/SW jack.**

   You'll be able to control the half-damper effect if you've connected the DS-1H. If you've connected a different switch-type pedal, it will function as a damper switch.

2. **After you turn the power on, select the option that's connected to the jack, and choose the appropriate Global/Media mode settings for "Type" and "Polarity" (GLOBAL/MEDIA: Controllers - PEDAL/SW) to specify the function that will be controlled by the pedal and the polarity of the pedal (☞p. 56, ☞PG p. 65).**

   If you're using a half-damper pedal, perform the half-damper calibration to ensure that the pedal is operating correctly (☞PG p. 66).

Connecting a foot switch

If you connect an on/off-type foot switch such as the Korg PS-1 pedal switch to the DAMPER/PEDAL/SW jack, you can use it to turn the sostenuto or soft pedal effect on/off, to control tap tempo, or to apply modulation to a sound or an effect.

This switch will always function in the same way regardless of the Program, Combination, or Song you've selected. You can assign the function in the Global/Media mode.

1. **Connect a foot switch such as the optional PS-1 to the DAMPER/PEDAL/SW jack.**

2. **After you turn the power on, select the option that's connected to the jack, and choose the appropriate Global/Media mode settings for "Type," "SW," and "Polarity" (GLOBAL/MEDIA: Controllers - PEDAL/SW) to specify the function that will be controlled by the foot switch and its polarity (☞p. 56, ☞PG p. 65, ☞PG p. 295).**

Connecting a foot pedal

If you connect a optional EXP-2 foot controller or XVP-10 expression/volume pedal to the DAMPER/PEDAL/SW jack, you can use it to apply modulation to sounds or effects, or to adjust the overall volume.

This pedal will always function in the same way regardless of the Program, Combination, or Song you've selected. You can assign the function in the Global/Media mode.

1. **Connect an optional XVP-10 or EXP-2 to the DAMPER/PEDAL/SW jacks.**

2. **After you turn the power on, select the option that's connected to the jack, and choose the appropriate Global/Media mode settings for "Type" and "Pdl" (GLOBAL/MEDIA: Controllers - PEDAL/SW) to specify the function that will be controlled by the pedal (☞p. 56, ☞PG p. 65, ☞PG p. 296).**

   Perform the foot pedal calibration procedure to ensure that the pedal is operating correctly (☞PG p. 66).

Connecting the microSTATION to a computer

The microSTATION provides both MIDI and USB connectors as standard equipment. By connecting the microSTATION to your computer via USB, you can use it as a controller and MIDI sound module for your DAW software with single cable convenience; and with out the need for a MIDI interface.

By using the dedicated editor, you can edit the microSTATION from your computer as though it were a software plug-in.

For details, read the "microSTATION Editor/Plug-In Editor User's Guide" (PDF).
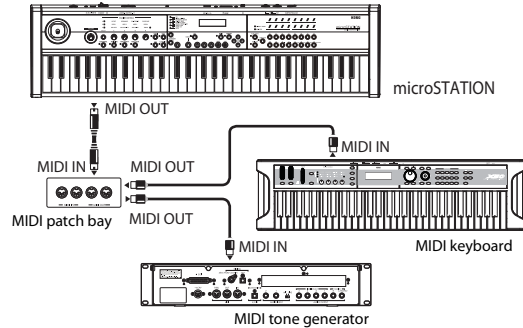
Connecting MIDI devices

By connecting the microSTATION's MIDI connectors to an external MIDI device you can transfer sound settings and performance data such as note messages between your external MIDI device and the microSTATION.

About MIDI

MIDI stands for Musical Instrument Digital Interface, and is a world-wide standard for exchanging various types of musical data between electronic musical instruments and computers. When MIDI cables are used to connect two or more MIDI devices, performance data can be exchanged between the devices, even if they were made by different manufacturers.

Controlling an external MIDI tone generator from microSTATION

If you want to use the microSTATION's keyboard and other controllers, sequencer, and arpeggiator to play or control an external MIDI sound module, use a MIDI cable to connect the microSTATION's MIDI OUT connector to the MIDI IN connector of your external MIDI sound module.

Controlling microSTATION's tone generator from an external MIDI device

When you wish to play or control the microSTATION's tone generator from an external MIDI keyboard or sequencer etc., use a MIDI cable to connect the MIDI OUT connector of the external MIDI device to the MIDI IN connector of microSTATION.
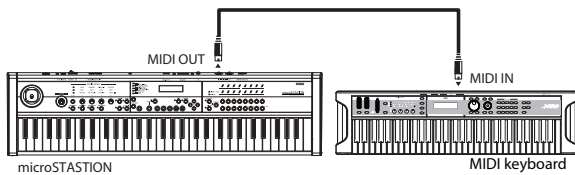

Controlling two or more external MIDI tone generators from microSTATION

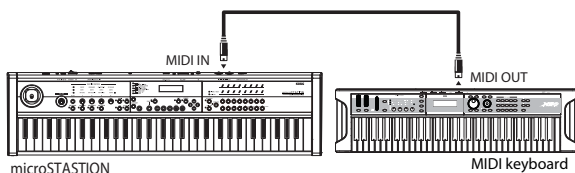You can also use a MIDI patch bay to control multiple MIDI devices.

Playing and editing programs

About the microSTATION's programs

On the microSTATION, a "program" is the basic sound. You'll use Program mode to play programs.

Programs are also used outside of Program mode.

In Combination mode you can combine multiple programs to create complex sounds.

In Sequencer mode you can assign a program to each MIDI track of the internal sequencer, or use the microSTATION as a sound module that's played from an external 16-channel MIDI sequencer.

In this section we'll explain basic ways to use programs, such as using the panel buttons in Program mode and basic editing.

Playing programs

Selecting a program

You can select a program in any of the following ways.

- Use the CATEGORY SELECT buttons and the ▲▼ buttons or the function 01–16 buttons
- Use a connected foot switch to select programs: PG p.65
- Receive MIDI program changes to select programs: PG p.60, PG p.63, PG p.305

For details, refer to the explanations below.

Using the CATEGORY SELECT buttons and the ▲▼ buttons

1. **Press the MODE PROG button (the LED will light).**

   You will enter Program mode, and the PROG PLAY page will appear.
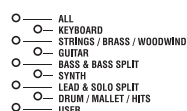
   ```
   PROG PLAY
   ↟001:L/R PIANO >
   ```
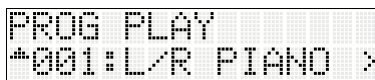
   The lower line of the display shows the index number and the name of the program.

   The "↟" shown at the left of the index number indicates that you can press the ▲ button to select programs within the current category. If a "-" is shown at the left of the number, that category contains only one program.

   Note: If the Global/Media mode "ScrollText" setting is On, names etc. that cannot be shown in the display because of their length will scroll.

2. **Use the CATEGORY SELECT buttons to choose a program category.**

You can choose from the following nine categories.

Category	Explanation
ALL	All categories
KEYBOARD	Acoustic piano, electric piano, clavi/harpsichord, and organ sounds
STRINGS/BRASS/WOODWIND	String, vocal, brass, woodwind, and reed sounds
GUITAR	Acoustic and electric guitar sounds
BASS&BASS SPLIT	Electric, acoustic, and synth bass sounds
SYNTH	Fast, slow, and motion synth sounds
LEAD&SOLO SPLIT	Synth lead sounds
DRUM/MALLET/HITS	Drum and percussion, bell, mallet, and sound effects
USER	Sounds saved as the user category (when shipped from the factory, contains initialized programs)

The front panel CATEGORY indicators show the selected category.

The first time you select a category, program 001 of that category will be shown.

3. **Use the ▲▼ buttons to select a program.**

4. **Play the keyboard to hear the sound of the selected program.**

Using the CATEGORY SELECT buttons and the function 01–16 buttons

Selecting a program by entering a numerical value

1. **Use the CATEGORY SELECT buttons to choose the desired program category.**

2. **Press the front panel NUM LOCK button to turn Num Lock on (LED lit-up).**

3. **Use function buttons 01 (1)–10 (0) to enter a numerical value, and then press the 14 (ENTER) button. You'll switch to the program of the index number you specified.**
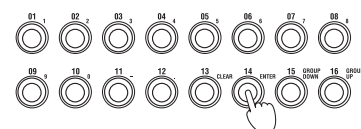
Selecting programs in groups of 16

1. **Use the CATEGORY SELECT buttons to choose the desired program category.**

2. **Turn the front panel PLAY/MUTE, NUM LOCK, and GRID SEQ buttons all off (LED unlit).**

3. **Now you can use function buttons 01–16 to select the programs of index numbers 1–16 within the chosen category.**

4. **To select a program from index number 17 and higher in that category, press the NUM LOCK button to turn Num Lock on (LED lit-up), and then press the 16 (GROUP UP) button.**
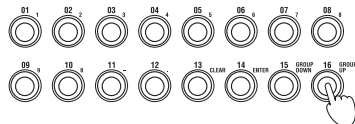
5. **Press the NUM LOCK button to turn Num Lock off (LED off).**

6. **Now you can use function buttons 01–16 to select programs from index numbers 17–32 within the chosen category.**

   When the NUM LOCK button is on, pressing the 15 (GROUP DOWN) button or the 16 (GROUP UP) button will cycle through the group of index numbers that can be selected: 17–32, 33–48, 49–64, ... etc.

Overview of the program memories

When the microSTATION is shipped from the factory, its program memory contains 480 preloaded programs, plus another 256 programs and 9 drum programs that are GM2 compatible. These programs are organized into banks as shown in the table below.

In PROG PLAY when you turn Num Lock on and press the 14 (ENTER) button, the bank and number are shown on the right side of the upper line of the display.

Program memories

Bank	Prog No.		Explanation
A...D	000...127 D:000...095	Preloaded programs	These programs are loaded when the microSTATION is shipped; they use a variety of multisamples, effects, and arpeggiators.
D	096...127	Initial programs	These are initialized programs for the user.
G (GM)	001...128	GM2 capital programs	These are 256 programs and 9 drum programs that are compatible with the GM2 sound map. The programs of this bank are read-only.
1...9 (g(1)... g(9))	001...128	GM2 variation programs	
d (g(d))	001...128	GM2 drum programs	Bank GM contains 128 programs, banks g(1)–g(9) contain 128 programs, and g(d) contains 9 programs. These programs cannot be written (saved).

On the microSTATION, you select programs using index numbers within each category. A category is pre-assigned to each program, or can be specified when you write a program.

The banks and numbers (Bank, Prog No.) shown in the table above are used to specify the writing-destination when writing a program, and to specify the copy-destination when executing a copy command.

✏️ On the microSTATION itself, you can't select a program by specifying a bank and number from the table above.

The AUDITION function

When selecting programs, you can use the Audition function which lets you use the AUDITION button to play a riff or phrase. If you press the AUDITION button (located below REALTIME CONTROLS knob 1) to make the LED at its left light-up, a riff (phrase) suitable for that program will play automatically.

Using Controllers

For details on performing with the joystick and the realtime controller, read the "Using Controllers" section on page 9.

Performing with the arpeggiator

Based on note data it receives from the keyboard or from the MIDI IN connector, the arpeggiator can generate a wide range of phrases and patterns including arpeggios, guitar or keyboard backing riffs, bass phrases, or drum patterns. You can also use the front panel Realtime Controller knobs to vary the length and dynamics of the arpeggiated notes.

For more about the arpeggiator, please see page 50.

Editing a program

Easy editing using the buttons and knobs

All of the microSTATION's programs can be edited.

You can create original programs by editing the preload programs on the microSTATION without needing to use external software.

By using the microSTATION Editor / Plug-In Editor software that is installed on your computer, you'll also be able to create original programs from scratch, starting from an initialized program.

However, creating the sound you want from an initialized program is a lot of work. We recommend that you start with a preload program that's close to what you have in mind, and modify it to your taste.

Let's try using the realtime control knobs on the microSTATION's front panel to edit a program. For example, you can edit parameters such as cutoff, resonance, and release time in this way.

Muting/un-muting oscillators

On the microSTATION, you can use the front panel PLAY/MUTE button and function buttons 01 and 02 to switch the mute/un-mute status of each program oscillator.

1. **Press the front panel PLAY/MUTE button to turn it on (the LED at the left of the button will light-up).**

2. **Press function button 01 or 02 to switch oscillators 1 or 2 between muted and un-muted states.**

   Function LEDs 1 and 2 located above the buttons will be lit-up or dark to indicate the status of each oscillator. The oscillator will sound if the indicator is lit-up, and will be muted if the indicator is dark.

   Note: Oscillator 2 cannot be controlled for a single oscillator program which uses only one oscillator.

Using realtime controls to edit the sound or effects

You can use the realtime controls (the SELECT button and knobs 1–4) to modify the sound and control the arpeggiator.
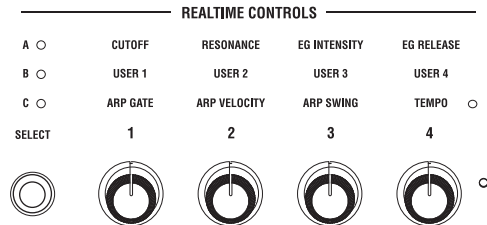
1. **Press the REALTIME CONTROLS SELECT button to switch the realtime control function between A, B, or C mode.**

   Each time you press the button, you'll cycle through A, B, and C modes, and the corresponding LED will light-up.

   Note: If CC#70–79 are assigned to REALTIME CONTROLS A mode and B mode, the sound that you edit using knobs 1–4 will be saved when you write the program. Arpeggiator settings you make in C mode will also be saved.

2. **Modify the sound by turning the knob that you want to control. See below for details.**

Mode A controls

In mode A you can turn knobs 1–4 to control or edit the following items.

Note: When a knob is in the center position (12 o'clock), the parameter will have the value specified by the program.

Knob [1]: CUTOFF

This adjusts the filter's cutoff frequency. Adjusting the cutoff frequency will modify the brightness of the sound.
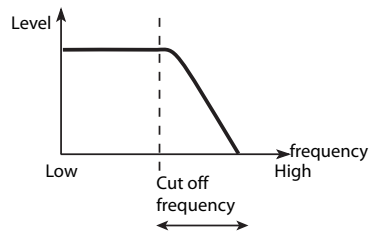
Knob [2]: RESONANCE

This adjusts the filter's resonance level.

Adjusting the filter resonance level will boost the sound in the region of the frequency, giving a distinctive character to the sound.

17
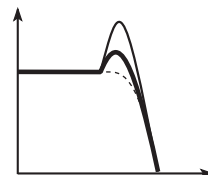
Knob [3]: EG-INTENSITY

This adjusts the filter EG intensity (the depth of how the EG affects the filter).

Operating the knob will change the amount of how the filter is affected by the EG. Normally, turning the knob toward the left will make the filter EG shallower, and turning the knob toward the right will make it deeper. Since the filter EG operates relative to the filter cutoff frequency, both knobs 1 and 3 will control the tonal change produced by the filter.

Knob [4]: EG-RELEASE

This adjusts the filter and amp EG release time, changing the time from note-off until the sound is no longer heard.

Turning the knob will change the release time of the filter EG and the amp EG. Normally, turning the knob toward the left will shorten the release time, and turning the knob toward the right will lengthen it.

Example:

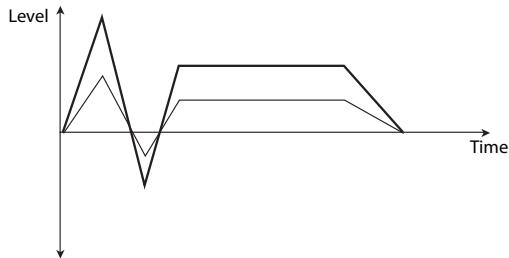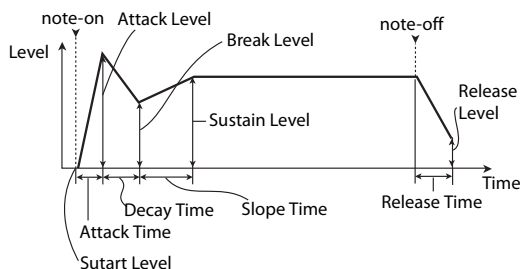1. **Select program "Category: KEYBOARD 042: Nu Digi EP".**

   This is an electric piano sound. Let's try modifying the sound a little.

2. **Press the REALTIME CONTROLS SELECT button to select mode A (the LED will light-up).**

3. **While you play, slowly turn knob 1 (filter frequency) about 3/4 toward the right.**

   The piano sound will become more like a synth sweep.

4. **Next, turn knob 2 (filter resonance) about 3/4 toward the right as well.**

5. **Leave knob 2 in its position, and try turning knob 1 to the left and right.**

   Raising the resonance will change the sound as though you were playing through a wah pedal.

Mode B controls

In mode B you can turn knobs 1–4 to control various aspects of the sound such as volume, portamento time, pan, filter and amp EG, pitch LFO, and master effect send level.

In mode B, the most useful functions are assigned individually for each preload program.

Mode C controls

In mode C you can control the arpeggiator in realtime.

For details on operation, refer to page 50.

Saving the edits you made by moving the knobs

The realtime control knobs are an ideal way to modify the sound while you perform. As needed, press the front panel WRITE button to execute "Write Program" and save the sound you've edited. (☞p. 58 "Writing to internal memory")

However for Realtime Control B mode knobs 1–4, the edited settings can be saved only if you've assigned CC#70–79.

Internally, a single knob usually affects several different parameters. When you write a Program, the edits are saved into the individual program parameters, and not to the knob itself.

After writing the Program, you'll notice that the knobs have returned to their center positions–since the old "edited" values are now the new "saved" values.

Restoring settings you've edited

Using COMPARE

When you're in the process of editing a sound, pressing the COMPARE button will recall the last saved version of the sound, as it was before you started editing.

For details, please see "COMPARE button - the Compare function" on page 8.

Saving your edits

After you've edited a program, you must save it if you want to keep the changes that you've made. If you re-select the program or turn off the power after editing, your edits will be lost.

For details, please see "Writing a Program or Combination" on page 58

You can also save programs on an SD card. For details, please see "Saving to media" on page 58.

Editing a program in detail

You can create an original sound by editing a preload program. (☞p. 58 "Writing a Program or Combination")

Before you start editing

The three elements of sound: pitch, tone, and volume

Sound is made up of three basic elements: pitch, tone, and volume.

The microSTATION provides "pitch," "filter," and "amp (amplifier)" sections that allow you to control these elements.

The "pitch" section modifies the pitch, the "filter" section modifies the tone, and the "amp" section modifies the volume.

Use PROG EDIT: OSC1 and OSC2 to edit the "pitch" section, and the PROG EDIT Filter/Amp group to edit the "filter" and "amp" sections.

EG, LFO, and controllers

In addition to the three elements listed above, a sound can vary according to the passage of time, the pitch range in which it's played, or by performance expressions.

Such aspects can be controlled by modulators and controllers such as the EG (envelope generator), LFO (low frequency oscillator), and joystick. These modulators and controllers apply change to the basic program.

Take a look at the illustration "Program structure." Notice that the signal flow is in the order of Oscillator/Pitch, Filter, Amp. You can see how the EGs and LFOs affect each section.

As shown in the illustration, each program consists of sections such as OSC 1/2, effects, and the arpeggiator.

OSC 1/2

OSC1 contains Oscillator/Pitch, Filter, Amp, EG, and LFO. The microSTATION provides OSC1 and OSC2, and you can combine these to create more complex programs.

Note: Pitch EG is shared by OSC1 and OSC2.

Effects

The output from OSC 1/2 is sent to the insert effects, master effects, and total effect. In the mixer section which controls the routing, you can freely specify the destination of each signal.

As effects, you can use five insert effects, two master effects, and one total effect.

Arpeggiator

A program can use one arpeggiator. You can select an arpeggio pattern, specify the range that the pattern will be developed within, and specify the range of notes or velocities that will trigger the arpeggiator.

Program structure
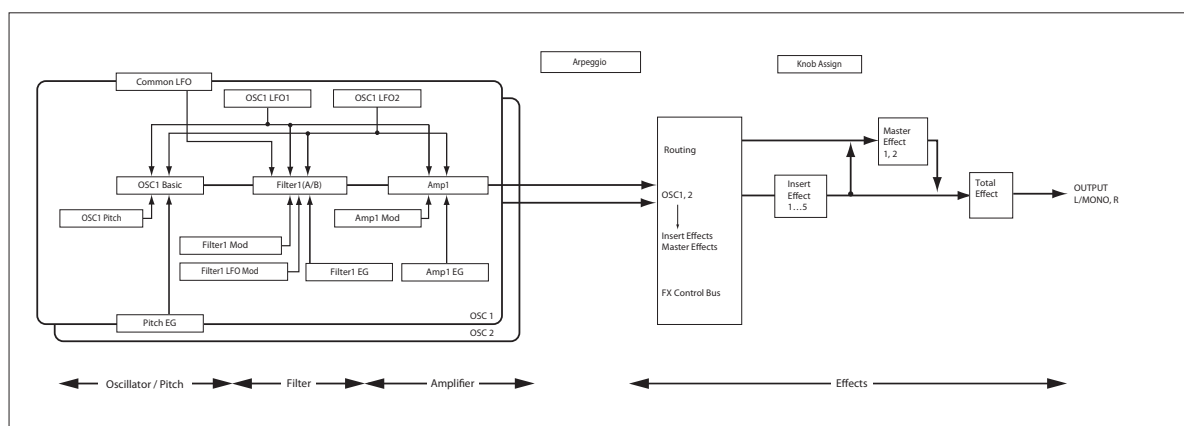
Summary of the edit pages

The PROG PLAY page lets you select and play programs. Here you can also use the realtime control knobs to perform simple editing or adjust the arpeggiator settings.

The PROG EDIT page lets you edit the sound in additional ways. It is divided into the following groups

Group	Summary
OSC Common	Polyphonic or monophonic setting. Pitch stretch, hold, and reverse settings.
Filter/Amp	Filter cutoff, frequency, resonance, filter EG intensity, and amp velocity intensity settings.
Filter/Amp EG	Filter and amp envelope settings.
Filter EG	Filter EG envelope settings.
Amp EG	Amp EG envelope settings.
Pitch EG/LFO	Pitch EG envelope settings.
LFO	LFO settings.
OSC1,OSC2	Oscillator 1 and 2 settings.
Audition Riff	Audition riff settings.
Knob Assign	Assign functions to knobs 1–4 when realtime control mode B is selected.
Tempo	Arpeggiator tempo setting.
ARP Setup	Arpeggiator settings.
FX Routing	Effect routing settings.
IFX 1–5	Insert effect settings.
MFX 1,2	Master effect settings.
TFX	Total effect settings.
Master Vol	Master volume setting.
Command	Commands
Write Program	Write a program.
External Setup	Check an external setup.

For details on how to access each mode and page, refer to the "Basic operating methods" section (☞p. 7).

Basic oscillator settings

Polyphonic/monophonic playing

Use the PROG EDIT: OSC Common "VoiceMode" setting to specify whether the program will play polyphonically (Poly) or monophonically (Mono).

With the **Poly** setting, you can play chords by pressing multiple keys simultaneously.

With the **Mono** setting, only one note will sound even if you press multiple keys simultaneously.

Normally you'll use the Poly setting, but Mono is effective when you're simulating an analog synthesizer bass or synth lead.

Try switching between Poly and Mono, and note the difference.

Controlling the pitch

Here you can adjust the way that the oscillator's pitch will change. You can use the pitch EG or LFO to make the pitch vary over time.

Varying the pitch according to keyboard position (Pitch Slope)

On keyboard instruments such as piano or organ, the pitch will go up as you play toward the right end of the keyboard, and will go down as you play toward the left end.

Use PROG: EDIT OSC1 or OSC2 "PtchSlope" to edit this.

With positive (+) settings, the pitch will go up as you play toward the right end of the keyboard, and will go down as you play toward the left end. Normally you'll leave this set at +1.0.

Pitch bend

The PROG EDIT: OSC1 or OSC2 "Pitch JS+X" and "Pitch JS-X" settings specify the amount of pitch change (in semitone steps) that will occur when MIDI pitch bend messages are received or when you move the joystick to the left or right.

With a setting of +12, the pitch can be raised by a maximum of 1 octave. With a setting of –12, the pitch can be lowered by a maximum of 1 octave.

Applying vibrato

You can use the LFO to create vibrato.

The PROG EDIT: Pitch EG/LFO "LFO1 Int" setting specifies the depth of how LFO1 will affect the pitch.

Portamento

Portamento creates a smooth change in pitch from one note to the next.

The PROG EDIT: OSC1 (or OSC2) "Portamento" setting turns portamento on/off, and "PortaTime" controls the time over which the pitch will change.

With higher values, the pitch change will take longer. With a value of "000" there will be no portamento.

Using LFOs and Envelopes (EGs)

Using LFOs

Each Oscillator has two LFOs: LFO1 and LFO2. There is also a single Common LFO, shared by both Oscillators. While LFO1 and LFO2 are separate for each voice, the Common LFO is shared by all voices in the Program. This makes it useful when you want all of the voices to have an identical LFO effect.

You can use these LFOs to modulate many different Program parameters, including:

- Pitch (for vibrato)
- Filters (for wah effects)
- Volume (for tremolo)
- Pan (for auto-panning)

The LFOs can modulate many other parameters, in addition to those listed above.

Basic LFO settings

Here we'll adjust settings for the LFO1 of oscillator 1.

1. Choose PROG EDIT: OSC1 "LFO1".

```
‹OSC1
 LFO1▲Triangle
```

2. Step through the various LFO1 waveforms to see what is available.

Numerous waveforms are provided, and there are typical uses for each waveform.

Triangle and **Sin**e are typical LFO shapes used for vibrato, tremolo, pan, and filter wah effects.

Square is suitable for gate filtering or volume change; it can be used to create a siren effect by varying the pitch.

Guitar is designed to simulate the vibrato produced by a guitarist; it only varies upward from the base value.

Saw and **ExpSawDwn** are appropriate for rhythmical changes in filter or volume.

Rnd1 (S/H) is suitable for controlling a resonant filter to create the typical sample-and-hold effect.

3. After you've noted each waveform, choose Triangle.

4. Choose PROG EDIT: LFO "LFO1 Speed."

```
‹LFO
 LFO1 Speed◆+00
```

5. Adjust the speed of LFO1.

6. The "LFO1 Fade" and "LFO1 Delay" settings control how LFO1 will be applied immediately after the note-on.

For more about the LFO, refer to ☞PG p.6.

These parameters control the movement of the LFO itself. The way that the LFO affects the actual sound is determined by the following parameters.

- Pitch EG/LFO: LFO1Int

- OSC1/OSC2: FltLFO1toA–FltLFO2toB, AmpLFO1Int–AmpLFO2Int, P.LFO1 AMS Int, P.LFO2 AMS Int

EGs (Envelope Generators)

An envelope creates a modulation signal by moving from one level to another over a specified time, and then moving to another level over another period of time, and so on.

The Program includes three EGs, for Pitch, Filter, and Amp. These produce time-varying changes in pitch, tone, and volume respectively.
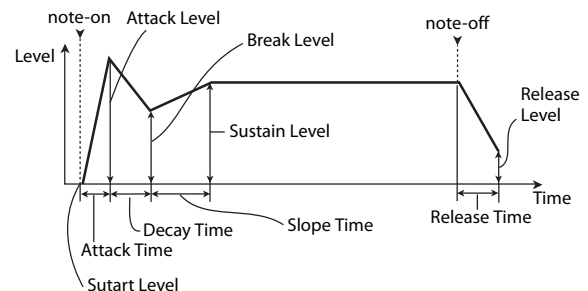
Adjusting the filter

A filter boosts or cuts specific frequency regions of the sound.

Filter settings have a significant influence on the character of the sound.

Adjusting the filter

Cutoff (cutoff frequency)

A filter cuts the frequency region that lies above or below the specified cutoff frequency, or around that frequency. The result will depend on the type of filter you use.

Cutoff Frequency

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Resonance

Resonance emphasizes the frequencies around the cutoff frequency, as shown in the diagram below.

When this is set to 0, there is no emphasis, and frequencies beyond the cutoff will simply diminish smoothly.

At medium settings, the resonance will alter the timbre of the filter, making it sound more nasal, or more extreme. At very high settings, the resonance can be heard as a separate, whistling pitch.

Low resonance

High resonance

Modulating a filter

You can use the filter EG or LFO to modulate the cutoff frequency of a filter. This is a method of producing rich variation in the character of the sound.

Filter EG
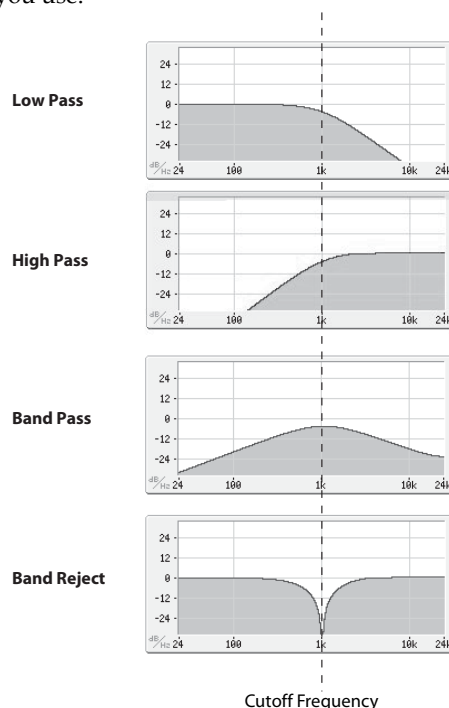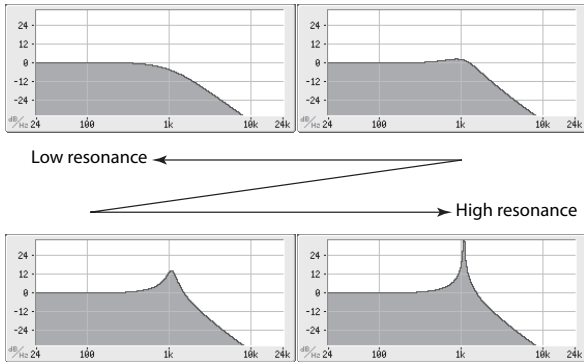
Use PROG EDIT: Filter/Amp "Flt EG Int" to specify how deeply the filter EG will modulate the filter. Use PROG EDIT: Filter EG to adjust the envelope.

```
‹Filter/Amp
 Flt EG Int⬍+00
```

LFO modulation

You can use LFO1 and LFO2 to modulate the filter. Filter modulation produced by an LFO will create a vintage-sounding auto-wah effect.

Use PROG EDIT: OSC1 (or OSC2) "FltLFO1toA," "FltLFO1toB," "FltLFO2toA," and "FltLFO2toB" to specify how deeply the LFOs will affect the tonal character.

```
‹OSC1
 FltLFO1toA⬍+00
```

Adjusting the amp

In the Amp section you can use Amp EG, and LFO 1/2 to control the volume.

Background - what does "Amp" mean?

Different sounds have characteristic shapes to their volume levels.

For example, the volume of a piano note begins at a high volume the instant you play the note, and then decreases gradually.
The volume of an organ note, on the other hand, remains constant as long as you continue pressing the key.

The volume of a note on a violin or wind instrument can be varied during the note by the musician (i.e., by regulating the amount of pressure on the bow or the force of the breath).
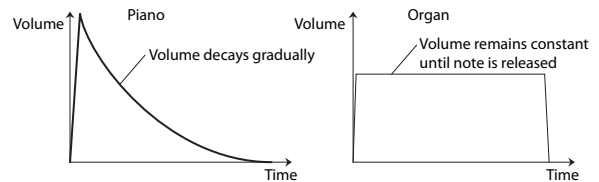
Amp Modulation

You can use the following modulation sources to vary the amp volume.

LFO1/2

This specifies the amount of volume change (tremolo) produced by the LFO.

Use PROG EDIT: OSC1 (or OSC2) "AmpLFO1Int" and "AmpLFO2Int" to specify how deeply the LFO will affect the volume.

```
‹OSC1
 AmpLFO1Int⬍+00
```

Velocity

Most programs will produce a lower volume when you play the keyboard softly, and a higher volume when you play the keyboard strongly. The PROG EDIT: Filter/Amp "AmpVel Int" setting specifies how velocity (keyboard playing strength) will affect the volume.

```
‹Filter/Amp
 AmpVel Int⬍+00
```

Normally you'll set the amp modulation to a positive (+) value. Raising this setting will increase the difference in volume between notes that are played softly or strongly.

Amp EG

The Amp EG lets you control how the volume changes over the course of a note.

Every instrument has its own characteristic volume envelope. This is part of what gives each instrument its identifiable character.

Conversely, by changing the volume contour–for instance, applying a string-like Amp EG curve to an organ multisample– you can produce interesting and unusual sounds.

Piano

Organ

Strings

Use PROG. EDIT: Amp EG to adjust the envelope.

```
‹Amp EG
 Attack      ↕+00
```
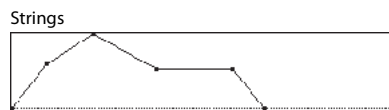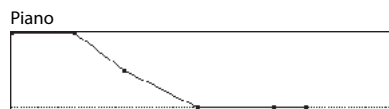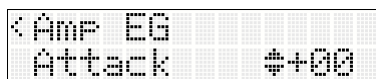
Arpeggiator

You can edit the arpeggiator used by the program.

You can choose from four preset patterns and 640 user patterns.

For more about the arpeggiator, refer to ☞p. 50.

Effects

For more about the effects, refer to the "Using Effects" section (☞p. 45).

Insert effects

Insert effect settings are made in PROG EDIT: IFX1–IFX5.

The output of each oscillator and of the overall program are sent to the insert effects. You can use effect types such as distortion, compressor, equalizer, and wah.

Master effects

Master effect settings are made in PROG EDIT: MFX. Effects such as chorus, reverb, and delay are most suitable for use with the master effects.

The output of each oscillator, of the entire program, or of the sound that has passed through the insert effects can be sent via "Send1" and "Send2" to the two master effects. Any effect type can be used.

Total effect

Total effect settings are made in PROG EDIT: TFX. The total effect is typically used with effect types such as compressor, limiter, or EQ that add a finishing touch to the overall sound.

Assigning functions to knobs

For each program, you can use PROG EDIT: Knob Assign to assign the function that knobs 1–4 will perform when realtime control mode B is selected.

1. **In PROG PLAY, press the ▶ button to enter PROG EDIT.**

2. **Use the ▲▼ buttons to access "Knob Assign," and press the ▶ button.**

3. **Press the ▶ button to choose knob 1.**

```
‹Knob Assign
 1-B↕Knob Mod1
```
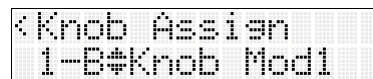
4. **Use the ▲▼ buttons to select the function that will be controlled by knob 1.**

5. **Press the ◀ button to return to the knob selection screen.**

6. **Use the ▲▼ buttons and ▶ button to choose other knobs and assign their functions in the same way as you did for knob 1.**

When you've finished assigning the functions of knobs 1–4, return to PROG PLAY, select realtime control mode B, and try using the knobs while you play.

Automatically importing a program into Sequencer mode

The Auto Song Setup function automatically applies the settings of the current program to a song.

This means that you can instantly set up a song using the program's settings, and then begin recording simply by pressing the Start/Stop button. Since a performance using the program's arpeggiator can be seamlessly shifted to song production, this lets you instantly create a song to capture phrases, inspirations, and ideas that occurred to you while playing a program. (☞p. 43 "Auto Song Setup function")

(☞PG p. 30 "Tips: Auto Song Setup")

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Playing and editing combinations

About the microSTATION's combinations

A "combination" consists of up to sixteen programs, which can be split or layered. This lets you create complex sounds that would not be possible for an individual program. You'll use Combination mode to play or edit combinations.

This chapter explains the basics of using combinations, such as how to use the panel buttons and perform basic editing in Combination mode.

Playing combinations

Selecting a combination

You can select a combination in any of the following ways.

- Use the CATEGORY SELECT buttons and the ▲▼ buttons or the function 01–16 buttons
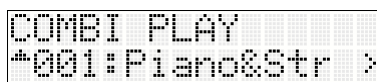- Use a connected foot switch: PG p.65
- Receive MIDI program changes: PG p.145, PG p.60, PG p.63, PG p.305

Details are given below.

Using the CATEGORY SELECT buttons and the ▲▼ buttons

1. **Press the MODE COMBI button (the LED will light-up).**

   You will enter Combination mode, and the COMBI PLAY page will appear.

   ```
   COMBI PLAY
   ♣001:Piano&Str  ⟩
   ```

   The lower line of the display shows the index number and the name of the combination.

   The "♣" shown at the left of the index number indicates that you can press the ▲ button to select combinations within the current category. If a "–" is shown at the left of the number, that category contains only one combination.

   If the Global/Media mode "ScrollText" setting is On, names etc. that cannot be shown in the display because of their length will scroll.

2. **Use the CATEGORY SELECT buttons to choose a combination category.**

   You can choose from the following nine categories.

Category	Explanation
ALL	All categories
KEYBOARD	Acoustic piano, electric piano, clavi/harpsichord, and organ sounds
STRINGS/BRASS/WOODWIND	String, vocal, brass, woodwind, and reed sounds
GUITAR	Acoustic and electric guitar sounds
BASS&BASS SPLIT	Bass and bass split sounds
SYNTH	Fast, slow, and motion synth sounds
LEAD&SOLO SPLIT	Synth lead and solo split sounds
DRUM/MALLET/HITS	Drum and percussion, bell, mallet, and sound effects
USER	Sounds saved as the user category (when shipped from the factory, contains initialized combinations)

   The front panel CATEGORY indicators show the selected category.

   The first time you select a category, combination 001 of that category will be shown.

3. **Use the ▲▼ buttons to select a combination.**

4. **Play the keyboard to hear the sound of the selected combination.**

Using the CATEGORY SELECT buttons and the function 01–16 buttons

You can use the CATEGORY SELECT buttons and function buttons 01–16 to select a combination in the same way as when selecting a program.

(☞p. 15 "Using the CATEGORY SELECT buttons and the function 01–16 buttons")

Overview of the combination memories

When the microSTATION is shipped from the factory, its combination memory contains 256 preloaded combinations organized into two banks as shown in the table below.

In COMBI PLAY when you turn Num Lock on and press the 14 (ENTER) button, the bank and number are shown in the right side of the upper line of the display.

Combination memories

Bank	Combi. No.	Explanation
A..B	000...127	Preloaded combinations
C	000...127	Initialized combinations, user combinations

On the microSTATION, you select combinations using index numbers within each category. A category is pre-assigned to each combination, or can be specified when you write a combination.

The banks and numbers (Bank, Combi No.) shown in the table above are used to specify the writing-destination when writing a combination, and to specify the copy-destination when executing a copy command.

On the microSTATION itself, you can't select a combination by specifying a bank and number from the table above.
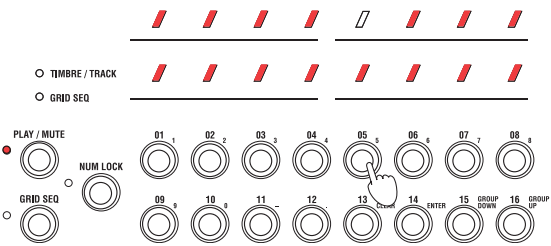
Performing with the arpeggiator

Based on note data that it receives from the keyboard or from the MIDI IN connector, the arpeggiator can generate a wide range of phrases and patterns including arpeggios, guitar or keyboard backing riffs, bass phrases, or drum patterns. When the Realtime controls C mode is selected, you can use the knobs to vary the duration and dynamics of the arpeggiated notes.

For more about the arpeggiator, please see page 50.

Using controllers to modify the sound

The microSTATION provides a variety of controllers that you can use to vary the sound, such as the joystick, and the realtime controls knobs.

For details, please see the corresponding explanation for Programs: "Using Controllers" on page 9.

Easy combination editing

All of the microSTATION's combinations can be edited.

You can create original combinations by editing the preload combinations, or by starting with an initialized combination.

Even without entering various pages for detailed editing, you can use the REALTIME CONTROLS buttons and knobs to effectively edit a combination simply from the COMBI PLAY page.

Timbre play/mute settings

You can use the front panel PLAY/MUTE button and function buttons 01–16 to switch each timbre's play/mute setting.

1. **Press the front panel PLAY/MUTE button to turn it on (the LED will light-up).**

   The function button 01–16 LEDs will indicate the play/mute status for timbres 1–16. A lit LED indicates Play, and a dark LED indicates Mute.

   Function buttons 01–16 correspond to timbres 1–16.

2. **Use function buttons 01–16 to switch the LEDs between lit and unlit; the corresponding timbre will switch between Play and Mute status.**

Simple editing using the knobs

You can use the realtime controls knobs to perform a variety of edits.

For example, you can use the realtime controls knobs to adjust the Filter cutoff or resonance. You can also use it to vary the depth of an effect, or to change the way in which the arpeggiator generates a phrase.

For details, please see "Realtime Controls" on page 9.

Edits you perform using the realtime controls cannot be saved.

Saving a Combination you've edited

After you've edited a combination, you must save it if you want to keep the changes you've made. If you re-select the combination or turn off the power before saving, your edits will be lost.
For details, please see "Writing a Program or Combination" on page 58.

You can also save combinations on an SD card.

For details, please see "Memory protect" on page 59.

Editing a combination

You can create an original combination either by editing a preload combination or by editing an initialized combination. You can then save (write) the edited combination.

Note: If a combination uses a program that was being edited in Program mode, that program will use the edited sound.

Summary of the edit pages

From the COMBI PLAY page, press the ▶ button to enter the COMBI EDIT page. The COMBI EDIT page lets you edit the sound in detail.

It is divided into the following groups.

Group	Summary
Timbres	Timbre parameters, effect routing settings, assign arpeggiators to timbres.
Knob Assign	Assign the function of knobs 1–4 when realtime control mode B is selected.
Tempo	Arpeggiator tempo setting.
ARP	Arpeggiator settings.
IFX 1 - IFX5	Insert effect settings.
MFX1, MFX2	Master effect settings.
TFX	Total effect settings.
MasterVol	Master volume setting.
Command	Commands
Write Combi	Write a combination.
External Setup	Check an external setup.

For details on how to access each mode and page, refer to "Basic operating methods"(☞p. 7).

A suggested approach for editing

First, select a Program for each Timbre. (Note that you don't have to use all 16 Timbres!)

Next, create any desired keyboard or velocity splits, layers, or crossfades between the different Timbres.

After this, adjust the volumes of the Timbres, and set up any other Timbre parameters as desired.

To add finishing touches to the sound, set up the Insert, Master, and Total Effect as desired. These effects can be different from those associated with the individual Programs in Program mode, if desired.

In addition, you can make arpeggiator and controller settings to create the finished Combination.

Note: You can use a command to copy a program's effect and arpeggiator settings (☞PG p. 27 "Command").

Combination structure and corresponding pages
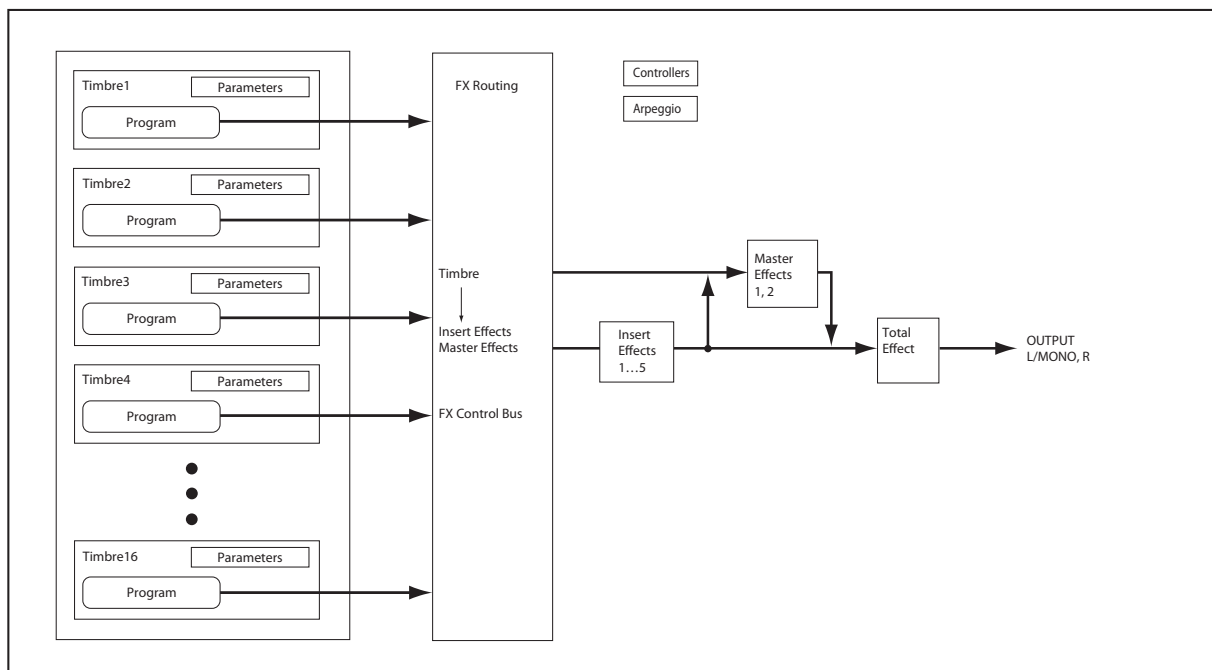
Changing the program assigned to each timbre

You can dramatically change the sound of a combination simply by changing the program that's assigned to each timbre 1-16.

1. **Access COMBI EDIT: Timbres - Timbre 01, and press the ▶ button.**

   In the first page of Timbre 01, you can select the program used by timbre 1 ("Program Select").

   Press the ▶ button once again; a "⊹", "⊹," or "⊹" symbol will appear at the left of the index number.

2. **Use any of the following methods to select the program for the timbre.**

   • Use the CATEGORY SELECT buttons to specify a category, and use the ▲▼ buttons to select an index number.

   • Use the CATEGORY SELECT buttons to specify a category, turn on the NUM LOCK button, and use function buttons 01–16 to enter an index number.

   Note: You can also switch programs by received MIDI program changes from a connected external MIDI device (☞PG p. 306).

3. **Make settings for another timbre. Make sure that the front panel PLAY/MUTE and NUM LOCK LEDs aren't lit, and use function buttons 01–16 to select a timbre. In this example, press the 02 button to select timbre 2.**

4. **Select a program for timbre 2 in the same way as you did in step 2.**

Layers, Splits, and Velocity Switches

Within a Combination, you can use note range and velocity level to define the "zone" where a specific timbre will play.

The Programs assigned to each Timbre can be played in three ways: as part of a **layer**, a **split**, or a **velocity switch**.
A Combination can be set to use any one of these methods or to use two or more of these methods simultaneously.

Layer

Layers cause two or more Programs to play simultaneously when a note is played.
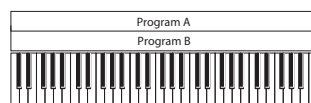
Layer:
Two or more programs sound simultaneously.

Split

Splits cause different Programs to respond on different areas of the keyboard.
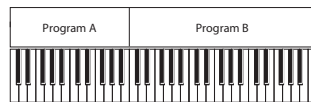
Split:
Different programs will sound in different areas of the keyboard.

Velocity Switch

Velocity Switches cause different Programs to respond depending on the velocity (how hard you play the notes).
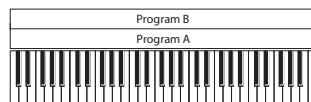
Velocity Switch:
Keyboard playing dynamics (velocity) switches between different programs.

On the microSTATION, you can use a different Program for each of up to sixteen Timbres, and combine two or more of the above methods to create even more complex setups.
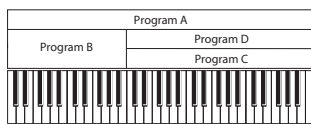
Example:
B and C/D are split. In the lower keyboard range, A and B are layered. In the higher keyboard range, C and D are switched by velocity and layered with A.

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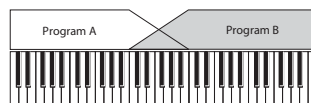
Keyboard X-Fade (keyboard crossfade):
As you play from low notes to high notes, the volume of A will fade out, and the volume of B will fade in.

Key split and layer settings

Split and layer

Let's try creating a combination using both a split and a layer as shown in the illustration below.

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

   (☞p. 27 "Changing the program assigned to each timbre")

2. **Choose COMBI EDIT: Timbres - Timbre 01 "Status."**
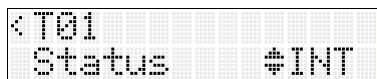
3. **Set the timbre 1 "Status" to INT.**

4. **For timbres 2 and 3 as well, set "Status" to INT.**

   You can use the function 02 or 03 buttons to switch timbres, and edit their settings.

5. **Specify the MIDI channel for each timbre. Choose COMBI EDIT: Timbres - Timbre 01 "MIDI Ch."**
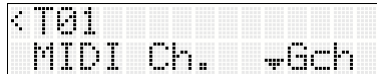
6. **For timbres 1–3, set "MIDI Ch." to Gch (global MIDI channel).**

   In the same way, use the function 02 or 03 button to switch timbres, and edit their settings.

7. **Specify each timbre's key zone (the range of notes that will play each timbre). Choose COMBI EDIT: Timbres - Timbre 01, Key Zone "Top."**

8. **Set the timbre 1 "Top" to G9 and "Bottom" to C4.**

   Note values can also be entered by holding down the front panel KEY button and playing a note on the keyboard.
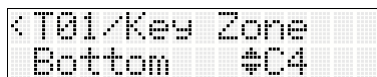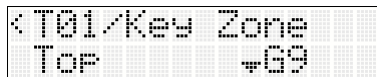
9. **Set the timbre 2 and timbre 3 "Top" to B3 and "Bottom" to C-1.**

   Use function buttons 02 and 03 to switch timbres, and edit their settings.

   Only timbre 1 will sound when you play the C4 key or higher.

   Timbres 2 and 3 will sound when you play the B3 key or lower.

Key zone slope

As an alternative to a "hard slope" where the sound changes abruptly, you can use the Slope parameter to create a setup where the sound will gradually fade-in or fade-out.

Starting from the example described above, let's make some changes.

1. **Set the timbre 1 "Bottom" to G3 and the timbre 2 "Top" to G4 so that the two timbres overlap.**

2. **Set the timbre 1 "Btm Slope" to 12 and the timbre 2 "Top Slope" to 12.**

   The sound will change gradually, rather than switching abruptly.
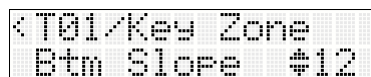
Velocity switch settings

Next let's create the simple velocity-switched combination shown in the illustration below.
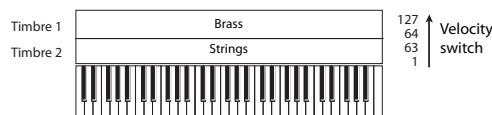
1. **Choose a brass program for timbre 1, and a strings program for timbre 2.**

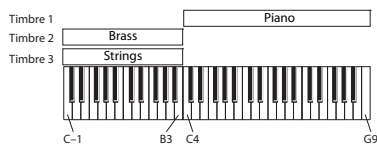   (☞p. 27 "Changing the program assigned to each timbre")

2. **Set the timbre 1 and 2 "Status" to INT, and set the "MIDI Ch." to Gch (global MIDI channel).**

   (☞steps 2–5 of "Split and layer").

3. **Access the COMBI EDIT: Timbres - Timbre 01, Vel Zone "Top" setting.**

4. **For timbre 1, set "Top" to 127 and "Bottom" to 64.**

   You can also enter a velocity value by holding down the front panel KEY button and playing a note on the keyboard.
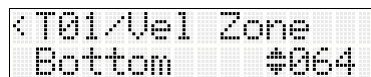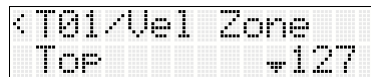
5. **For timbre 2, set "Top" to 63 and "Bottom" to 1.**

Velocity zone slope

As for the key zone slope described above, you can make settings so that the sound will gradually fade-in or fade-out according to velocity range, rather than switching abruptly.

Starting from the example that's described above, let's make some changes.

1. **Set the velocity zones of the two timbres so that they partially overlap.**

2. **Set the "Top Slope" and "Btm Slope" so that the sound changes gradually, rather than abruptly switching between velocity values 63 and 64.**

Editing parameters

Adjusting the volume of each timbre

The COMBI EDIT: Timbres - Timbre 01–Timbre 16 "Volume" settings adjust the volume of each timbre.

```
‹T01
 Volume      ▾127
```
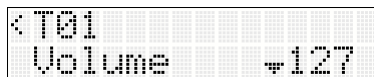
Use function buttons 01–16 to switch between timbres.

Adjusting the pan of each timbre

The COMBI EDIT: Timbres - Timbre 01–Timbre 16 "Pan" settings adjust the pan of each timbre.

```
‹T01
 Pan         ◆C064
```
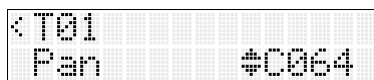
The timbre's pan setting works in conjunction with the pan setting of the program. If the timbre pan setting is C064, the pan will be the same as specified by the program setting. Adjusting the timbre pan will shift the sound toward the left or right while maintaining the pan settings of each oscillator. A setting of L001 is far left, and a setting of R127 is far right.

Switching the play/mute status of each timbre

If you press the front panel PLAY/MUTE button to turn it on (the LED at the upper left of the button will light-up), you can use function buttons 01–16 to turn each timbre on/off. By switching each timbre on/off, you can hear its sound and check its settings.

MIDI settings

Status

Here you can specify the MIDI and internal sound generator status for each timbre. Choose INT if you want the timbre to play the internal sound generator. Choose Off for timbres you're not using. Timbres that are set to Off, EXT, or EX2 will not sound. Choosing the EXT or EX2 setting lets that timbre control a MIDI-connected external sound module.

```
‹T01
 Status      ◆INT
```
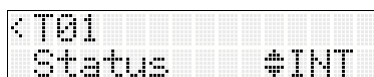
For more about this setting, refer to "Status" (☞PG p. 20).

MIDI channel

Use COMBI EDIT: Timbres - Timbre 01–Timbre 16 "MIDI Ch." to specify the MIDI channel for each timbre.

```
‹T01
 MIDI Ch.    ▾Gch
```
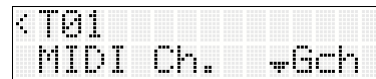
If you want to play a timbre from the microSTATION's keyboard, you'll need to set that timbre to the global MIDI channel (Gch). When you play the microSTATION's keyboard, you'll hear the timbres that are set to match this MIDI channel. Normally you'll set this to Gch. If this is set to Gch, the MIDI channel of the timbre will always match the global MIDI channel even if you change the global MIDI channel.

✎ In the preload combinations, timbres where the arpeggiator is assigned might have a MIDI channel setting other than Gch. Those timbres will sound only when the arpeggiator is on. (This is a useful technique when creating a combination that uses an arpeggiator.)
For details, refer to PG p. 23 "Arpeggiator settings in Combination and Sequencer modes". Please take special note of how the arpeggiator A/B assignments, status, and MIDI channel settings are related.

MIDI filter settings

COMBI EDIT: Timbres - Timbre 01–Timbre 16 MIDI Filter lets you adjust MIDI filter settings for each timbre.

Each MIDI filter item specifies whether the corresponding MIDI message will be transmitted and received. The message will be transmitted and received if the setting is On.

The MIDI filter setting is not an on/off switch for the function itself. It merely controls whether MIDI messages are transmitted and received.

For example, suppose you're creating a bass/piano split, and you've assigned a bass program to timbre 1 and a piano program to timbre 2. If you use the settings that are described below, the damper pedal will apply only to the piano sound played by timbre 2.

1. **Access COMBI EDIT: Timbres - Timbre 01, MIDI Filter "Damper."**

```
‹T01/MIDI Filter
 Damper      ◆Off
```

2. **Turn the timbre 1 "Damper" setting Off.**

3. **Press the function 02 button to switch to timbre 2.**

4. **Turn the timbre 2 "Damper" setting On.**

```
‹T01/MIDI Filter
 Damper      ▾On
```
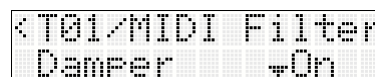
Altering Programs to fit within a Combination

You can make various changes to Programs within the context of a particular Combination to make them fit better with other Programs, or to create particular sonic effects. These changes do not affect the original Programs, or how those Programs sound in other Combinations.

Transpose, Detune

These parameters adjust the pitch of the timbre.

- In a layer-type combination, you can set two or more timbres to the same program, and create a richer sound by using "Transpose" to shift their pitch apart by an octave or by using "Detune" to create a slight difference in pitch between the two.

- In split-type combinations, you can use "Transpose" to shift the pitch (in semitone units) of the programs specified for each key zone.

- If you wish to change the playback pitch of a drum program, use "Detune". If you change the Transpose setting, the relationship between the notes that you play and drum-note assignments will change.

Filter and amp

The COMBI EDIT: Timbres - Timbre 01 Filter/Amp settings adjust the filter and amp parameters of the program used by the timbre.
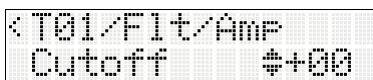
```
‹T01/Flt/Amp
 Cutoff    ⬍+00
```

Changes you make to these parameters are saved as part of the combination; they will not affect the original program.

Filter EG and amp EG

The COMBI EDIT: Timbres - Timbre 01 Filter/Amp EG parameters adjust the filter EG and amp EG parameters of the program used by the timbre.
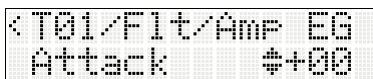
```
‹T01/Flt/Amp EG
 Attack    ⬍+00
```

Changes you make to these parameters are saved as part of the combination; they will not affect the original program.

Arpeggiator settings

According to the note data that's received from the keyboard or from the MIDI IN connector, the arpeggiator will automatically generate a wide range of phrases or patterns including arpeggios, guitar or keyboard backing riffs, bass phrases, or drum patterns. When the Realtime controls C mode is selected, you can use the knobs to vary the duration and dynamics of the arpeggiated notes.

Effects

Reverting the edited settings

Compare function

Use the Compare function when you want to compare the sound of the combination that you're editing with the sound before you began editing (i.e., the saved sound). (☞p. 8 "COMPARE button - the Compare function")

Automatically importing a combination into Sequencer mode

The Auto Song Setup function automatically applies the settings of the current combination to a song.

This means that you can instantly set up a song using the combination's settings, and then begin recording simply by pressing the Start/Stop button. Since a performance using the combination's arpeggiators can be seamlessly shifted to song production, this lets you instantly create a song to capture phrases, inspirations, and ideas that occurred to you while playing a combination.
(☞p. 43 "Auto Song Setup function")
(☞PG p. 30 "Tips: Auto Song Setup")

Creating songs (Sequencer mode)

Overview

About the microSTATION's Sequencer

The microSTATION's 16-track MIDI sequencer can hold up to 128 songs and 210,000 MIDI events.

You can record and play back MIDI data using sixteen MIDI tracks and one master track (containing tempo data, etc.) to control the internal sound generator and your external sound modules.

With its broad range of capabilities such as the arpeggiators, high-quality effects, and controllers, the microSTATION is the ideal environment for music production or live performance.

✍ When you turn off the power, the settings made in Sequencer mode, the song data, and any user pattern data that you recorded will not be backed up. If you wish to keep this data, you must save it on an SD card before turning off the power.

If you wish to write the programs, track parameters, effects, and arpeggiator settings etc. selected for a song as a template song, use the song command Save Template Song. (☞PG p. 48).

Immediately after the power is turned on, microSTATION will not contain any song data, so if you wish to play a song on the sequencer, you must first load data from SD card.
(☞p. 61, PG p. 69)

The specified template song will be loaded immediately after you turn on the power. Use Global/Media mode "Initial Song" to specify the template song that will be loaded.

Sequencer mode structure

Sequencer mode is structured as follows.

For details on each mode and how to access each page, please see "Basic operating methods" on page 7.

Songs

A song consists of MIDI tracks 1–16, a master track, song parameters such as the song name and arpeggiator.

A maximum of 128 such songs can be created on microSTATION.

MIDI tracks 1–16 each consist of setup parameters located at the start location, and musical data within the track. The master track consists of tempo and time signature data.

For details, please see "Setup parameters & Musical data"(☞p. 29) of the Parameter Guide.

Song recording and editing

Song recording is done on tracks.

You can record MIDI tracks using realtime recording. For realtime recording you can choose one of six recording modes. (☞PG p. 34)

The microSTATION also provides a Grid Sequence function that makes it easy to create drum patterns. This lets you use function 01–16 buttons and LEDs to enter notes at the desired grid locations.

You can edit MIDI tracks in units of entire tracks or individual measures. You can also insert or edit individual events such as pitch bend, aftertouch, and control change data.

Sequencer mode structure
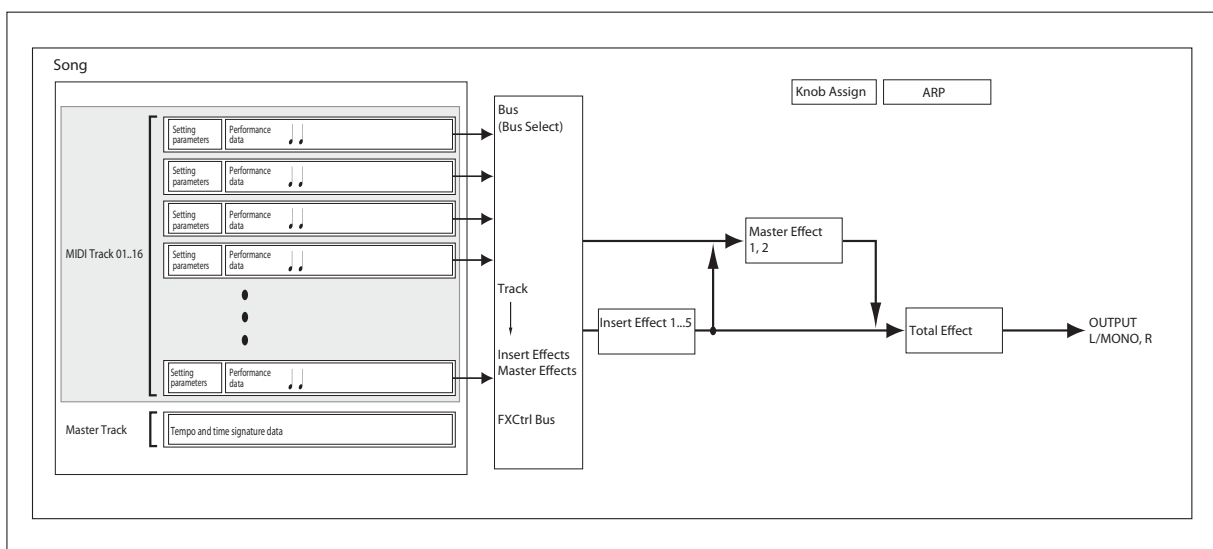
What each button does
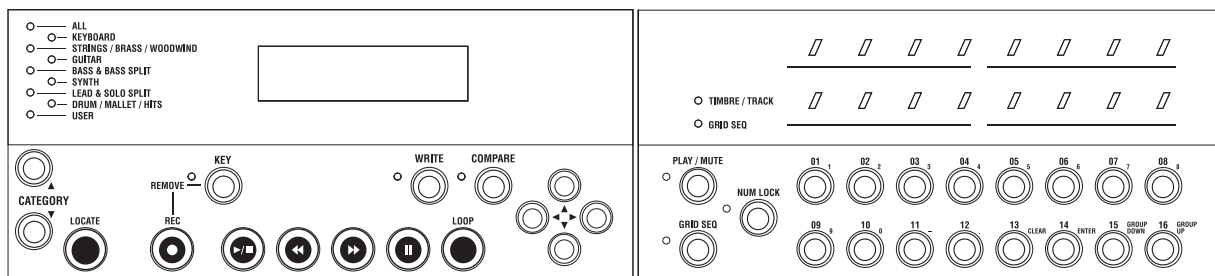
LOCATE button

This button instantly moves the playback position of the song to a previously specified location. By default, this location will be the first beat of measure 1.

To set the current playback position as this location, hold down the WRITE button and press the LOCATE button.

Alternatively, you can use the song command "Location Point" to directly specify the location.

REC button

When you press this button, the microSTATION will enter record-ready mode. From record-ready mode (the button will light-up), press the Start/Stop button to begin recording (☞p. 34 "Let's try recording").

KEY (REMOVE) button

Normally in each mode, you can specify a note number by holding down this button and pressing a key.

During loop recording, this button operates as the Remove (delete) button. If you hold down this button and press a key, notes corresponding to that key will be deleted. If you hold down this button and press the REC button, all events will be deleted.

▶■ (Start/Stop) button

This button starts/stops recording or playback.

◀◀ (REW) button

When the song is playing or paused, pressing this button will rewind the song. If you hold down this button, the button will light-up, and the song will rewind while playing. (This does not work during recording or while the song is stopped.)

Note: You can use the song command "FF/REW Speed" to specify the rewind and fast-forward speed.

▶▶ (FF) button

When the song is playing or paused, pressing this button will fast-forward the song. If you hold down this button, the button will light-up, and the song will fast-forward while playing. (This does not work during recording or while the song is stopped.)

❙❙ (Pause) button

This button pauses song playback. While paused, the button will light-up. When you press the button once again to cancel pause and resume song playback, the button will turn off.

LOOP button

When you press this button, playback or recording will loop according to the loop parameter settings.

The Loop function will turn on/off each time you press the button. When you turn the Loop function off, the recording mode will return to its previous setting.

✎ You can't turn the Loop function on during multi-track recording.

PLAY/MUTE button

When you press this button (the LED at the upper left of the button will light-up), you can use the function buttons 01–16 located at the right to control the play/mute status of each track.

GRID SEQ button

When you press this button (the LED at the upper left of the button and the LED at the left of the function LEDs will light-up), the Grid Sequence function will turn on, allowing you to create drum patterns by using the function 01–16 buttons and LEDs 1–16 located at the right. The Loop function will turn on automatically.

NUM LOCK button

When you press this button (the LED at the upper left of the button will light-up), the function 01–16 buttons at the right will operate as numeric keys, CLEAR, ENTER, GROUP DOWN, and GROUP UP.

When the three functions are off (LED off), the function 01–16 buttons are used to select tracks.

Function 01–16 buttons

Depending on the state of the PLAY/MUTE, GRID SEQ, and NUM LOCK buttons, these sixteen buttons can be used to select tracks, switch the play/mute status, use the grid sequence function, or as numeric keys.

TIMBRE/TRACK LED

This will light-up when the function 01–16 buttons and LEDs can be used to select timbres or tracks.

GRID SEQ LED

This will light in Sequencer mode when you press the GRID SEQ button to turn on the Grid Sequence function.

Function 01–16 LEDs

Depending on the state of the PLAY/MUTE, GRID SEQ, and NUM LOCK buttons, these LEDs indicate the track selection (when the TIMBRE/TRACK LED is lit-up), the play/mute status, or the grid sequence settings (when the GRID SEQ LED is lit).

Performing in Sequencer mode

Playing back

Playback methods

In order to play back song data, you must first record the data or load song data into the microSTATION.

Let's start by loading a demo song and playing it back. For details on the loading procedure, please refer to the "Loading the demo songs" section in the easy start guide.

1. **Press the MODE SEQ button to enter Sequencer mode.**

   ```
   SEQ      [001:01]
   ↑000:Splinter   >
   ```
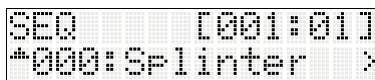
2. **Use the ▲▼ buttons to select the song that you want to play back.**

   If there is more than one song, a ⊤ or ⊕ symbol is shown at the left of the song number, and you can use the ▲▼ buttons to select the desired song. If there's only one song, these symbols won't be shown.

3. **Press the Start/Stop button.**

   Song playback will begin.

   The location indicator in the upper right of the display shows the currently playing measure and beat.

4. **During playback, press the Start/Stop button to stop playback.**

   When you press the Start/Stop button once again, playback will resume from where you stopped it.

   For details on using the LOCATE, Pause, ◀◀ (REW), and ▶▶ (FF) buttons, please refer to p. 32.

   You can use the song command "FF/REW Speed" to specify the speed of rewind and fast-forward. (☞PG p. 48)

Specifying the location

By pressing the LOCATE button you can move to a specified location. By default, you'll move to 001:01.

You can use the song command "Set Location Point" to change this location.

Alternatively, you can specify the location during playback by holding down the WRITE button and pressing the LOCATE button (☞PG p. 49 "Location Point")

Loop playback

By pressing the LOOP button you can make the song play as a loop. In this example, we'll loop measures 1 through 4 of the demo song.

1. **Press the LOOP button to turn the Loop function on (the button will light-up).**

2. **Press the ▶ button to access the SEQ: PLAY - LOOP - P setting "Loop M:".**

   ```
   ‹LOOP-P [001:01]
   ↵Loop M:001-001›
   ```

3. **Set the first measure of the loop to 1, and the last measure to 4.**

   ```
   ‹LOOP-P [001:01]
    Loop M001-↕004
   ```
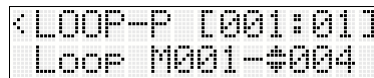
4. **Press the Start/Stop button to play back the demo song.**

   Measures 1 through 4 will play repeatedly.

   Note: During song playback/recording, you can also individually loop the MIDI track being played back (☞p. 36 "Loop playback settings")

Switching MIDI tracks during playback

When the microSTATION starts up, a template song is loaded into Sequencer mode. A program is assigned to each of the template song's sixteen tracks.

In this example, we'll enter Sequencer mode and switch MIDI tracks to hear the program that's assigned to each track.

1. **Press the MODE SEQ button to enter Sequencer mode.**

2. **In the song select screen, use the function 01–16 buttons to select a track.**

   When the TIMBRE/TRACK LED located in the right of the front panel is lit, you can use the function 01–16 buttons to select tracks.

   The function 01–16 LEDs will light-up to indicate the track that's currently selected.

   The display will show a screen where you can select the program for each track; here you can view the number and name of the program used by each track.

   ```
   ‹T03:TRACK 03
   ↵›001:A.Piano 1›
   ```

   The category of the program is shown by the CATEGORY indicators located at the left of the display.

3. **When you play the keyboard, you'll hear the program that's assigned to the track.**

   Note: A program is assigned to each of the template song's sixteen tracks, so you can press the function 01–16 buttons to select the sounds of sixteen different programs within the song.

MIDI recording

When you use the microSTATION's sequencer to record, your keyboard performance and your use of the joystick and other controllers are recorded in realtime.

In most cases, you'll use "single track recording" where you record one track at a time.

Note: As an alternate to single track recording, you can also use "Multi-track recording"(☞p. 44).

Let's try recording

We'll use a Sequencer mode template to record a drum track and a bass track.

When you enter Sequencer mode on the microSTATION, the specified template will be loaded. This template assigns each track's program, volume level, and pan setting etc.

Note: Use the Global/Media mode GLOBAL/MEDIA: Basic setting "Initial Song" to specify the template that will be loaded (☞PG p. 60).

Recording the drum track

Let's use the drum program of track 1 to record the following drum pattern.

Hi hat: Ab3
Snare: D3
Bass drum: C3

1. **Press the MODE SEQ button to enter Sequencer mode.**

2. **Press the REC button to enter record-standby mode.**

   The REC button will light, and the Start/Stop button will blink.

   The function 01 LED will light, indicating that track 1 is selected for recording.

   Note: From this state, you can press one of the function 02–16 buttons to change the track that will be recorded. The display will show a screen where you can specify the tempo and the recording mode.

   When in recording-standby mode, you can use the ▲▼ buttons to access a page for making recording-related settings. Use the ◄► buttons to select a parameter, and use the ▲▼ buttons to change the setting.

   For this example, use the following settings.

   Tempo and recording mode
   "M" (recording mode): OVW (overwrite)

   Select a tempo where you can record comfortably.

   ```
   ‹REC        [001:01]
   ♩:120.00 M:OVW›
   ```
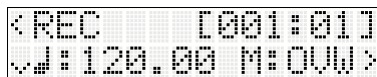
   Time signature and quantization
   "TS" (time signature): 4/4, "Q" (quantization): Hi

   ```
   ‹REC        [001:01]
   ◊TS:  4/4      Q:Hi›
   ```
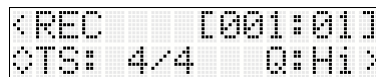
"Q" specifies how the timing of the MIDI data you perform will be corrected while you realtime-record to a MIDI track. (Previously-recorded data will not be corrected.)

For example, suppose that you played eighth notes while realtime-recording, but your rhythm was slightly incorrect as shown in figure 1. If you realtime-record with "Q" set to ♩ in this case, the notes would automatically be adjusted to the timing shown in illustration 2, below. If the "Q" setting is Hi, your performance will be recorded at the actual timing; no correction will be applied.

Location
Specify the location where recording will begin.

"Set" (Set Location): [001:01]

```
‹REC
◊Set [:001 :01]›
```
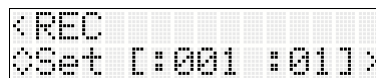
Tempo and tempo mode
Adjust tempo-related settings for the song. For this example, choose the Manu setting so that the song will follow the "♩(Tempo)" setting.

Tempo mode: Manu (Manual)

```
‹REC        [001:01]
◊♩:120.00 :Manu›
```
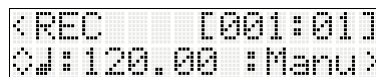
Metronome sound
Specify how the metronome will function. For this example, adjust settings so that the metronome will be on only during recording.

Metronome (Metronome Sound): REC

```
‹REC        [001:01]
◊Metronome :Rec›
```

Metronome bus
Specify the output bus for the metronome.

Metro Bus: L/R

```
‹REC        [001:01]
◊Metro Bus :L/R›
```
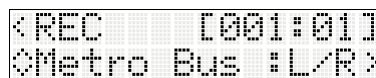
Metronome level
Specify the volume level of the metronome.

Metro Lvl: 127

```
‹REC        [001:01]
◊Metro Lvl :127›
```
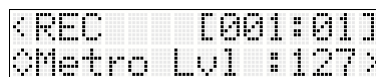
Metronome pre-count

Specify the pre-count when recording.

Metro Count: 2

```
<REC        [001:01]
^Metro Count :2>
```
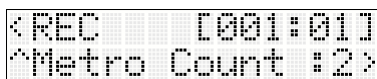
For details on these parameters, please refer to the parameter guide.

3. **Press the Start/Stop button to start recording. Use the keyboard to record the drum pattern.**

When you start recording, the function 01 LED which indicates the track that's being recorded will change from being steadily lit to blinking at regular intervals.

4. **Press the Start/Stop button to stop recording. The location will return to the beginning of the song (or the place where you started recording).**

The function 01 LED will blink at irregular intervals, indicating that this track has been recorded.

When you continue recording other tracks, the way in which these LEDs are blinking will indicate which tracks are empty.

5. **Press the Start/Stop button to play back the drum track you recorded.**

Press the Start/Stop button once again to stop the playback.

If you're not satisfied with your performance, press the COMPARE button. You'll return to the state you were at prior to recording, allowing you to re-record from step 2.

Recording the bass track

Now let's record the following bass pattern on track 2, the bass track, while you listen to the drum pattern recorded on track 1.

1. **Press the function 02 button to select track 2. You'll hear a bass sound when you play the keyboard.**

    Note: If you press the function 01 button at this time to select track 1, the function 01 LED will blink at irregular intervals. This is a useful indication that this track has already been recorded.

2. **Press the LOCATE button to return the location, and play back. Play the keyboard to practice the bass part while you listen to the drum pattern.**

3. **Press the REC button to enter recording-standby mode.**

    Just like when you recorded the drum track, the REC button will light-up, and the Start/Stop button will blink.

    This time you're recording track 2, so the function 2 LED will light-up.

4. **Just like you did when recording track 1, set the recording-related parameters (p. 34 "Recording the drum track" step 2).**

5. **Press the Start/Stop button to start recording.**

    Play the keyboard to record while listening to the drum track.

    During recording, the function 02 LED will blink at regular intervals.

6. **Press the Start/Stop button to stop recording.**

    The location will return to the beginning of the song (or the place where you started recording).

    The function 02 LED will blink at irregular intervals, indicating that this track has been recorded.

7. **Press the Start/Stop button to play back the drum track and bass track you recorded, and listen to the playback.**

Go ahead and assign a desired program to another track, and record it in the same way.

Recording with the Loop function

The Loop function lets you record onto a track repeatedly over a specified range of measures. For example, you could loop about four measures and individually record each instrument of a drum pattern.

Loop recording

In this example, we'll create a new song and loop-record a drum pattern.

1. **Press the MODE SEQ button to enter Sequencer mode.**

2. **Choose "Create New" to create a new song (☞p. 41 "Creating a new song").**

3. **In a new song, a drum program is assigned to track 1.**
    Press the function 01 button to select track 1.

    If you want to select a different drum program, press ▶ button to choose "Program Select."

```
<T01:Drums1
♦017:Basic Kit
```
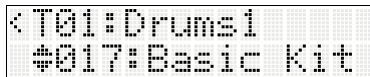
Then use the ▲▼ buttons to select a different drum program.

4. **Press the LOOP button, and then the REC button. (The order in which you press these buttons does not matter.)**

    The LOOP button will light-up, and track 1 will be in recording-standby mode.

    The display will show the loop region setting switch ("Loop M: ***-***").

```
<LOOP-R [001:01]
√Loop M:001-001>
```

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5. **Set the loop region to M: 001–004, so that measures 1–4 will be loop-recorded.**

6. **Specify the recording-related parameters (p. 34 "Recording the drum track" step 2).**

   You can use the Rehearsal function when loop-recording.

   If you want to use the Rehearsal function, turn "AutoRehrsl" On.

   ```
   ‹LOOP-R [001:01]
    AutoRehrsl▾On
   ```

   The Rehearsal function suspends recording when you switch tracks during loop recording, while allowing the recorded content to continue playing as a loop. While recording is suspended (i.e., when rehearsal mode is on), nothing will be recorded even if you play the keyboard. This lets you find an appropriate sound by playing the keyboard to try out various programs, or rehearse the phrase or pattern you'll be recording.

7. **Press the Start/Stop button to start recording.**

   Play the keyboard to record each instrument of the drum pattern. Start by recording just the kick. Then record the snare, hi-hat, and so on, successively layering the notes to record the entire drum pattern.

   If you're not satisfied with the recording
   Hold down the KEY button, and at the timing of the unwanted notes, press the key whose notes you want to delete.

   This lets you delete specific notes without stopping loop-recording.

   When you finish recording the drum track, let's switch to the bass program on track 2 and record without halting recording.

8. **Press the function 08 button to select track 2.**

   You'll switch to track 2 (the function 02 LED will light), and Rehearsal will turn on. The location will return to the beginning, and the drum track will play as a loop. At this time, nothing will be recorded even if you play the keyboard.

   If you want to use a different bass program, press the ▶ button to choose "Program Select." Then use the ▲▼ buttons to select a different bass program.

   While listening to the drum track, you can play the keyboard to try out various bass sounds. When you've decided on a sound for track 2, and have worked out the phrase you'll be recording, you can resume recording.

9. **Press the function 02 button to turn Rehearsal off.**

   The function 02 LED will change from being steadily lit to blinking at regular intervals; now you can record the track.

   Each time you press the function button, you'll alternately turn Rehearsal on or off.

10. **Play the keyboard to record on track 2.**

11. **Press the Start/Stop button to stop recording.**

The function 02 LED will blink at irregular intervals, indicating that this track has been recorded.

Loop playback settings

You can individually loop the playback of MIDI tracks when playing-back or recording a song.

For example if you want to loop track 1, turn the SEQ EDIT: Tracks - T01: TK01, Play Loop "Loop" setting On.

Then set "Start M" and "End M" to specify the first and last measure that will play back repeatedly.

If "Play Intro" is turned On, the intro portion will play back first, and then the specified region of measures will play repeatedly.

Example settings

• Track 1: "Loop": On, "Start M": 005, "End M": 008, "Play Intro": On
• Track 2: "Loop": On, "Start M": 009, "End M": 010, "Play Intro": Off

If you play back from the first measure with the example settings above, the specified region will play repeatedly in the following way.

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13
Track 1	1	2	3	4	5	6	7	8	5	6	7	8	5
Track 2	9	10	9	10	9	10	9	10	9	10	9	10	9

If track 1 "Play Intro" is Off, the specified region will play repeatedly in the following way.

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13
Track 1	5	6	7	8	5	6	7	8	5	6	7	8	5
Track 2	9	10	9	10	9	10	9	10	9	10	9	10	9

Recording with the arpeggiator

Typically, the preset template songs assign arpeggio patterns suitable for the corresponding musical genre to the drum track and the bass or guitar track. This means that you can record the drum track or bass/guitar track simply by turning on the ARP ON/OFF button.

1. **Choose the song command "Create New" to create a new song (☞p. 41 "Creating a new song").**

   The new song will have the settings of template song P00: Pop.

2. **Press the function 01 button to select track 1 (the drum track).**

3. **Turn on the ARP ON/OFF button, and play any key.**

   A drum pattern generated by the arpeggiator will start.

   Listen to the phrase, and then press the ARP ON/OFF button to turn off the arpeggiator for now.

   Note: You can use SEQ EDIT: ARP - ARP-A Setup, "Pattern Select" to change the arpeggio pattern.

4. **Start recording. Turn on the ARP ON/OFF button.**

5. **Press the REC button and then the START/STOP button to start recording.**

   Note: The function 01 LED will blink at regular intervals, indicating that recording has begun.

6. **During the two-measure pre-count, press a key and hold it down.**

   The arpeggiator will not start during the pre-count. When the location reaches 001:01, the arpeggiator will start in synchronization with the tempo.

7. **When you start recording , wait for about eight measures and press the START/STOP button to stop recording.**

   The arpeggiator will stop at the same time.

   Note: The function 01 LED will blink at irregular intervals, indicating that this track has been recorded.

8. **Next you'll record the guitar track. For a new song with the default settings, an arpeggio suitable for acoustic guitar is assigned to track 4. Press the function 04 button to select the guitar track. Then record the guitar chording in the same way as described earlier through step 7.**

9. **Press START/STOP to play back the drum and bass tracks you recorded.**

Play/Mute function

The microSTATION provides a Play/Mute function that lets you mute the specified MIDI tracks 1–16. For example, you can use this to mute the sound of a track that you temporarily don't want to hear, or to hear only the rhythm section and ignore other existing tracks while you record new tracks. Let's try out the Play/Mute function.

Playing/muting specific tracks during playback

We'll try out the Play/Mute function using the drum pattern and bass pattern you loop-recorded earlier.

1. **Press the PLAY/MUTE button to turn it on (the LED at upper left of the button will light-up).**

   The play/mute status will alternate each time you press the button.

2. **Press the Start/Stop button to play back the drum and bass pattern.**

3. **Press the function 02 button.**

   The function 02 LED will go dark, and the bass playback will be muted.

   When you press the function 02 button once again, the function 02 LED will light-up, and the bass playback will be heard.

Playing/muting specific tracks during recording

You can also use the Play/Mute function during recording. In this example, let's add an electric piano performance to the drum pattern and bass pattern that you loop-recorded earlier. We'll use the Play/Mute function during this process.

1. **Turn the LOOP button on, and press the REC button. Then press the function 03 button to select track 3.**

2. **Choose an electric piano sound for track 3.**

3. **Press the Start/Stop button to start recording.**

   If you need to rehearse, press the function 03 button (the function 03 LED will light-up).

   If you press the function 03 button once again, recording will be possible. (The function 03 LED will blink at regular intervals.)

4. **Press the PLAY/MUTE button to turn it on. Then press the function 02 button to mute the bass performance of track 2.**

   At this time, the function 02 LED will be unlit, and the 03 LED will be blinking at regular intervals.

5. **Play the keyboard to record the electric piano performance on track 3.**

6. **When you press the function 02 button once again, the bass of track 2 will be heard.**

   If you are not satisfied with your recording, hold down the KEY button and play the key of the undesired note at the timing that it occurs. Alternatively, you can delete all events recorded on that track by holding down the KEY button and pressing the REC button.

Grid Sequence function

What is the Grid Sequence function?

The grid sequence function lets you create phrases such as drum patterns by entering notes on a grid. Even if you're not comfortable recording the drums from a keyboard, this method allows you to easily create drum patterns.

What is the grid?

Let's think of an 8-beat measure as an empty grid. First we'll use vertical lines to indicate each of the 8th notes. Since our example has one measure, we'll draw eight vertical lines.
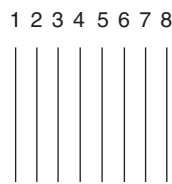
Next we'll use horizontal lines to indicate the note numbers (different instrumental sounds). Since we're going to use four drum instruments, we'll draw four horizontal lines.
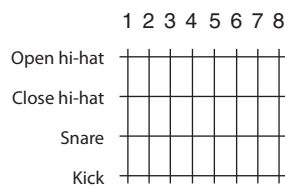
We'll use a "+" symbol to indicate each intersection between a vertical and horizontal line. Each "+" symbol indicates a grid location. The following illustration shows an empty grid for one 8-beat measure.
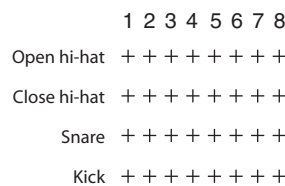
In our example, we'll use this grid to enter the 8-beat one-measure drum pattern shown below.
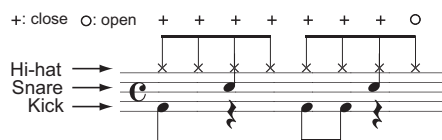
The illustration below shows how we can use the grid to depict this 8-beat drum pattern. The "●" symbol indicates a grid location at which the corresponding drum instrument is heard.
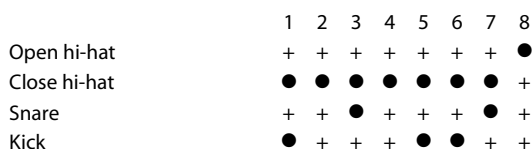
You can use the microSTATION's grid sequence function to create this pattern by turning the "+" locations off and the "●" locations on.

You'll use the function 01–16 buttons and function 01–16 LEDs to make grid settings. You can use the function 01–16 buttons to specify a sequence of up to 64 grid steps. For example with a 4/4 time signature and an 8-beat rhythm, this lets you create a pattern up to eight measures long. With a 4/4 time signature and a 16-beat rhythm, the pattern can be up to four measures long.

Recording with the Grid Sequence function

Let's use the Grid Sequence function to create a simple drum pattern.

Note: When you record using the Grid Sequence function, each note's velocity value and duration (note length) are recorded at a fixed value specified by "Init Vel" and "Init Dur" respectively. If you want to create changes in these values, you'll need to edit them after recording.

🔏 You can't use the Grid Sequence function to turn a grid note on/off while a song is playing or being recorded. You must first stop playback or recording.

1. **Create a new song.**

   (☞p. 35 "Recording with the Loop function" steps 1–3)

2. **Assign a drum program to track 1.**

   (☞p. 35 "Recording with the Loop function" steps 3–5)

3. **Press the GRID SEQ function.**

   The Grid Sequence function will turn on. The LED located at the upper left of the GRID SEQ button and the GRID SEQ LED located at the left of the function LEDs will light-up.

   When the Grid Sequence function is turned on, the Loop function will turn on.

   Note: The LOOP button will not light-up when the Grid Sequence function turns on. When you exit the Grid Sequence function, Loop will remain on, and the LOOP button will light-up.

   When the Grid Sequence function turns on, the display will show a screen that lets you specify the measures over which the loop will repeat, and the quantization setting ("LpEnd" and "Q").

   For this example, set "LpEnd" to 002.

   By default, the loop setting will be the loop setting ("Loop M***-***") that was specified when you turned the Loop function on. If you want to change the loop start measure, turn off the Grid Sequence function and use "Loop M***-***" to change the setting. The measures that will be looped can be changed in the Grid Sequence function setting screen.

   By default, the time signature setting ("TS") will be the setting of the song. If you want to change this,

turn off the Grid Sequence function and use SEQ EDIT: Track Edit - Edit Time Sig, or press the REC button and use the "TS" field to change the time signature for recording.

4. Press the Start/Stop button to start playback.

At this point, all grid notes are off, so you won't hear anything, but you'll notice that the function LEDs will be lit-up.

During playback, function 01–08 LEDs indicate the location, and function 09–16 LEDs indicate the status of each grid note. These LEDs will blink in time with the playback tempo and quantize settings.

Example 1) Loop: 01–002 (two measures), "TS": 4/4, "Q": 8th (♪)

First measure

Second measure
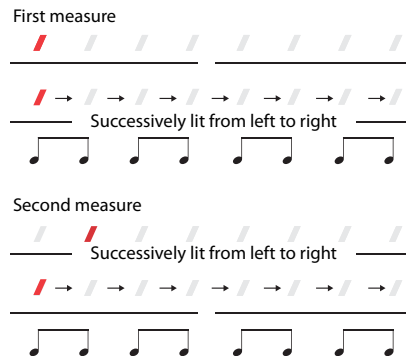
Example 2) Loop: 001–002 (two measure), "TS": 4/4, "Q": 16th (♬)

First measure - Beat 1–2

First measure - Beat 3–4

Second measure - Beat 1–2

Second measure - Beat 3–4
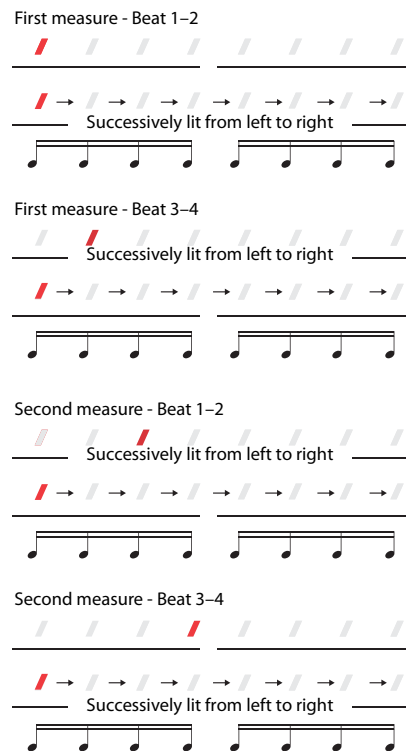
5. Press the Start/Stop button to stop.

Now let's create the drum pattern shown below.

Loop: 001–002 (two measures), "TS": 4/4, "Q": 8th (♪)

Open hi-hat (A#3)	+ + + + + + + + + + + + + + + ●
Close hi-hat (F#3)	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● +
Snare (D3)	+ + ● + + + ● + + + ● + + + ● +
Kick (C3)	● + + + ● ● + + ● + + + ● ● + +
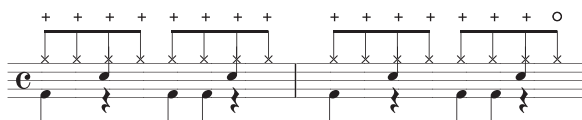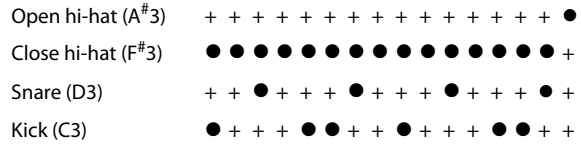
6. Specify the looped measures and the quantization as follows.

- "LpEnd": 2
- "Q": 8th (♪)

```
GRID(C3 )001-002
 LpEnd⬍002 Q:♪ >
```

Note: Use the ▲▼ buttons to move between pages. Use the ◀▶ buttons to select parameters. (☞p. 7 "Selecting a parameter and editing its value")

7. Set the tempo and tempo mode as follows.

- Tempo: 080.00
- Tempo mode: Manu

```
GRID(C3 )001-002
◇♩:080.00 :Manu>
```

8. First, enter the kick. Hold down the KEY button, and press the C3 key. You can also use "KeySelect" to specify the note to enter.

```
GRID(C3 )001-002
◇KeySelect:C3  >
```

The velocity used when you strike the key is used as the velocity value of the note that's entered. You can also use "Init Vel" to specify the velocity.

```
GRID(C3 )001-002
◇Init Vel :100 >
```

9. Now you can enter the desired grid notes. Press the function 01 button to choose the first location, and then press the function 09, 13, and 14 buttons to turn on the corresponding grid notes.

The function 09, 13, and 14 LEDs will light-up.

The function 09–16 buttons will turn on or off each time you press them.

10. Press the function 09 button to specify the second location, and then press buttons 09, 13, and 14 buttons to turn on the corresponding grid notes.

The function 09, 13, and 14 LEDs will light-up.

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11. Press the Start/Stop button to play back, and listen to the kick pattern you entered.

The function 09–16 LEDs will successively light-up from left to right in time with the tempo, and you'll hear the kick at the grid notes that were already lit.

When you've listened to the pattern, press the Start/Stop button once again to stop.

12. Next we'll enter the snare. Hold down the KEY and press the D3 key.

13. Press function button 01 to specify the first location, and then press function 11, and 15 buttons to turn on the corresponding grid notes.

The function 11 and 15 LEDs will light-up.

14. Press function button 02 to specify the second location, and then press buttons 11 and 15 to turn on the corresponding grid notes.

The function 11 and 15 LEDs will light-up.
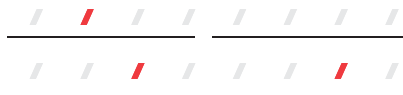
15. Press the Start/Stop button to play back, and listen to the pattern with the snare added.

When you've listened to the pattern, press the Start/Stop button once again to stop.

16. Next we'll enter the closed hi-hat. Hold down the KEY button and press the F#3 key.

17. Press function button 01 to specify the first location, and then press function 09–16 buttons to turn on the corresponding grid notes.

The function 09–16 LEDs will light-up.

18. Press function button 02 to specify the second location, and then press function 09–15 buttons to turn on the corresponding grid notes.

The function 09–15 LEDs will light-up.

Next we'll enter the open hi-hat.

19. Hold down the KEY button and press the A#3 key.

20. Turn off all grid notes in the first location.
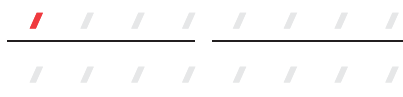
21. Press function button 02 to specify the second location, and then press the function 16 button to turn on the corresponding grid note.

The function 16 LED will light-up.
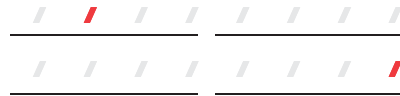
This completes all input. Let's listen to the pattern that you entered.

22. Press the Start/Stop button to play the pattern, and listen to it.

If you hold down the KEY button and press a key, the grid on/off indications of the function LEDs will switch. C3 switches to the kick indication, D3 the snare, F#3 the closed hi-hat, and A#3 the open hi-hat indication.

Editing a pattern you entered using the Grid Sequence function

You can edit the velocity and duration (the length relative to the quantization) for each note of the pattern that you created using the Grid Sequence function.

In this example, let's add some dynamics by editing the velocity of the closed hi-hat in the drum pattern that you created using the Grid Sequence function.

1. **Press the GRID SEQ button to turn the Grid Sequence function on.**

2. **Hold down the KEY button and press the F#3 key to specify the note that you want to edit.**

3. **Press the ▼ button to access the Grid Edit page, and then press the ▶ button to enter grid editing.**

```
‹[F#3]Vel/Dur
 1-1 :100/:080%›
```

The upper line of the display shows the note number you're editing.

The lower line shows (from the left) the grid number, velocity value, and duration value. If a grid note is off, the velocity value and duration are both shown as "---".

The grid number is shown as "the number indicated by the function 01–08 LEDs" - "the number indicated by the function 09–16 LEDs." This indication will be between 1-1 and 8-8.

For this example, let's change the velocity value to 120 for grid numbers 1-1, 1-5, 2-1, and 2-5 in order to add an accent to the pattern.

4. **Use the ▲▼ buttons to move to the grid note that you want to edit.**

```
‹[F#3]Vel/Dur
 1-5 :100/:080%›
```

5. Press the ▶ button to select the velocity value.

```
<[F#3]Vel/Dur
 1-5 $100/:080%>
```

6. Use the ▲▼ buttons to change the velocity value.

```
<[F#3]Vel/Dur
 1-5 $120/:080%>
```

7. Change the velocity value of the other grid notes.

8. Press the Start/Stop button to play back the pattern, and listen to it.

✍ When you play back, you'll temporarily exit Grid Edit.

Using the keyboard to add a pattern to the pattern that you entered using the Grid Sequence function

While using the Grid Sequence function to create a drum pattern, you can also use realtime recording to add sounds.

1. **Leaving the Grid Sequence function turned on, press the REC button.**

   You'll be in recording-standby mode.

   The loop range, tempo, and quantization will be set to the values specified by the Grid Sequence function.

2. **Play the keyboard to check the drum instrument you'll be adding. For this example, let's add hand-claps (D♯3).**

3. **Press the Start/Stop button to start recording.**

   After a two-measure pre-count, the drum pattern will play as a loop.

4. **Record the hand-claps while you listen to the drum pattern. If you are not satisfied with your recording, you can erase it without stopping the loop. While holding down the KEY button, press the key whose note you want to erase at the timing of the unwanted note.**

   Note: The velocity value that is recorded depends on the "Vel (Velocity Mode)" setting (☞PG p. 53 "Velocity Mode").

5. **When you've finished recording, press the Start/Stop button to stop recording.**

In this way, you can seamlessly use both the Grid Sequence function and conventional realtime recording to record in the way that's appropriate for your situation.

Preparations for recording

This section explains how to create a new song and adjust basic settings for recording, such as specifying a program, volume, and pan setting for each track.

✍ Before you record, go to Global/Media mode and make sure that memory protect is turned off. (☞p. 59 "Memory protect")

Creating a new song

You'll use the song command "Create New" to create a new song.

1. **Press the MODE SEQ button to enter Sequencer mode.**

2. **Press the ▶ button to access the Menu.**

3. **Use the ▲▼ buttons to select "Song Command," and then press the ▶ button.**

4. **Use the ▲▼buttons to select "Create New," and then press the ▶ button.**

5. **In "Length," specify the number of measures.**

```
<Create New
 Length    $064
```

Note: You are free to change the number of measures later.

6. **Press the ▶ button to make the display indicate "OK?", and then press the ▶ button.**

   A new song will be created.

```
<Create New
^OK?              >
```

Track settings

Here's how to assign a program and make volume settings etc. for each MIDI track so that you can record a new song.

Note: For details on how to move between pages, or select and edit parameters, refer to p. 7 "Selecting a parameter and editing its value".

1. **Select a program for each track.**

   With the front panel TIMBRE/TRACK LED lit-up, press one of the function 01–16 buttons to select a track.

   The program selection screen ("Program Select") will appear.

```
<T04:A.Guitar
♪>045:Fingertip>
```

   If you press a function 01–16 button when the display shows something other than the track parameters, the display will switch to the "Program Select" screen for the track whose button you pressed.

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Use the ▲▼ buttons to select a program. The method is the same as when assigning a program to each timbre in a combination (☞p. 27).

Note: You can copy settings from a combination or program (☞PG p. 50, ☞PG p. 51).

2. **In the same way, use the function 01–16 buttons to select other tracks, and use the ▲▼ buttons to specify a program for those tracks.**

   Set the parameters of each track, using the function 01–16 buttons to switch tracks.

3. **Use "Volume" to specify the volume of each track.**

   ```
   ‹T04:A.Guitar
   ↕Volume      :127›
   ```

4. **Use "Pan" to specify the pan of each track.**

   ```
   ‹T04:A.Guitar
    Pan         ⬍C064
   ```

5. **Use "Status" to specify the sound source that each track will play.**

   ```
   ‹T04:A.Guitar
   ↕Status      :BTH›
   ```

   If you're using the internal sound generator as a 16-track multitimbral sound module, you'll normally choose INT or BTH.

   For details on these settings, refer to the parameter guide (☞PG p. 38 "Status").

6. **Use "MIDI Ch." to specify the MIDI channel of each track.**

   ```
   ‹T04:A.Guitar
   ↕MIDI Ch.    :04 ›
   ```

   Normally you'll use "MIDI Ch." to specify a different channel 1–16 for each track. Tracks for which you've specified the same MIDI channel will sound simultaneously when you record or play back any of those tracks.

7. **Use "Bus" to specify the output bus for each track.**

   ```
   ‹T04:A.Guitar
   ↕Bus         :IFX4›
   ```

   (☞p. 49 "Effect settings for a combination or song")

8. **Adjust effect settings.**

   Adjust settings for each of the IFX1–IFX5, MFX1, MFX2, and TFX effects.

   (☞p. 49 "Effect settings for a combination or song")

9. **Adjust other settings as necessary.**

   You can adjust settings such as arpeggiator (ARP), MIDI filter (MIDI Filter), key zone (Key Zone), and velocity zone (Vel Zone).
   (☞PG p. 23 "Arpeggiator settings in Combination and Sequencer modes")

Saving the song setting parameters

The "song setting parameters" you edit here can be saved as a template.

If you use these settings frequently, you can save them as a template and then load them when necessary (☞PG p. 48 "Save Template").

Using templates

Loading a template as the default song

Here's how to load a template as the default song for Sequencer mode when the unit is turned on.

1. **Press the GLB/MEDIA button to enter Global/Media mode.**

2. **Select the Global/Media: Basic "Initial Song."**

   ```
   ‹Basic
   ↕Initial Song  ›
   ```

3. **Select the template that will be loaded as the default song when the unit is turned on.**

   You can use the song command "Save Template" to save your frequently used settings as a user template, and use that template as the default song.

   ```
   ‹Basic/InitSong
   ⬆P00:Pop
   ```

Loading a template

By loading a template, you can easily use the appropriate settings for the desired style of music.

1. **Choose the Sequencer mode song command "Load Template."**

2. **Use the "From" field to select the template that you want to load.**

   ```
   ‹Load Template
   ↙From:P00:Pop   ›
   ```

3. **Execute the Load Template command.**

   ```
   ‹Load Template
   ⬆OK?            ›
   ```

Using sounds from a combination or program

You can copy settings from a combination or program, and use those settings for recording.

Auto Song Setup function

The Auto Song Setup function takes the settings of the program or combination you're playing in Program or Combination mode, and automatically applies those settings to set up a song.

As an example, here's how to perform the Auto Song Setup function in Combination mode to set up a song.

1. **Enter Combination mode, and select the desired combination.**

   As desired, you can edit each timbre's pan, volume, and arpeggiator settings. After editing, execute "Write Combi" if you want to save your settings.

2. **Press the REC button.**

   The REC button will blink, and the display will show the following screen.

   ```
   ‹Auto Song Setup
   OK?              ›
   ```

3. **To perform the Auto Song Setup, press the ▶ button or the REC button.**

   When you use the function, you'll automatically switch to Sequencer mode, and the settings of the combination will be assigned to the song. The song using these settings will be the first unused song.

   The microSTATION will automatically be in recording-standby mode, and the metronome will play according to its settings.

   Multi-track recording will automatically be turned on according to each timbre's MIDI channel and arpeggiator settings. If you don't need to record multiple tracks, one track will be assigned for recording.

4. **Press the Start/Stop button to start realtime recording.**

   To stop recording, press the Start/Stop button once again.

Copying settings from a combination or program

In Sequencer mode, you can use the song commands "Copy Combi" or "Copy Prog" to copy the settings from a combination or program, and set up the song accordingly.

As an example, here's how to use "Copy Combi" to set up a song.

Note: Make sure that the global MIDI channel is 01 (☞p. 56).

1. **Create a new song. (☞p. 41 "Creating a new song")**

2. **Choose the song command "Copy Combi," and press the ▶ button.**

3. **Select the combination that you want to copy from (i.e., the copy-source combination).**

```
‹Copy Combi
↲From:A000:Pian
```

4. **If you want the effect settings of the combination to be copied as well, set "With FX?" to Yes.**

```
‹Copy Combi
 With FX?  ▾Yes
```

5. **If you set "Multi Rec?" to Yes, each track's MIDI channel setting etc. will be adjusted, or tracks added, to ensure that playback will reproduce the same sound as during recording.**

```
‹Copy Combi
 Multi Rec?▾Yes
```

6. **Press the ▶ button to execute the copy.**

```
‹Copy Combi
 ^OK?            ›
```

7. **Start recording.**

   Press the LOCATE button to set the location to 001:01. Press the REC button, and then press the Start/Stop button.

   Note: If you play the keyboard during the pre-count that precedes recording, recording will start and the arpeggiated phrase will simultaneously start playing from the beginning.

8. **When you're finished playing, press the Start/Stop button.**

   If you made a mistake, or want to re-record for any reason, you can use the Compare function (press the COMPARE button) to re-record as many times as you want.

Multi-track recording

On the microSTATION, "multi-track recording" is the action of recording more than one track simultaneously. This is useful in the following situations.

- When multiple tracks of data from an external sequencer are being recorded via MIDI into the microSTATION's sequencer.
- When the performance of a combination that uses the arpeggiators is being recorded onto multiple tracks using the Auto Song Setup function.

Multi-track recording is not possible if Loop is on.

As an example, here's how to multi-track record on tracks 1–8.

1. **Press the REC button.**

   The REC LED will light-up, and the microSTATION will be in recording-standby mode.

   The explanation here will assume that track 1 is selected as the recording track and the function 01 LED is lit.

2. **While holding down the function 01 button, press the 02, 03, 04, 05, 06, 07, and 08 buttons, and then release the 01 button.**

   The TIMBRE/TRACK LED will blink, and the function 01–08 LEDs will light-up; the microSTATION will be in multi-track recording standby mode.

   Multi-track recording is indicated by the TIMBRE/TRACK LED blinking and the function 01–16 LEDs being lit-up.

   If you press the PLAY/MUTE button in multi-track recording mode, the function 01–16 LEDs will indicate the status of each track.

   Blinking: Recording track

   Lit: Play track. This track will be heard during recording.

   Unlit: Mute track. This track will be muted during recording.

   You can use the function 01–16 buttons to switch the status of each. The track status will change each time you press the button corresponding to that track.

   To cancel multi-track recording, press any one of the function 01–16 buttons from the multi-track recording standby state.

3. **Press the Start/Stop button to start multi-track recording.**

   This section describes how to do multi-track recording. For details on the settings and procedure for receiving MIDI data from an external MIDI sequencer and multi-track recording, please refer to the parameter guide section "Appendix - Recording musical data from an external device" (☞PG p. 312).

   You can also use multi-track recording to simultaneously record a multi-track performance produced using the arpeggiators (☞PG p. 23 "Arpeggiator settings in Combination and Sequencer modes").

Recording exclusive events

The parameter changes that are produced when you edit MIDI track parameters, effect parameters, or exclusive messages received from an external MIDI device, can be recorded to the desired MIDI track.

When this data is played back, it can control the song's track parameters, effect parameters, or be transmitted to an external MIDI device (☞PG p. 55 "Recording internal parameter changes").

MIDI GM, XG, or GS exclusive messages can be recorded on a track, but will not be reproduced by the microSTATION's sound generator.

Recording the changes of a MIDI track's pan, volume, and tone parameters

If you control pan, volume, or tone parameters during recording, those changes will be reflected during playback.

If you want to modify the settings of multiple tracks simultaneously, use multi-track recording.

Note: Control of these parameters is done by transmitting control changes or system exclusive messages. If you want to record this data, you'll need to turn the Global/Media: MIDI - MIDI Filter "Ctrl Chg" and "SysEx" settings On. Switch to Global/Media mode and make sure that these are turned On.

Note: The Global/Media: MIDI - MIDI/SEQ Out "Parameter" setting lets you specify whether changes you make by editing a parameter will be transmitted as Pan: CC#10 (pan), Volume: CC#7 (volume), and Send 1/2: CC#93 (send 1 level and send 2 level) control changes, or as system exclusive messages.

Using Effects

An overview of the microSTATION's effects

You can choose from 134 different types of high-quality digital effects. The microSTATION provides five insert effects, two master effects, and one total effect, together with a mixer section that controls the routing of these effects. All of these are stereo in/out.

Specific parameters of these effects can also be controlled in real time from the microSTATION's controllers or via MIDI messages using Dynamic Modulation (Dmod), by MIDI/Tempo Sync, or by using a common LFO to apply synchronized changes to multiple modulation effects.

Effect I/O

Insert Effects

Insert Effects (IFX 1–5) are stereo-in/stereo-out. If you select Dry (unprocessed) for the "Wet/Dry" parameter, the stereo input signal will be output in stereo without being processed by the effect. If you select Wet (effect applied), the processed signal will be output in one of the following ways:

	Mono In - Mono Out	
Wet	Mono In - Stereo Out	
	Stereo In - Stereo Out	
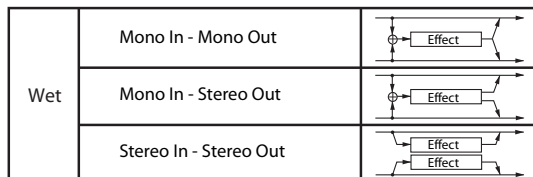
Insert effect 1 can use the effects S01: St.Comp–S63: Rotary SP and D00: St.MltLmt–D10: Rotary OD.

Insert effects 2–4 can use the effects S01: St.Comp–S61: Amp-Trml and D00: St.MltLmt–D09: Vocoder.

Insert effect 5 can use the effects S01: St.Comp–S61: Amp-Trml.

Master Effects

Master Effects MFX1 and MFX2 are stereo-in/stereo-out. "Send1" and "Send2" determine the send level to the Master Effects.

With Master effects, only the Wet (processed) signal will be output. The output signals from the Master Effects are routed to the L/R bus with the output level specified by "Return1" and "Return2". These output signals are mixed with the output signals from the bus specified by "Bus" L/R, then routed to the total effect.

Selecting "000: No Effect" will mute the output. The processed signal will be output in one of the following ways, according to the type of effects.

	Mono In - Mono Out	
Wet	Mono In - Stereo Out	
	Stereo In - Stereo Out	
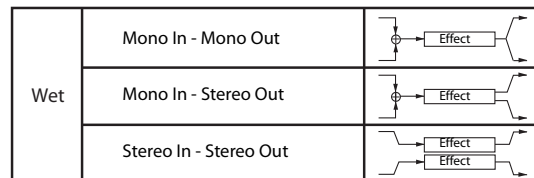
Master effect 1 can use the effects S01: St.Comp–S87: Phsr-Flng and D00: St.MltLmt–D13: Early Ref.

Master effect 2 can use the effects S01: St.Comp–S120: Rev-Gate.

Total Effect

The total effect (TFX) is stereo-in/stereo-out. The Dry (unprocessed) side of the "Wet/Dry" parameter sends the stereo input sound directly to the stereo output. The way that the Wet (processed) side is output depends on the type of effect, as follows.

	Mono In - Mono Out	
Wet	Mono In - Stereo Out	
	Stereo In - Stereo Out	
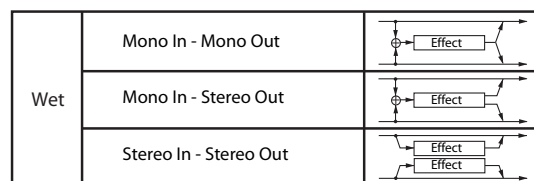
Total effects can use the effects 01: St.Comp–61: Amp-Trml.

Note: The Parameter Guide includes block diagrams for each individual effect, which include the effect's input/output structure. (☞PG p. 219–)

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Effects in each mode

Program mode

For programs, you can use insert effects to process the final sound in the same way that you use the Filter and Amplifier to process the sound from the oscillators (OSC 1 & 2). Next, the master effects are used to create overall ambience such as reverb, and you use the total effect to make final adjustments.

Combination and Sequencer modes

In Combination and Sequencer modes, you can insert effects to process the sound of each timbre/track program. Then you can use the master effects to create overall ambience, and use the total effect to make final adjustments.

In Combination mode, you can adjust these settings for each combination, and in Sequencer mode you can adjust them for each song.

In Sequencer mode, you can switch between effects or modify the effect parameters and record these changes, so that effects will switch automatically or effect parameters will be modified automatically as the song plays back.

Routing and effect settings

The insert effects, master effects, and total effect that are available in each mode have the same structure, but the routing settings will determine how the program's oscillators, the combination's timbres, or the song's tracks will be sent to each of the insert effects, master effects, and total effects. Here we'll explain how to adjust routing settings in each mode, and how to edit the effect settings.

Effect settings for a program

Routing

1. **Access the PROG EDIT: FX Routing "Bus" parameter.**

```
‹FX Routing
 Bus      ⬍IFX1
```
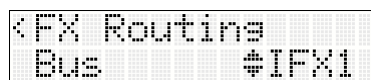
2. **"Bus" specifies the bus where the output from the oscillators will be sent. Here we'll choose IFX1 so that the output of the oscillators will be sent to insert effect 1.**

   L/R: The oscillator output will not be sent to an insert effect. It will pass through the total effect, and then be sent to OUTPUT L/MONO and R.

   IFX1–IFX5: The oscillator output will be sent to insert effect 1–5.

   Off: The oscillator output will not be sent to OUTPUT L/MONO or R, or to insert effects 1–5. (Choose this if you want to connect the oscillator output to the master effects in series, at the send levels specified by "OSC1 Send1," "OSC1 Send2," "OSC2 Send1," and "OSC2 Send 2.")

Program mode
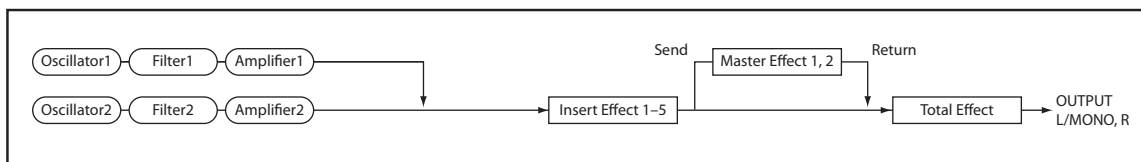
Combination, Sequencer mode
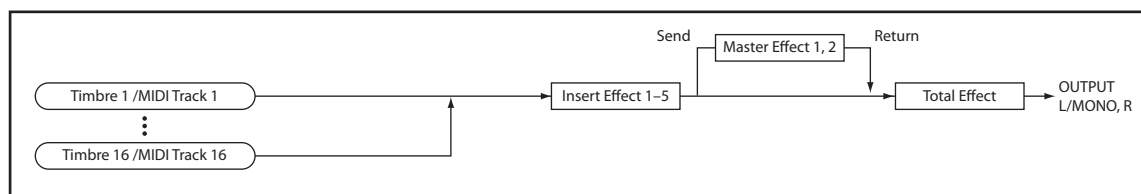
3. **If you're inputting the oscillator output to the master effects without sending it to the insert effects, use the "OSC1 Send1," "OSC1 Send2," "OSC2 Send1," and "OSC2 Send 2" settings for the oscillators to specify the send levels to the master effects.**

   These settings are available only if "Bus" is set to L/R or Off.

   ```
   <FX Routing
    OSC1 Send1▾127
   ```

   If "Bus" is set to IFX1–IFX5, use the "Send1" and "Send2" parameters following the insert effect (PROG EDIT: IFX1–IFX5) to specify the send levels to the master effects.

4. **"FXCtrl Bus" sends the output of oscillators 1 and 2 to the FX control bus.**

   Use this when you want to use a different sound to control the sound that's being input to an effect. You can use two FX control buses to freely control the sound (☞PG p. 209 "FX Control Bus")

   ```
   <FX Routing
    FXCtrl Bus⬦1
   ```

Insert effect

Here's how to adjust settings for insert effect 1.

You can adjust settings for the other insert effects in the same way.

1. **Access the PROG EDIT: IFX1 screen, and press the ▶ button.**

   The first page of IFX1 is the selection screen for insert effect 1 ("IFX Select").

   Press the ▶ button once again, and then use the ▲▼ buttons to select the effect type for insert effect 1.

   ```
   <IFX1
    ⬦S01:St.Comp  >
   ```

   You can use the "Copy IFX" command to copy effect settings from another effect. The "Swap IFX" command lets you exchange (for example) insert effects 1 and 5.

   If you press the ▶ button to enter the page at right, you'll see the parameters of the selected insert effect. (☞step 5)

2. **Adjust settings for the insert effect 1 on/off status and connections.**

   Use "On/Off" to turn insert effect 1 On.

   If this is Off, the result will be the same as if 000: No Effect is selected; the input sound will be output without change.

   ```
   <IFX1
    On/Off     ▾On
   ```

3. **Turn "Chain" On.**

   If "Chain" is On, the insert effect will be connected in series.

   ```
   <IFX1[1→2]
    Chain      ▾On
   ```

   Set "Chain To" to IFX2.

   If IFX2 is selected, the insert effects will be connected in series in the order of IFX1 → IFX2. The connection status is shown in the upper line of the display.

   ```
   <IFX1[1→2]
    Chain To ▴IFX2
   ```

4. **Set the "Pan (CC#8)," "Bus," "FXCtrl Bus," "Send1," and "Send2" parameters to specify the pan and routing of the signal following the insert effect.**

   If "Chain" is On, the settings that follow the last insert effect will be used. ("FXCtrl Bus" is an exception.)

   "Pan (CC#8)": Specifies the pan.

   ```
   <IFX2
    Pan(CC#8)⬦C064
   ```

   "Bus": Specifies the output destination. Normally you'll set this to L/R.

   ```
   <IFX2
    Bus        ▴L/R
   ```

   "Send1," "Send2": Specify the send levels to the master effects. For this example, set them to 127.

   ```
   <IFX2
    Send1      ▾127
   ```

   "FXCtrl Bus": The sound that has passed through the insert effect is then sent to the FX control bus. This allows you to use a different sound to control the input to an effect. You can use two FX control buses, giving you a wide range of possibilities for controlling the effects. (☞PG p. 209 "FX Control Bus")

   ```
   <IFX2
    FXCtrl Bus⬦1
   ```

5. **Use the pages located to the right of PROG EDIT: IFX1 "IFX Select" to edit the parameters of insert effect 1.**

   ```
   <St.Comp
   ✓Wet/Dry :Wet  >
   ```

   For details on the parameters of each effect, please refer to PG p. 219 and following.

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Double-size effects

Double-size effects (D00: St.MltLmt–D13: Early Ref) use twice as much processing area as other effects.

D00: St.MltLmt–D10: Rotary OD can be used with insert effect 1, D00: St.MltLmt–D09: Vocoder can be used with insert effects 2–4, and D00: St.MltLmt–D13: Early Ref can be used with master effect 1.

When you use a double-size effect, the next-numbered effect will be unavailable. For example if you've selected a double-size effect for IFX1, you won't be able to use IFX2. If you've selected a double-size effect for MFX1, you won't be able to use MFX2.

Master effects

1. **"Send1" and "Send2" settings (steps 3 or 9) determine the input level to the master effects. If "Send1" and "Send2" are set to 0, nothing will be input to the master effects. "Send1" corresponds to MFX1, and "Send2" corresponds to MFX2.**

   Let's adjust settings for master effect 1.

2. **Access PROG EDIT: MFX1, and press the ▶ button.**

   The first page of MFX1 is the master effect 1 selection screen ("MFX1 Select").

   Press the ▶ button once again, and then use the ▲▼ buttons to select the effect type for master effect 1.

   ```
   ‹MFX1
    ⬦S30:Small Phs›
   ```

   The procedure is the same as for the insert effects (☞step 5).

   Note: Double-size effects can be selected only for MFX1 (☞p. 48 "Double-size effects").

   If you press the ▶ button to enter the page at right, you'll see the parameters for the selected master effect (☞step 5).

3. **Specify the master effect 1 on/off setting and return level.**

   Use "On/Off" to turn on master effect 1.

   If it is Off, the output of the master effect will be muted.

   ```
   ‹MFX1
    On/Off      ⬇On
   ```

   Use "Return1" to adjust the output level of master effect 1.

   ```
   ‹MFX1
    Return1    ⬇127
   ```

   Note: For each effect's "Wet/Dry" setting, the Wet value is the output level of that effect. This value is multiplied by the return setting (with "Return" = 127 as x1.0) to determine the actual output level of the master effect.

   Note: The output level of master effect 2 is adjusted by PROG EDIT: MFX2 "Return2."

4. **Turn "Chain" On.**

   When "Chain" is On, master effects 1 and 2 will be series-connected in the order of MFX1 → MFX2.

   ```
   ‹MFX1        [1→2]
    Chain       ⬇On
   ```

   You cannot change the order of connection .
   The order is fixed as MFX1 → MFX2.

   "ChainLevel" specifies the level from master effect 1 to master effect 2.

   ```
   ‹MFX1        [1→2]
    ChainLevel⬇127
   ```

5. **Use the pages located at the right of PROG EDIT: MFX1 "MFX1 Select" to edit the parameters of master effect 1.**

   ```
   ‹Small Phs
   ⬇Wet/Dry :Wet   ›
   ```

   For details on the parameters of each effect, please refer to PG p. 219 and following.

Total effect

1. **The signal will be input to the total effect if you use "Bus" to set the oscillator output to L/R, or if you set the "Bus" following the insert effect to L/R.**

   The output from each master effect is input to the total effect via the PROG EDIT: MFX1 and 2 "Return1" and "Return2" settings.

   After passing through the total effect, the signal is output from OUTPUT L/MONO and R.

2. **Access PROG EDIT: TFX, and press the ▶ button.**

   The first page of TFX is the total effect selection screen ("TFX Select").

   Press the ▶ button once again, and then use the ▲▼ buttons to select an effect type for the total effect.

   ```
   ‹TFX
    On/Off      ⬇On
   ```

   You can't use double-size effects with the total effect (☞p. 48 "Double-size effects").

   If you press the ▶ button to enter the page at right, you'll see the parameters for the selected total effect (☞step 4).

3. **Use On/Off to turn the total effect On.**

   If it is Off, the result will be the same as if 000: No Effect is selected; the input signal will be output without change.

   ```
   ‹TFX
    ⬦08:St.G7EQ    ›
   ```

4. Use the pages located at the right of PROG EDIT: TFX "TFX Select" to edit the effect parameters so that the overall sound is to your liking.

```
‹St.G7EQ
◊B1:+00.0/80     ›
```

For details on the parameters of each effect, please refer to PG p. 219 and follows.

Effect settings for a combination or song

In Combination and Sequencer modes, you can specify how each timbre or track is routed to the insert effects, master effects, and total effects. The procedure for adjusting settings is similar in each mode. Here, we'll explain the procedure for Combination mode.

Routing

We'll explain how to send the output of timbre 1 to insert effect 1, and then make settings for insert effect 1.

1. In COMBI EDIT: Timbres - Timbre 01, set "Bus" to specify the bus where the output of timbre 1 will be sent. In this example, select IFX1 so that the timbre's output will be input to insert effect 1.

```
‹T01
 Bus         ◊IFX1
```

If you want to send a timbre's output to a master effect without sending it to an insert effect, use the "Send1" or "Send2" settings of that timbre to specify the send levels to the master effects.

This setting is available only if "Bus" is set to L/R or Off.

```
‹T01
 Send1        ◊000
```

Note: The actual send level is determined by multiplying this setting with the "Send1" or "Send2" value of oscillators 1 and 2 in the program selected by the timbre. If the program's "Send1" or "Send2" setting is 0, the actual level will be 0 even if you raise the send level setting here.

If "Bus" is set to IFX1–IFX5, the "Send1" and "Send2" (IFX1–IFX5) settings following the insert effect will determine the send levels to the master effects.

2. "FXCtrl Bus" sends the timbre's output to the FX control bus. Use this when you want to use a different sound to control the input to an effect.

You can use the two FX control buses to control effects with a great deal of flexibility. (☞PG p. 209 "FX Control Bus")

Insert effects

1. Access COMBI EDIT: IFX1, and press the ▶ button.

The first page of IFX1 is the insert effect 1 selection screen ("IFX Select").

Press the ▶ button once again, and then use the ▲▼ buttons to select the effect type for insert effect 1.

```
‹IFX1
 ◊S03:St.Limitr›
```

2. In the same way as for a program's insert effects, specify the effect's on/off status and connections.

3. In the same way as for a program's insert effects, use "Pan (CC#8)," "Bus," "FXCtrl Bus," "Send1," and "Send2" to specify the pan and routing following the insert effect.

4. Use the pages located at the right of COMBI EDIT: IFX1 "IFX Select" to edit the effect parameters of insert effect 1.

You can adjust these settings in the same way as for a program (☞p. 47).

MIDI You can use MIDI to control each effect's dynamic modulation (Dmod) and the "Pan (CC#8)," "Send1," and "Send2" following the insert effect. These settings are controlled on the MIDI channel specified by "Ctrl Ch."
For timbres that are routed to an insert effect, a "*" symbol is shown at the right of the channel number Ch01–16. If multiple timbres with differing MIDI channel settings are routed, you can specify here the channel on which control will occur.

Master effects
Total effect

You can make these settings in the same way as for a program (☞p. 48).

MIDI Dynamic modulation (Dmod) for the master effects and total effect can be controlled on the MIDI channel specified by "Ctrl Ch."

Dynamic modulation (Dmod)

Dynamic modulation (Dmod) lets you use MIDI messages or the microSTATION's controllers for realtime control of specific effect parameters.

Another way to control effect parameters is to use MIDI/Tempo Sync, which allows the LFO speed of a modulation effect or the delay time of a delay effect to be synchronized to the tempo of the arpeggiator or sequencer.

(☞PG p. 208 "Dynamic modulation to control an effect parameter in realtime")

Arpeggiator function

Using the arpeggiator while you play

The arpeggiator is a function that automatically generates arpeggios (patterns of individual notes derived from a chord). Most arpeggiators produce an arpeggio when you play a chord on the keyboard.

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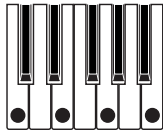
The microSTATION's arpeggiator is also polyphonic, and can produce a variety of chordal transformations or phrases based on the pitch or timing of the notes you play on the keyboard. These functions let you use the arpeggiator to play a wide range of patterns including drum or bass phrases, and guitar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

The microSTATION's Dual Arpeggiator feature lets you use two simultaneous arpeggio patterns in Combination mode, and Sequencer mode. You can take advantage of this in many ways, including a separate arpeggio pattern for a drum program, and another applied to a bass program, or using a keyboard split or velocity to switch between two arpeggio patterns.

The microSTATION provides five preset arpeggio patterns: the standard **UP**, **DOWN**, **ALT1**, **ALT2**, and **RANDOM**. You can also create and store 640 of your own user patterns. The factory settings contain a wide variety of arpeggio patterns stored in these user locations.

Performing with the arpeggiator in Program mode

1. **Press the PROG button to enter Program mode, and select a program (☞p. 15 "Selecting a program").**

   As you switch through the programs, you'll notice that the LED at the upper left of the ARP ON/OFF button will be lit for some of the programs (☞p. 54 "Linking the arpeggiator to program, combinations")?

   The arpeggiator will start when you play the keyboard. For other programs as well, you can turn on the arpeggiator by pressing the ARP ON/OFF button (the LED at the button's upper left will light).

2. **As described in the following sections "Settings via controllers" and "Settings in the display", operate the controllers and notice how the arpeggio changes.**

Using controllers to control the arpeggio pattern and tempo
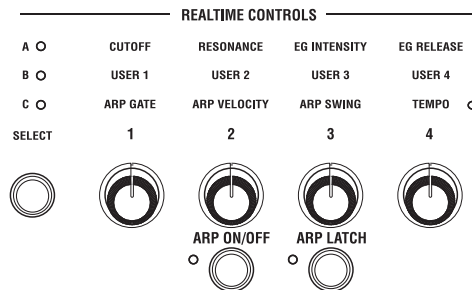
Turning the arpeggiator on/off

The arpeggiator will turn on/off each time you press the ARP ON/OFF button.

If it is on (LED lit-up), the selected arpeggio pattern will start playing when you play the keyboard.

Note: The on/off status is saved when you write a program.

In a combination or song, turning on the ARP ON/OFF button might not start the arpeggiator, depending on the settings of arpeggiators A and B (☞PG p. 24).

Making the arpeggio keep playing after you release the keys

The ARP LATCH button lets you specify whether the arpeggio will keep playing even after you take your hands off the keyboard.

On (LED lit-up): The arpeggio will keep playing after you take your hands off the keyboard.

ARP LATCH

Off (LED off): The arpeggio will stop playing when you take your hands off the keyboard.

Adjusting the arpeggiator tempo

REALTIME CONTROLS

A ○	CUTOFF	RESONANCE	EG INTENSITY	EG RELEASE
B ○	USER 1	USER 2	USER 3	USER 4
C ○	ARP GATE	ARP VELOCITY	ARP SWING	TEMPO ○
SELECT	1	2	3	4
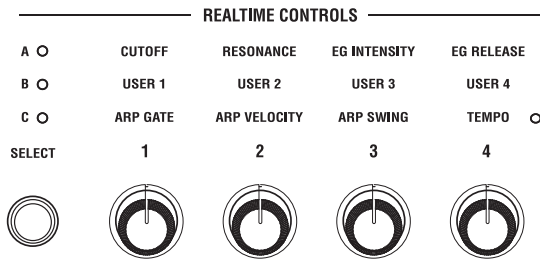
1. **Press the REALTIME CONTROLS SELECT button to select mode C.**

2. **Use knob 4 (TEMPO) to adjust the tempo.**

   You can adjust the tempo in a range of 40.00–300.00. The LED located to the right of "TEMPO" on the panel will blink at quarter-note intervals of the tempo.

   Note: The tempo setting is saved when you write the program.

   Note: You can also specify the tempo by using the PROG EDIT: Tempo "♩:" setting.

   Note: The arpeggio playback speed is affected by the "Resolution" setting (PROG EDIT: Arp Setup).

   ⚠ If the GLOBAL/MEDIA: MIDI - MIDI Clock "Clock" parameter is set to External MIDI or External USB, or is set to Auto and MIDI clock is being received, the PROG EDIT: Tempo "♩=" will indicate EXT, and the tempo will be synchronized with an external MIDI device. In this case, you won't be able to change the tempo on the microSTATION itself.

Changing the duration of the arpeggiated notes

Switch the realtime controls to mode C, and turn knob 1 to adjust the duration of the arpeggiated notes.

Turning the knob toward the left will shorten the notes, and turning the knob toward the right will lengthen them. When the knob is at the center position (12 o'clock), the duration will be as specified by the program's "Gate" parameter (PROG EDIT: ARP Setup).

Note: The state of the knob is saved when you write the program.

Note: You may find it useful to switch the realtime controls to mode A and adjust knob 4 (EG RELEASE).

Changing the strength of the arpeggiated notes

Switch the realtime controls to mode C, and turn knob 2 adjust the strength of the arpeggiated notes.

Turning the knob toward the left will soften the notes, and turning the knob toward the right will strengthen them. When the knob is at the center position (12 o'clock), the strength will be as specified by the program's "Velocity" parameter (PROG EDIT: ARP Setup).

Note: The state of the knob is saved when you write the program.

Note: You may find it useful to switch the realtime controls to mode A, and adjust knob 1 (CUTOFF), knob 2 (RESONANCE), and knob 3 (EG-INTENSITY).

Adding a shuffle feel to the arpeggio pattern

Switch the realtime controls to mode C, and turn knob 3 to add a shuffle feel to the arpeggio pattern.

Note: The state of the knob is saved when you write the program.

⚠ If the selected arpeggio pattern is one of the preset arpeggio patterns P0–P4, turning the knob will not change it. This adjustment is available only if one of the user arpeggio patterns 000–639 is selected.

Arpeggiator settings

Enter PROG EDIT: Arp Setup.

Selecting an arpeggio pattern
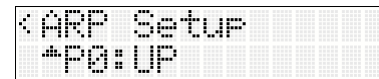
Choose one of the preset arpeggio patterns P0–P4 or user arpeggio patterns 000–639. With the factory settings, a wide variety of arpeggio patterns are stored in 000–511 and in some of 512–639.

Select the arpeggio pattern setting, and use the ▲▼ buttons to choose the desired pattern.

You can also select a user arpeggio pattern by turning NUM LOCK on, using function buttons 01 (1)–10 (0) to directly specify a number, and then pressing the 14 (ENTER) button.

P0: UP

P1: DOWN

P2: ALT1
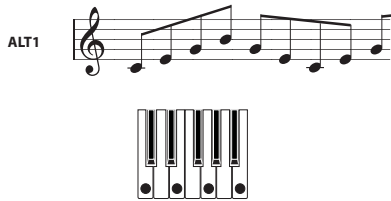
P3: ALT2
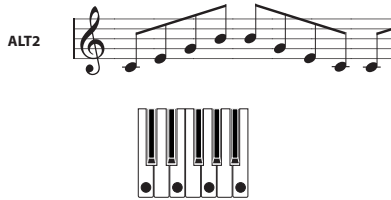
P4: RANDOM
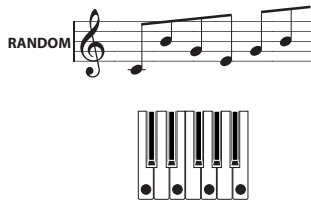
Selecting the octave range where the arpeggio is sounded

Use the "Octave" radio buttons to specify the range of octaves where the arpeggio will play.
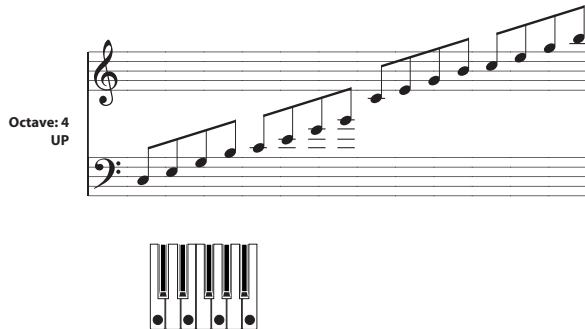
Changing the note value of the arpeggiated notes

The "Resolution" parameter lets you set the note value of the arpeggiated notes, over a range from ♪$_3$–♩.
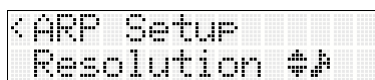
Sounding the arpeggio in the order that you play the notes

The "Sort" setting lets you specify whether the arpeggiated notes will be heard in order of their pitch regardless of the order that you played them, or heard in the order that you played them.

On: The arpeggiated notes will be heard in order of their pitch, regardless of the order that you played them on the keyboard.

Off: The order of the arpeggiated notes will be based on the order that you played them on the keyboard.

Synchronizing the arpeggiator to the keyboard

The "KeySync" setting lets you specify whether the arpeggio pattern will start the moment you play the keyboard, or will always stay in synchronization with MIDI clock.
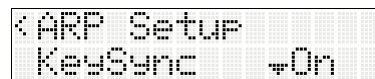
On: The arpeggio pattern will start from the beginning when a note-on occurs. Use this setting if you want the performance to be synchronized to the beginning of the measure in realtime.

Off: The arpeggio pattern will play in synchronization with MIDI clock.

Sounding both the arpeggio and your keyboard playing

The "Keyboard" setting lets you specify whether your keyboard playing will be heard together with the arpeggiator's playback.
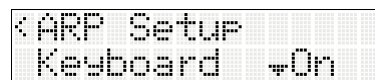
On: Your keyboard playing will be heard together with the arpeggiator's playback.

Off: Only the arpeggiator's playback will be heard.

Specifying the range of keys that will trigger the arpeggiator

The arpeggiator will start when you play keys inside the range specified by the "Top Key" and "BottomKey" settings. Keys outside this range can be used to perform normally, regardless of the arpeggiator on/off status.

```
‹ARP Setup
 Top Key  ↓G9
```

Specifying the range of velocities that will trigger the arpeggiator

The arpeggiator will start when you play notes with velocities inside the range specified by the "Top Vel" and "Bottom Vel" settings. Velocities outside this range can be used to perform normally, regardless of the arpeggiator on/off status.

```
‹ARP Setup
 Top Vel  ↓127
```

Performing with the arpeggiator in Combination mode

Combination mode provides a dual arpeggiator that lets you run two arpeggio patterns simultaneously.

1. **Press the COMBI button to enter Combination mode, and select a combination (☞p. 24 "Selecting a combination").**

    As you switch through the combinations, you'll notice that the LED at the upper left of the ARP ON/OFF button will be lit-up for some of the combinations (☞p. 54 "Linking the arpeggiator to program, combinations").

    The arpeggiator will start when you play the keyboard. For other combinations as well, you can turn on the arpeggiator by pressing the ARP ON/OFF button (the LED at the button's upper left will light-up).

2. **As described in the preceding sections "Settings via controllers" and "Settings in the display," use the controllers and notice how the arpeggio changes.**

    ✍ The ARP ON/OFF button, ARP LATCH button, and realtime controls mode C knobs will apply to both arpeggiators A and B. Their status is saved when you write the combination.

Note: The latch setting can also be specified using PROG EDIT: Arp Setup "Latch."

Arpeggiator settings

Selecting the arpeggiator(s) to run

Turn the "Run" setting On for the arpeggiator(s) that you want to run. The arpeggiator(s) that are turned On here will function when the ARP ON/OFF button is on.

```
‹ARP-A Setup
↓Run        :On ›
```

However, the arpeggiator will run only if the "ARP Assign" setting of each timbre assigns arpeggiator A or B to that timbre (☞"Assigning an arpeggiator to a timbre").

Assigning an arpeggiator to a timbre

As an example, we'll assign a piano sound to timbre 1, a bass sound to timbre 2, and assign arpeggiators A and B to timbres 1 and 2 respectively.

1. **In COMBI EDIT: Timbres - Timbre01, use "Program Select" to select a piano program.**

```
‹T01
 ↑002:A.Piano 1›
```

2. **In COMBI EDIT: Timbres - Timbre01, set "ARP Assign" to A.**

```
‹T01
 ARP Assign↕A
```

3. **With the front panel TIMBRE/TRACK LED lit, press the 02 button to switch to timbre 2, and then use COMBI EDIT: Timbres - Timbre02 "Program Select" to select a bass program.**

4. **In COMBI EDIT: Timbres - Timbre02, set "ARP Assign" to B.**

Settings for each arpeggiator

5. **In COMBI EDIT: Arpeggiator - Arp-A Setup or Arp-B Setup, make settings for arpeggiator A or B.**

```
‹ARP-A Setup
 ↑P0:UP
```

Set the "Pattern," "Resolution," "Octave," "Sort," "Latch," "Key Sync.," and "Keyboard" parameters for arpeggiator A and B (☞PG p. 9).

Checking the structure of a user arpeggio pattern

Let's take a look at how the combination "Category: BASS & BASS SPLIT 039: [<Moon Jam>]" is structured.

- Select combination Category: BASS&BASS SPLIT 039: [<Moon Jam>]
- Look at the "ARP Assign" settings; notice that arpeggiator A is assigned to timbre 3, and arpeggiator B is assigned to timbres 6 and 7.

```
< T03
◇ARP Assign:A    >
```

```
< T06
◇ARP Assign:B    >
```

When you play the keyboard, arpeggiator B will play the program of timbre 6. (Timbre 7 is a dummy timbre used to play timbre 6. ☞PG p. 24) Arpeggiator A will play the program of timbre 3.

- If you turn "Run" Off for A or B, the arpeggiator that is turned off will stop.

  When you turn it On again and play the keyboard, the arpeggiator will run.

```
<ARP-A Setup
✓Run        :On  >
```

- Take a look at COMBI EDIT: Arpeggiator - Arp-A Setup and Arp-B Setup parameters "Top Key" and "Bottom Key"; note that arpeggiator A and B are triggered by keys C4 and above.

Linking the arpeggiator to program, combinations

You can specify whether or not the arpeggiator settings that are written in a program or combination will change when you switch programs or combinations.

With the factory settings, the former is selected. Use the latter when you want to keep the same arpeggio pattern running, and change only the program sound.

This setting is made in "Load ARP" (GLOBAL/MEDIA: Basic–ARP). (☞PG p. 59)

Arpeggiator synchronization

For details on synchronization between arpeggiators A and B, and synchronization between the arpeggiators and sequencer in Sequencer mode, please see PG p. 203.

How Global/Media mode is organized

In Global/Media mode you can make settings that apply to the entire microSTATION, such as master tune, key transpose, effect global switch, and global MIDI channel. You can also adjust settings for the damper pedal / assignable foot switch / pedal, and save or load data to/from media.

For details on how to access each page, please refer to (☞p. 7 "Basic operating methods").

✎ Changes that you make in Global/Media mode are maintained until the power is turned off, but will revert to their original state when you turn off the power. If you want to keep your settings, you must write them. You can also save your settings to an SD card. (☞p. 59, p. 60)

✎ The Compare function that lets you return to the state prior to editing is not available in Global/Media mode.

Note: By using microSTATION Editor, you can create user drum kits, user arpeggio patterns, and user scales.

Global settings

Basic setup

In GLOBAL/MEDIA: Basic you can adjust basic settings for the microSTATION itself.

Matching the tuning with another instrument

You can adjust the tuning to match with another instrument.

```
‹Basic
  MTune♦+00cents
```

(☞PG p. 57 "MTune (Master Tune)")

Transposing the pitch

Use "Transpose (Key Transpose)" to adjust the pitch in semitone steps.

```
‹Basic
  Transpose ♦+00
```

(☞PG p. 57 "Transpose")

Adjusting how variations in velocity or aftertouch will affect the volume or tone

You can specify how volume or tone will change in response to velocity or aftertouch received from MIDI IN.

```
‹Basic
  AT Curve    ♦3
```

(☞PG p. 57 "Vel Curve (Velocity Curve)")
(☞PG p. 59 "AT Curve (Aftertouch Curve)")

Bypassing an effect

You can bypass an insert effect, a master effect, or the total effect.

```
‹Basic/EffectSW
  IFX1-5     ▾On
```

```
‹Basic/EffectSW
  MFX1&2     ▾On
```

```
‹Basic/EffectSW
  TFX        ▾On
```

(☞PG p. 59 "Effect SW")

Stopping the arpeggiator

If you set "All ARP" to Off, all arpeggiators will turn off. Even if the ARP ON/OFF button is on, the arpeggiators will not run.

```
‹Basic/ARP
  All ARP    ▾On
```

(☞PG p. 59 "All ARP")

Linking the arpeggiator to a program or combination

You can specify whether the arpeggiator settings written to the program or combination will be used when you switch programs or combinations.

```
‹Basic/Load ARP
  with Prog ▾On
```

```
‹Basic/Load ARP
  with Combi▾On
```

(☞PG p. 59 "Load ARP:")

Protecting memory

```
‹Basic/M.Protect
  Program   ▴Off
```

(☞PG p. 60 "M.Protect (Memory Protect)")

MIDI setup

In GLOBAL/MEDIA: MIDI you can adjust MIDI-related settings for the entire microSTATION.

Specifying the global MIDI channel

This lets you specify the global MIDI channel. The global MIDI channel is specified in Global/Media mode, and is the basic channel on which the microSTATION transmits and receives MIDI messages.

```
‹MIDI
 Channel    ♠01
```

(☞PG p. 60 "Channel (Global MIDI Channel)")

Local control setting

This lets you specify whether your performance on the microSTATION will use the internal sound generator, or whether the microSTATION's keyboard, knobs, and joystick will be disconnected from the internal sound generator so that your performance data will only be transmitted to an external sequencer etc.

```
‹MIDI
 Local Ctrl↓On
```

(☞PG p. 61 "Local Ctrl (Local Control)")

MIDI clock source setting

This specifies whether the microSTATION's arpeggiator and internal sequencer will be synchronized to an external MIDI device (e.g., sequencer or rhythm machine) or computer.

```
‹MIDI/Clock
 Clock♠Internal
```

(☞PG p. 62 "Clock (MIDI Clock Source)")

Controller settings

In GLOBAL/MEDIA: Controllers - PEDAL/SW, you can adjust settings for the option that's connected to the DAMPER/PEDAL/SW jack, the arpeggiator ARP ON/OFF button, the LATCH ON/OFF button, and assign MIDI control change messages to knobs 1–4 for realtime controls mode C.

Specifying the function of the damper pedal / assignable switch / pedal

```
‹Controllers
 ↓PEDAL/SW       ›
```

(☞PG p. 65 "PEDAL/SW")

External control

When you press the realtime controls EXTERNAL button to choose external mode, the microSTATION's knobs 1–4 can be used to control an external MIDI device.

Each knob 1–4 will transmit the assigned MIDI control change on the MIDI channel that you've specified. You can use a total of 128 such setups.

When the microSTATION is shipped from the factory, setup memory contains preloaded external setups for controlling software synthesizers such as the Korg Legacy Collection, or the level and pan of DAW software.

External setups are edited in GLOBAL/MEDIA: MIDI - External Setup (☞p. 57 "Editing an external setup").

Using external setups

Note: Before you continue, you'll need to adjust some settings so that MIDI data can be transmitted from the microSTATION to your computer application or MIDI device. Here, we'll describe an example in Program mode.

1. **Press the EXTERNAL button to put the realtime controls in External mode.**

2. **Access PROG EDIT: External "External Setup."**

```
‹External Setup
 ♠000:KLC M1
```

3. **Select the external setup that you want to use.**

4. **In the pages below "External Setup," you can view the setting of each knob.**

```
‹External Setup
 ◇1.Gch/#008:064 ›
```

5. **When you operate realtime control knobs 1–4, a MIDI control change (CC#) will be transmitted on the assigned MIDI channel.**

   If the display is showing the knob assignment view screen (step 4), you can see the setting assigned to the knob and the value that is transmitted.

```
‹External Setup
 ◇2.Gch/#071:064 ›
```

   Note: The microSTATION's keyboard and other controllers will function as they usually do in each mode.

6. **When you use a knob in PROG PLAY, the display will show that knob's assignment and value.**

```
===2.Gch/#071===
       066
```

7. **Switch to Combination mode, and set the realtime controls to External mode.**

   The settings will be maintained, allowing you to control a connected MIDI device, etc.

Even if you switch programs in Program mode or switch to Combination mode, that setup will remain unchanged. This means that you can select a different microSTATION sound without changing the settings that control an external MIDI device, or conversely, switch the settings that control the external MIDI device without changing the microSTATION's sound.

✍ You'll need to select the realtime control mode for each mode; Program, Combination, and Sequencer.

Editing an external setup

✍ The settings that you edit in Global/Media mode are maintained until you turn off the power; they will disappear when you turn off the power. If you want to keep your settings, you must use the "Write Global" command to save.

1. **Press the MODE GLB/MEDIA button to enter Global/Media mode.**

2. **Access the GLOBAL/MEDIA: MIDI - External Setup section, and press the ▶ button.**

   The first page of the External Setup section lets you select the external setup that you want to edit ("External Set Select").

   Press the ▶ button once again to choose "External Set Select."

   ```
   <MIDI/External
   ⬍100:External S>
   ```

3. **Use the ▲▼ buttons to select the external setup that you want to edit, and then press the ▶ button.**

   The knob selection screen will appear.

   ```
   <External/Set100
   ⬍Knob 1         >
   ```

4. **Use the ▲▼ buttons to select the knob that you want to edit, and then press the ▶ button.**

5. **Use "Channel" to specify the MIDI channel where the knob will transmit data.**

   ```
   <Set100/Knob1
    Channel    ⬍Glb
   ```

6. **Use "CC#" to specify the MIDI control change that the knob will transmit.**

   ```
   <Set100/Knob1
    CC#        ⬍003
   ```

7. **Specify the MIDI channel and MIDI control change for the other knobs in the same way.**

   Note: For details on the control change (CC#) settings of the preload external setups, and the applications for which each setup is intended, please refer to "microSTATION External Setups" (PDF).

Saving & loading data

Types of data that can be saved

You can save the various types of data in the microSTATION by writing it to internal memory, by saving it to an SD card (commercially available), or by sending it as a MIDI data dump.

Writing to internal memory

The following types of data can be written into the internal memory.

- Program
  Programs 000–127 in banks A–D
- Combination
  Combinations 000–127 in banks A–C
- Global settings
  (GLOBAL/MEDIA: Basic–Controllers)
- User template songs U00–U15

  Song settings such as the song name and tempo, track settings (see PG p. 36), arpeggiator, and effect settings can be saved (written) to internal memory. However, the musical data for song tracks are not saved to internal memory. Furthermore, settings that govern how the musical data is played back such as "Time Signature", "Metronome", "PLAY/MUTE", and "Track Play Loop" (including Start/End measure) settings will not be saved either. Use the Sequencer mode song command "Save Template Song" to write this data; for details, please see "Save Template" on page 48 of the Parameter Guide.

✍ Data that you edit in Sequencer mode can only be saved to media; it cannot be saved in internal memory.

- User drum kits 00 (INT)–47 (USER)
- User arpeggio patterns 000–639

  User drum kits and user arpeggio patterns cannot be edited from the microSTATION itself. Data you've edited using microSTATION Editor / Plug-In Editor will be transmitted to the microSTATION and written when you execute "Write Drumkit" (☞PG p. 204) or "Write Arpeggio pattern" from the editor (☞PG p. 205).

About preloaded data and preset data

"Preloaded data" refers to the data that is loaded in the microSTATION when it is shipped from the factory. You are free to rewrite this data, and with the exception of the demo songs, the data will be written to the location as described in "Writing to internal memory." This data is stored in the microSTATION's system area.

The preload data can be reloaded into internal memory via an SD card by using a Global/Media mode command such as "Load PCG."

Preset data, on the other hand, is data that cannot be overwritten by the Write operation. This includes the following data.

- GM program
- GM drum kits 48(GM)–56(GM)
- Preset template songs P00–P15

Saving to media

The following data can be saved to various types of media.

- **.PCG file:**
  Programs, Combinations, Drum kits, Global settings, and user arpeggio patterns.
- **.SNG file:**
  Song.
- **.MID file:**
  Saves a Sequencer mode song in Standard MIDI File (SMF) format.

Using the included editor to save data

You can use the utility command Save to save the data on your computer as a dedicated file for the editor application (☞PG p. 205).

Writing to internal memory

Writing a Program or Combination

The Program and Combination settings you've made in the various editing pages can be saved to internal memory. This action is referred to as "writing a program" or "writing a Combination." If you want your edited data to be preserved after the power is turned off, you must perform a Write operation.

There are two ways to write a Program or Combination.

Before you can write data into memory, you must turn off the memory protect setting in Global/Media mode.
For details, please see "Memory protect" on page 59.

A combination does not contain the actual program data for each timbre, but simply references the number of the program used by each timbre. If you edit a program that is used by a combination, or exchange it with a different program number, the sound of the combination will also change, reflecting the altered program.
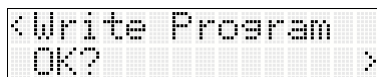
We'll explain using Program mode as an example. (The procedure is the same for Combination mode.)

Using the WRITE button

This method allows you to write only to the program/combination number that's selected.

1. **Press the WRITE button.**

   The display will ask "OK?"

   ```
   ‹Write Program
     OK?            ›
   ```

To execute the Write operation, press the ▶ button.
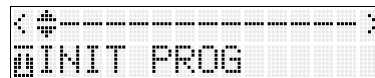
Writing from an edit page

1. **Make sure that the program that you want to save is selected.**

2. **Enter an edit page, and choose "Write Program."**

   ```
   ‹PROG EDIT
   ◊Write Program ›
   ```
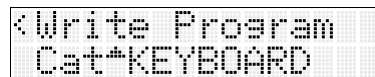
3. **Edit the program name as desired.**

   Use the ◀▶ buttons to select the character location, and use the ▲▼ buttons to specify the character for that location.

   ```
   ‹ ◈—————————————— ›
   ▒INIT PROG
   ```
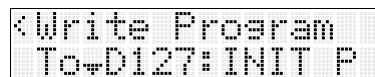
4. **Use "Cat" to specify a category for the program.**

   You'll be able to select the program via the category that you specified here.

   ```
   ‹Write Program
     Cat▲KEYBOARD
   ```

5. **Use the "To" field to specify the writing-destination bank and number.**

   ```
   ‹Write Program
     To▾D127:INIT P
   ```

   Note: The bank and number are shown in the upper right of the display when you turn on Num Lock in the PROG PLAY page and then press the 14 (ENTER) button.

6. **To begin the Write operation, make the display indicate "OK?" and then press the ▶ button.**

   ```
   ‹Write Program
     OK?            ›
   ```

How tone parameter settings are saved

The sound parameters of a program, and adjustments applied to the programs used by a combination or song, are referred to as "tone parameters."

There are two types of tone parameters as described below, and their type will determine how they are written.

- **Absolute:** This type of Tone parameter controls a single program parameter. The Program parameter and the Tone parameter reflect each other exactly. If you edit one, the other parameter will reflect the identical change. This type of Tone parameter "absolutely" controls the program parameter itself.

- **Relative:** This type of Tone parameter controls two or more program parameters simultaneously. For example, "Filter/Amp EG Attack Time" controls a total of six program parameters. The value of a relative parameter indicates the amount of change that is applied to the value of each program parameter it's affecting.
  When a relative parameter is at zero (i.e., when its slider is in the center position), the program parameters it controls will function according to their original settings. Raising or lowering the value

of a relative parameter will indirectly raise or lower the value of these program parameters.

Program mode:
- The settings of relative-type Tone parameters are automatically applied directly to the program parameters when you write the program. The Tone parameter values will be reset to zero.
- The settings of absolute-type Tone parameters are written "as themselves" (i.e., as the new settings of those Tone parameters) (☞PG p. 79).

Combination mode:
- The settings of both relative-type and absolute-type Tone parameters are written and preserved as the Tone parameter settings for each timbre. (☞PG p. 149)

About the Program and Combination edit buffer

When you select a program in PROG PLAY or a combination in COMBI PLAY, the program or combination data is called into the microSTATION's edit buffer.

When you then use the various Program or Combination pages to edit the parameters, your changes will affect the data in the edit buffer.

If you wish to save this modified data into internal memory, you must perform the Write operation. When you perform the Write operation, the data in the edit buffer is written to the specified program or combination number of the specified bank.

If you select another program or combination without writing your edits, the data of the newly selected program or combination will overwrite the edited data in the edit buffer, and your changes will be lost.

Note: When you press the COMPARE button in Program mode, or Combination mode, the data from memory (i.e., the contents that were written into memory) will be temporarily called into the edit buffer. This allows you to compare the settings you are editing with the original un-edited settings.

Editing applies to the data in the edit buffer. Programs or combinations will play according to the data in the edit buffer.
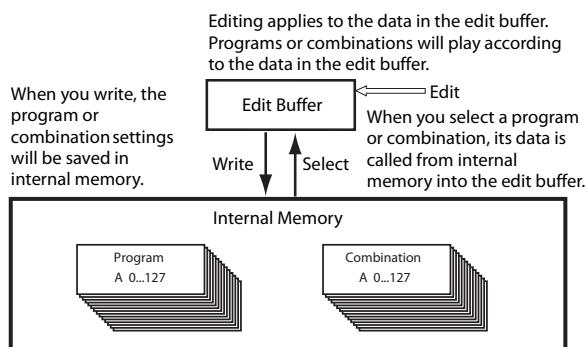
Writing global settings

Settings that you've edited in Global/Media mode can be written to the microSTATION's internal memory. Be sure to write your settings if you want to keep them even after the power is turned off.

1. **Choose GLOBAL/MEDIA: Write Global.**

   The display will indicate "OK?"

   ```
   <Write Global
   OK?            >
   ```
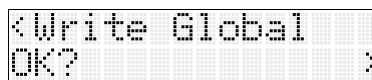
   ✍ The Effect SW settings are not saved.

2. **To begin the Write operation, press the ▶ button.**

   When writing is finished, the display will indicate "Complete."

Memory in Global/Media mode

When the power is turned on, the Global/Media mode data is called from internal memory into the Global/Media mode memory area. Then when you modify the parameters in Global/Media mode, the data in the memory area will be modified. If you wish to save this modified data in internal memory, you must Write it.

When you write this data, the data in the memory area is written into the global settings.

If you turn off the power without writing, the modified data in the memory area will be lost.
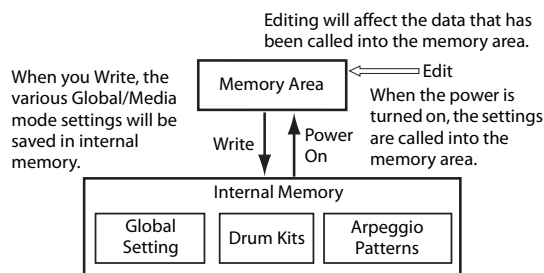
Memory protect

To prevent Programs, Combinations, Songs, Drum Kits, and User Arpeggio Patterns from being overwritten accidentally, the microSTATION provides a Memory Protect setting that prohibits writing to memory.

Before you save edited data or load data from media, use the following procedure to turn the memory protect off.

You must also turn memory protect off before loading the above data from media or via a MIDI data dump, or before recording in Sequencer mode.

1. **Press the GLB/MEDIA button to enter Global/Media mode.**

2. **Choose GLOBAL/MEDIA: Basic - Memory Protect.**

   ```
   <Basic
   ^Memory Protect>
   ```

3. **Turn Off the "Memory Protect" setting for the data that you want to write to the microSTATION's memory.**

   ```
   <Basic/M.Protect
    Program   ^Off
   ```
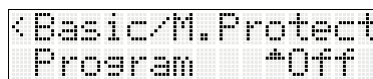
Saving to media (Media–Save)

For details on the data that can be saved on storage media. For details, please see "Types of data that can be saved" on page 57.

✎ Song data in the microSTATION's Sequencer mode cannot be written into internal memory. This data will disappear when the power is turned off. In order to keep this data, you must write it to the SD card (commercially available). When you've come up with settings that you like, it's a good idea to save them, so that even if you subsequently edit those settings, you'll always be able to reload the previous settings if desired.

Types of media you can use – SD card specifications

MS-DOS format FAT16 or FAT32 are supported.

Capacity recognized: FAT16: 2 Gigabytes (GB)

SDHC memory cards are supported.

✎ Media is not included. You will need to purchase it separately.

Inserting/removing a card in the SD card slot

If you've placed an SD card in the SD card slot, you can use it to save or load various types of Program, Combination, and Song data.

Inserting a card
• Insert an SD card in the SD card slot.

With the card label facing upward, insert the connector end of the card into the SD card slot and press it in until you hear a click.

SD card slot
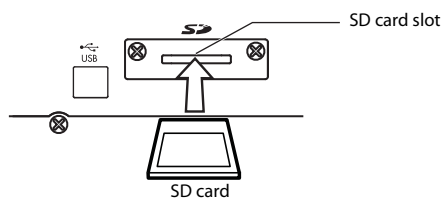
SD card

✎ Make sure that the card is oriented correctly when you insert it. Forcing it in the wrong direction may damage the slot or the card, and the data may be lost.

Removing a card

✎ Never remove an SD card from the slot while loading, saving, or formatting is in progress.

• Remove the card from the SD card slot.
Press the card inward; you will hear a click, and the card will pop out part-way, allowing you to pull it completely out.
Refer to the operation guide included with your card, and observe the guidelines for handling and use.

Saving

Select the appropriate page for the data that you want to save to media.

For details on saving, please refer to PG p. 69 "Save All" and following.

Cautions when saving
• When you format media on the microSTATION, or execute a Save operation for the first time, a directory named Korg/MICRO_ST will automatically be created in the root directory. When you save data, an automatically named file will be created below that directory.

When saving, the data will automatically be assigned a filename extension of ".PCG," ".SNG," or ".MID" etc. according to its type. Please note that if you use your computer to change this extension, it will be considered an undefined file when you attempt to load it into the microSTATION, and will be handled as a Standard MIDI File.

Saving in the editor

The "Save" utility command

In the microSTATION Editor/Plug-In Editor, click the UTILITY button, and choose "Save" from the menu that appears; this lets you save the editor's settings as a dedicated microSTATION Editor/Plug-In Editor file on your computer

The "Export" utility command

In the microSTATION Editor/Plug-In Editor, click the UTILITY button, and choose "Export" from the menu that appears; this lets you save the editor's settings as a microSTATION .PCG file on your computer.

Loading data

Data that can be loaded

Loading from media

You can load the following data from media.

• **.PCG file:**
Programs, Combinations, Drum Kits, Global settings, and User Arpeggio Patterns

• **.SNG file:**
Song

• **.MID file:**
Standard MIDI file (SMF) format

Restoring the factory settings (loading the preload data and demo songs)

You can reload the preload data from the included accessory disc, as well as the demo song data that's in the microSTATION's internal memory.

For the procedure, please refer to "Loading the preloaded data"(☞p. 63) and "Loading the demo songs" ("Easy start guide," p. 15).

• **Preload data:** On the included accessory disc, or download from the Korg website.

Programs, combinations, drum kits, global settings, user arpeggio patterns

• **Demo song data:** In the microSTATION's internal memory.

Loading data from media (Media-Load)

Loading all programs, combinations, drum kits, and arpeggio patterns

Here's how all data from a .PCG file containing programs, combinations, drum kits, global settings, and user arpeggio patterns can be loaded in a single operation.

✎ In order to load programs, combinations, songs, drum kits, or user arpeggio patterns, you must first make sure that the Global/Media mode memory protect setting is off. (☞p. 59 "Memory protect")

Note: For details on the media from which data can be loaded, please refer to p. 60.

1. **Make sure that the media is ready for loading.** (☞p. 60 "Inserting/removing a card in the SD card slot")

2. **Choose GLOBAL/MEDIA: Media - Load, Load PCG, and then press the ▶ button.**

   The PCG files on the media will be displayed.

   `<Media/Load PCG`
   `↓0000.PCG        >`

3. **Use the ▲▼ buttons to select the .PCG file that contains the program or combination data you want to load, and then press the ▶ button.**

   `<0000.PCG`
   `↓All PCG         >`

4. **Choose All PCG, and press the ▶ button.**

   The display will indicate "OK?"

5. **To begin the Load operation, press the ▶ button.**

   All data of the .PCG file will be loaded into the microSTATION.

   ✎ Never remove the media while data is being loaded.

Note: You can also load programs or combinations by bank. Please refer to PG p. 68.

Loading individual items from a PCG file

The microSTATION also allows you to load individual items or banks of program, combination, drum kit, or user arpeggio pattern data. This is a convenient way to rearrange combinations into the order in which you'll be playing them live.

✎ Be aware that editing a program will affect the sound of any combination that uses that program.

As an example, here's how one combination that was saved in bank A can be loaded into C127.

1. **Choose GLOBAL/MEDIA: Media - Load PCG.**

   `<Media/Load PCG`
   `↑0001.PCG        >`

2. **Select the PCG file that contains the combination you want to load, and then press the ▶ button.**

   `<0001.PCG`
   `↕Combinations    >`

3. **From the PCG file, choose "Combinations" and press the ▶ button.**

   `<Combinations`
   `↕Bank A          >`

• From the combinations, choose "Bank A" and press the ▶ button.

   `COMBI PLAY`
   `↕006:INIT COMBI >`

• From bank A, choose the combination that you want to load, and press the ▶ button.

   Note: When you play the keyboard, you'll hear the selected combination. However, each timbre will sound using the corresponding internal program.

4. **Choose C127 as the load-destination, and press the ▶ button.**

   `<Bank A`
   `↕006:INIT COMBI >`

   The display will ask "OK?"

5. **To load the data, press the ▶ button.**

   The selected combination of bank A will be loaded into C127.

6. **In Combination mode, set the category to ALL, turn Num Lock on, and specify 384 to select combination C127.**

   `COMBI PLAY[C127]`
   `↓384:INIT COMBI >`

   Note: The bank and number are shown in the upper right of the display in the COMBI PLAY page when you turn Num Lock on and press the 14 (ENTER) button.

Loading a song (.SNG) for use in Sequencer mode

In this example, we'll explain how to load a song.

We will assume that this song uses programs, drum kits, and user arpeggio patterns that you've edited. If this is the case, it's best to load all data.

1. **As described in "Loading all programs, combinations, drum kits, and arpeggio patterns" (☞p. 61), load the PCG file that is used by the .SNG file you're going to load.**

2. **In GLOBAL/MEDIA: Media - Load, choose Load SNG.**

   `<Media/Load`
   `◊Load SNG        >`

3. **Use the ▲▼ buttons to select the SNG file that you want to load, and then press the ▶ button.**

```
‹Media/Load SNG
↙0000.SNG        ›
```

4. **Select the song data that you want to load, and press the ▶ button.**

```
‹0001.SNG
↖000:NEW SONG    ›
```

If you want to load all of the song data, choose All SNG.

The display will ask "OK?"

5. **To begin the Load operation, press the ▶ button.**

The specified data will be loaded into the microSTATION.

⚠ Never remove the media while data is being loaded.

Loading microSTATION system version update data

You can update the microSTATION's system by downloading the latest system file from the Korg website (http://www.korg.com) to your computer, and then transmitting the file from your computer to the microSTATION. For details, please refer to the Korg website.

Media utility

Formatting media

Here's how to format media.

New media that you've just purchased, or media that has been used by another device, cannot be used on the microSTATION in that state. You must first format the media so that it can be used on the microSTATION.

⚠ When you format media, all data that had been saved on that media will be deleted. Before you proceed, make sure that the media does not contain important data.

⚠ After formatting, you cannot return the media to its previous state by pressing the COMPARE button.

1. **Make sure that the media you want to format is inserted** (☞p. 60 "Inserting/removing a card in the SD card slot").

2. **Choose GLOBAL/MEDIA: Media - Format, and press the ▶ button.**

```
‹Media
↖Format          ›
```

The display will ask "OK?"

3. **To execute the Format operation, press the ▶ button.**

When formatting is completed, the display will indicate "Complete."

⚠ You must format the media on the microSTATION. Media that was formatted on a different device might not be recognized correctly.

Appendix

Restoring the factory settings

Loading the preloaded data

The original preload data is backed up in the microSTATION, so you can restore any or all of the Programs, Combinations, Drum Kits, User Arpeggio Patterns, and Global settings to their original factory settings.

To return the microSTATION to its factory-set state, you can load the preload data from an SD card to which you copied it, or dump the data to the microSTATION from microSTATION / Plug-In Editor running on a USB-connected computer.

The preload data is provided on the accessory disc included with the microSTATION. You can also download the latest data from the following website.

Korg website: "http://www.korg.com/"

✎ Never turn off the power while the data is being loaded.

✎ Before you load, you'll need to turn the GLOBAL/MEDIA: Basic "Memory Protect" setting Off for the data that you want to load. You won't be able to execute the Load operation if this setting is On (☞PG p. 60 "M.Protect (Memory Protect)").

✎ Loading the preloaded data will overwrite the contents of the internal memory. If you want to keep the existing data that is stored in internal memory, use "Save All " or "Save PCG" to save your data to external media before you continue.

Here we'll explain how you can use your computer to copy the preload data to an SD card, insert that SD card into the microSTATION, and use Global/Media mode to load it.

Note: User banks and user patterns not included in the preload data will remain in the microSTATION unchanged. If you want to erase the user banks and user patterns, initialize the microSTATION and then load the preload data (☞p. 63 "Initialization").

Items you'll need
- SD card: an SD card of 128 Mbyte or greater capacity.
- Computer: For details on computer requirements, please refer to "Operating requirements"(☞p. 73).
- SD card reader/writer

Loading procedure

1. **Insert your SD card into the microSTATION's card slot, and format the SD card as described in "Formatting media" on p.62.**

Note: An SD card that's already being used with the microSTATION does not need to be formatted.

✎ When you format media, all data saved on that media will be erased. Please check the contents of the media before you format it.
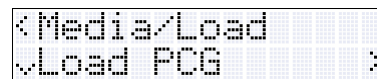
When you format the SD card, the folder structure "KORG" - "MICRO_ST" will be created on the card.

2. **Remove the SD card from the microSTATION.**
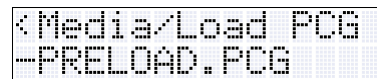
3. **Using your computer, copy the preload data (PRELOAD.PCG) from the "Factory Preload Sounds" folder of the included disc to the "MICRO_ST" folder on the SD card.**

✎ If the "MICRO_ST" folder already contains a folder named PRELOAD.PCG, it will be overwritten.
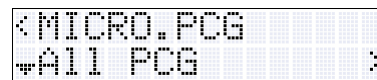
4. **Choose MEDIA/Load - Load PCG.**

```
‹Media/Load
√Load PCG          ›
```

5. **Select the PCG data (file name: PRELOAD.PCG) that you want to load, and press the ▶ button.**

```
‹Media/Load PCG
—PRELOAD.PCG
```
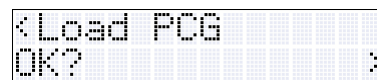
6. **Choose All PCG, and press the ▶ button.**

```
‹MICRO.PCG
▾All PCG            ›
```

The screen will ask "OK?"

7. **To load the data, press the ▶ button.**

```
‹Load PCG
OK?                 ›
```

Loading a PCG file will load the following data.
- Program: Bank A, B, C, D (000–095)
- Combination: Bank A, B
- Drum Kit: 00 (INT)–47 (INT)
- User Arpeggio Pattern: 000...639
- Global Setting

Initialization

If operation becomes unstable, you can initialize the microSTATION as follows.

1. **Turn off the microSTATION's power.**

2. **While holding down the PLAY/MUTE button and the function 08 button, turn on the microSTATION's power.**

The microSTATION will be initialized, and data will be written to internal memory. While data is being written, the display will indicate "Initializing..."

When initialization has been completed, you'll need to load the preload data from an SD card containing the data, or dump it from a USB-connected computer using microSTATION Editor/Plug-In Editor. (☞"Loading the preloaded data")

Troubleshooting

If you experience problems, please see the relevant item and take the appropriate measures.

Power supply

Power does not turn on

☐ Is the AC adapter connected to an outlet? ☞p. 11

☐ Is the rear panel POWER switch turned on? ☞p. 11

Display

The power is turned on, but nothing is shown on the display. The microSTATION functions normally when you play the keyboard or perform other operations.

☐ Use the rear panel Contrast adjustment knob to adjust the contrast of the display. ☞p. 4

The power is turned on, but the display does not work normally, or an error message is displayed. There is no sound when you play the keyboard, and the microSTATION does not function normally.

☐ This type of problem may occur if a data writing operation to internal memory was not completed correctly, for example, if the power of the microSTATION was turned off while a program or other data was being written. If this occurs, initialize the microSTATION's internal memory. ("Initialization" on page 63)

Can't switch modes or pages

☐ If you're doing any of the following, you may not be able to change modes or switch to a different page:
→ Recording or playing back a song.

In Combination, or Sequencer modes, you can't edit the value of Timbre/Track parameters

☐ Some parameters can't be edited while notes are playing, either locally or from MIDI. If the damper pedal is held down, or if its calibration is incorrect, notes may be sustaining even if they aren't audible.
→ Are you using a damper pedal with a polarity that does not match the **Polarity** setting (Global/Media: Controllers–PEDAL/SW)? ☞PG p. 65
→ In some cases, this problem can be solved by executing the Global/Media mode command HalfDmpr Calib.☞PG p. 66

Audio output

No sound

☐ Are connections made correctly to your amp, mixer, or headphones? ☞p. 12

☐ Is the connected amp or mixer powered-on, and is its volume raised?

☐ Is Local Control turned on?
→ Turn "Local Ctrl" (GLOBAL/MEDIA: MIDI) On. ☞PG p. 61

☐ Is the VOLUME knob set to an appropriate position? ☞p. 2

☐ Is the Master Volume assigned to **Foot Pedal Assign**, and is that pedal volume lowered? ☞PG p. 65

☐ If a specific oscillator doesn't sound in program mode, is its "Play/Mute" set to Play? ☞p. 17

☐ If a specific timbre doesn't sound in Combination mode, is its "Play/Mute" set to Play? ☞p. 29

☐ If a specific track doesn't sound in Sequencer mode, is its "Play/Mute" set to Play? ☞p. 37

☐ Make sure that the **Status** is INT or BTH. ☞p. 29, p.42

☐ Are the Key Zone and Velocity Zone set so that sound will be produced when you play? ☞PG p. 21, PG p. 22, PG p. 40

☐ Is the Oscillator, Timbre, or Track level lowered? ☞PG p. 7, PG p. 19, PG p. 37

☐ Could the level of the **Master Volume** following the total effect have been lowered? ☞PG p. 13, PG p. 26, PG p. 47

☐ Could the total polyphony be exceeding the maximum polyphony of 80 voices?

Notes do not stop

☐ Is "Hold" (PROG EDIT: OSC Common) turned Off? ☞PG p. 5

☐ In Global/Media: Controllers–PEDAL/SW, make sure that **Polarity** is set correctly. ☞PG p. 65
→ Even if this is set correctly, you might be able to solve the problem by executing the Global/Media mode command "HalfDmpr Calib."

☐ If the ARP ON/OFF buttons are turned on, try turning them off.

Notes are sounded in duplicate

☐ Is Local Control turned Off?
→ Turn "Local Ctrl" (GLOBAL/MEDIA: MIDI) Off. ☞PG p. 61

Noise or oscillation is heard

☐ When using the MIDI/Tempo Sync function to control the delay time of an effect, noise may occur in the delay sound. This noise is due to

discontinuities in the delay sound, and is not a malfunction.

☐ Some effects, such as S19: St.Record, generate noise intentionally. It is also possible to make a resonant filter oscillate. Please check the settings.

☐ Note that if you use the following effects with the routing described below, a feedback loop will be created, possibly producing a loud noise. Please use caution.
If the signal from an oscillator or timbre/track output, or the signal after an insert effect, is sent to the FX Control bus and that signal is output directly, with this output sent to the FX Control bus, a loud noise may be output. (It is also possible that a DC component will be output at the maximum level, producing silence.)

• When using S03: St.Limitr or S06: St.Gate, and the "Env Sel" of these effects is set as either FX Ctl1 or FX Ctl2, and "Trigger Monitor" is On (editable only by using microSTATION Editor / Plug-In Editor).

• When using D09:Vocoder, and the "Mod Src" of this effect is set as either FX Ctl1 or FX Ctl2, and "Modulator High Mix" is set to other than 0 (editable only by using microSTATION Editor / Plug-In Editor).

Can't play chords

☐ Could the program's **Voice Assign Mode** be set to Mono? ☞PG p. 3

Pitch is incorrect

☐ In the Global/Media: Basic, are the **MTune** and **Transpose** settings correct? ☞PG p. 57

☐ In the Prog Edit: OSC1 or OSC2, is the **PitchSlope** set to +1.0? ☞PG p. 7

☐ In the combination or song, are the **Transpose** and **Detune** settings of each timbre/track set appropriately? ☞PG p. 20, PG p. 39

Programs and Combinations

Settings for oscillator 2 are not displayed

☐ Have you selected a program that uses oscillator 2?

Program does not sound

☐ Could the oscillator or amp level be lowered? ☞PG p. 7

☐ Is the oscillator's "Play/Mute" parameter set to Play? ☞p. 17

A combination does not play correctly after you load data

☐ Are the category and index number of the programs used by the combination the same as when you created the combination?

Can't write a Program

☐ Is the Memory Protect **Program** or **Combi** off (GLOBAL/MEDIA: Basic)? ☞p. 55, PG p. 60

Songs

The sound of the program selected for a track is different than when played in Program mode

☐ When you select a program for a track in Sequencer mode, the arpeggiator and effect settings of Program mode are not assigned automatically.

→ You can use the SEQ EDIT command "Copy ARP," "Copy IFX," or "Copy MFX/TFX" etc. to copy the Program mode settings. ☞PG p. 48

Song does not play correctly after being loaded

☐ Are the programs used by the song the same as when the song was created?

→ When saving the song, it is best to use **Save All** so that the programs are saved together with the song. Then when loading, load both the .PCG and the .SEQ data. ☞PG p. 69

Playback does not start when you press the Start/Stop button in Sequencer mode

☐ Is the **Clock** (Global/Media: MIDI–MIDI Clock) set to Internal or Auto? ☞PG p. 62

Can't record in Sequencer mode

☐ Did you select the MIDI track that you want to record?

☐ Is the Memory Protect **Song** off (Global/Media: Basic)? ☞p. 55, PG p. 60

☐ Is the **Clock** (Global/Media: MIDI–MIDI Clock) set to Internal or Auto? ☞PG p. 62

☐ When using loop recording, could you be in Rehearsal mode?

→ Turn off Rehearsal mode. ☞p. 36

After using the song command "Copy Combi" to copy a combination, you can't record the arpeggiator as when you were playing that combination

☐ Were the settings correct when you executed Copy Combi? ☞p. 43

→ In the Copy Combi settings, set "Multi Rec?" to Yes before you execute the copy. These settings will be made automatically.

Can't record program changes

☐ Is the MIDI filter "Prog Chg" turned On for each track? This is Off by default.

→ Turn the MIDI filter "Prog Chg" On for each track before you record.

Can't record changes in tone parameters

☐ Tone parameters are recorded as system exclusive data. Is the Global/Media mode MIDI Filter "SysEX" turned On? This is Off by default. ☞PG p. 63

SMF you loaded in Media mode won't play correctly

☐ Use the song command **GM Initialize** to restore the settings. ☞PG p. 49

☐ Set Global/Media: Basic, **Bank Map** to GM(2). ☞PG p. 59

When the grid sequence function is on, you can't use function buttons 01–16 to turn grid notes on/off

☐ Is the sequencer stopped? You can't turn grid notes on/off while the song is playing back.

☐ If there is no sound even when a grid note is on, check whether track parameters such as "Status" and "Play/Mute" are set so that sound can be produced.

→ Check the parameters, and also try playing the keyboard to verify that sound is produced.

Arpeggiator

Arpeggiator won't start

☐ Is the ARP ON/OFF button on (the button at the upper left of the LED lit)? ☞p. 50

☐ If the arpeggiator does not start in Combination or Sequencer mode, is each arpeggiator's "Run" setting turned On? Is "ARP Assign" set to assign the arpeggiator to a timbre or track? ☞p. 53, PG p. 19, PG p. 37

☐ Is "Clock" (GLOBAL/MEDIA: MIDI - MIDI Clock) set to Internal or Auto? ☞PG p. 62

☐ Is GLOBAL/MEDIA: Basic-ARP "All ARP" turned Off? ☞p. 55, PG p. 59

Effects

Effects are not audible

☐ Have you selected effect program 000?
→ Select an effect other than 000: No Effect for "IFX1–5," "MFX 1, 2" or "TFX."

☐ Are the Effect SW "IFX1-5 Off," "MFX1&2 Off," and "TFX Off" settings (GLOBAL/MEDIA: Basic) turned Off? ☞p. 55, PG p. 59

☐ If you are in Combination and Sequencer mode, and master effects are not audible when you raise the **Send 1** or **Send 2** of the timbre/track, does **Return 1** or **Return 2** from the master effect need to be raised? ☞PG p. 25, PG p. 46, PG p. 211 Alternatively, has **Send 1** or **Send 2** for each oscillator of the program used by the timbre/track been lowered? ☞PG p. 25, PG p. 46

Note: The actual send level is determined by multiplying the send setting of each oscillator in the program with the send setting of the timbre/track.

☐ Have you routed the output to an insert effect? ☞PG p. 11, PG p. 19, PG p. 46

MIDI

The microSTATION does not respond to incoming MIDI data

☐ Are all MIDI cables or USB cables connected correctly? ☞p. 14

☐ Is the MIDI data being received on the channel on which it is being transmitted? ☞PG p. 60

The microSTATION does not respond correctly to incoming MIDI data

☐ Are the MIDI Filter "Prog Chg," "Bank Chg," "Combi Chg," "Ctrl Chg," "AfterTouch," and "SysEx" settings (GLOBAL/MEDIA: MIDI) each turned On? (By default, "SysEx" is turned off.) ☞PG p. 63

☐ Does the microSTATION support the types of messages that are being sent to it? ☞PG p. 304

Incorrect response to program change messages

☐ Is the **Bank Map** setting correct? ☞PG p. 59

☐ If program changes are not received in Sequencer mode, check the MIDI filter "Prog Chg" setting of each track. By default, this is turned off.

Damper pedal, Foot pedal do not respond correctly

Damper response is wrong

☐ Execute the Global/Media mode command **HalfDmpr Calib** to correctly calibrate the half-damper pedal sensitivity. ☞PG p. 66

Foot pedal response is wrong

☐ Execute the Global/Media mode command **Pedal Calib** to correctly calibrate the foot pedal sensitivity. ☞PG p. 66

Media

Can't format the SD card

☐ Does the media meet the requirements for use on the microSTATION? ☞p. 60

☐ Is the media inserted correctly? ☞p. 60

☐ Could the media's write protect setting be turned on?

Can't save/load data on the SD card

☐ Is the media inserted correctly? ☞p. 60

☐ Has the media been formatted? ☞p. 62

☐ Could the media's write protect setting be turned on?

Connections with a computer

The microSTATION does not respond to MIDI data sent from outside

☐ Is the USB cable connected correctly? ☞p. 14

The computer does not detect the microSTATION

☐ Are the USB cables connected correctly?

An error occurs when you disconnect from the computer

☐ Never disconnect the microSTATION from the computer while your host application is in use.

While connected, you are asked to install software or a device driver

☐ Does the operating system version of your computer support the microSTATION? ☞p. 73

When using USB, sound processing is slow, or the tempo is unstable

☐ Is the MIDI driver installed for the USB port you've connected?
→ If you are using Windows, a driver must be installed for each USB port you use. If you connect the microSTATION to a USB port other than the port you used when installing the KORG USB-MIDI Driver for Windows, you'll need to reinstall the KORG USB-MIDI Driver.

Included accessory disc

Can't install the driver

☐ Is the USB cable connected correctly?

☐ Is the accessory disc inserted in your optical disc drive?
→ Make sure that the accessory disc is inserted correctly.

☐ Is the lens of your optical disc drive dirty?
→ Use a commercially-available lens cleaner to clean the lens.

☐ Are you able to use USB?
→ If you are using Windows XP, go to [Control Panel] → [System], and select the [Hardware] tab. In [Device Manager], check the settings for Universal Serial Bus Controller and USB Root Hub.

☐ Has the microSTATION been detected as an unknown device?
→ If you are using Windows XP, go to [Control Panel] → [System], select the [Hardware] tab, and check [Device Manager]. If the microSTATION has not been detected correctly, it will be displayed in "Other devices" or "Unknown devices." Reconnect the USB cable; if the microSTATION is again displayed as an "Unknown device," the computer has failed to detect it correctly. Delete the "Unknown device" entry, and reinstall the driver.

Your software does not respond to the microSTATION

☐ Is the USB cable connected correctly?

☐ Did you install the driver?

☐ Has your computer detected the connected microSTATION?

→ If you are using Windows XP, go to Control Panel → "Sounds and Audio Devices Properties" and click the Hardware tab.

→ If you are using Windows Vista or Windows 7, check Sound, Video, and Game Controllers in the Device Manager.

→ If you are using Mac OS X, go to Macintosh HD → Application folder → Utility folder → "Audio MIDI Settings," select the "MIDI Devices" tab, and check that the microSTATION has been detected.

✎ Some computer hardware configurations may not recognize the microSTATION.

☐ Check the microSTATION's assignments and USB-MIDI port settings.

☐ The connected device or software may not support the messages that you are transmitting. Refer to the manual of the connected device or software to verify that it responds to the messages you are transmitting.

☐ If you want to transmit and receive system exclusive data, the MIDI Filter "SysEx" setting must be On (GLOBAL/MEDIA: MIDI). You must turn this setting On if you've connected the microSTATION to your computer and want to edit the microSTATION from your computer (or edit bi-directionally). If you use microSTATION Editor / Plug-In Editor, this setting will turn On automatically.

☐ Please download and use the most recent version of the microSTATION Editor/Plug-in Editor.
You can download the most recent versions of the editor, plug-in editor, and Korg USB-MIDI driver from the following website.

Korg website: http://www.korg.com/

Error messages

Various messages

A

Access denied

Meaning: This will appear if you attempt to execute the song command "Memory Status" while playing or recording on the sequencer.

Action: Stop the sequencer before you execute the song command "Memory Status."

C

Can't calibrate

Meaning: Calibration could not be performed correctly.

Action: Try the operation again.

Can't undo

Meaning: Free memory for undoing (the Compare function) could not be allocated when you finished recording in Sequencer mode, or when you executed an edit. The data you just recorded or edited will remain, but undo (Compare) cannot be executed.

Action: In order to allocate sufficient free memory for undo (Compare) to be available, you can delete unneeded song or track data. We recommend that you save your data to media before executing.

Completed

Meaning: The command was executed, and completed

Action: The command you executed was successful.

D

DestMeasureEmpty

Meaning: There is no data in the specified measure.

Action: Specify a measure that contains data.

Dest same as src

Meaning: When copying, you selected the same song or track as the copy-source and copy-destination.

Action: Make sure that the copy-source and copy-destination are different songs or tracks.

Dest. empty

Meaning: When editing, the track you specified contains no performance data.

Action: Specify a track that contains performance data.

Dest. song empty

Meaning: The song you specified as the copy-destination does not exist.

Action: Before you copy, execute the song command "Create New" to create a song.

F

File exists

Meaning: When executing a file rename command, an identically-named file existed on the media.

Action: Delete the existing file, or specify a different name.

File invalid

Meaning: You attempted to load or open a file whose file format was incorrect.

File not found

Meaning: When performing a file delete command, the specified file did not exist.

Action: Check the media or file.

File read only

Meaning: You attempted to delete a file, but that file had a read-only attribute.

Meaning: You attempted to save a file using the same name as a read-only file that already existed on the media.

Action: Save the file under a different name.

Format failed

Meaning: An error occurred while formatting media.

Action: Use different media.

FX size mismatch

Meaning: When copying or swapping effects, you attempted to place a double-size effect at IFX5 (insert effect 5) or MFX2 (master effect 2).

Action: Don't specify a double-size effect for IFX5 or MFX2 when executing the command.

FX type mismatch

Meaning: This message will appear when copying or swapping effects if the copy-destination or swap-destination IFX (insert effect), MFX (master effect), or TFX (total effect) has an effect that cannot be selected.

Action: For each IFX, MFX, and TFX, some effects can be selected and other effects cannot be selected. Verify that the effect is one that can be selected for the copy-destination or swap-destination IFX, MFX, or TFX.

I

Illegal name

Meaning: An invalid file name was specified.

Action: Change the file name. You may not specify a file name that is invalid in MS-DOS.

M

Measure#Exceeded

Meaning: Executing the edit would cause the track length to exceed 999 measures.

Action: Delete unneeded measures.

Media full

Meaning: When you attempted to save a file in Global/Media mode, there was insufficient free space on the media.

Action: Either delete an existing file, or use different media that has sufficient free space.

Media Invalid

Meaning: The selected media is unreadable.

Memory Full

Meaning: When you were editing a song or track in Sequencer mode, the total amount of all song data exceeded the sequence data memory capacity, so no further editing is possible.

Action: Delete other song data to increase the amount of free memory.

Meaning: During realtime recording in Sequencer mode, the microSTATION ran out of memory to hold the recorded data, so recording was forcibly stopped.

Action: Delete other song data to increase the amount of free memory.

Memory Protected

Meaning: The program, combination, song, drum kit, or user arpeggio pattern in the microSTATION's internal memory is protected.

Meaning: You began the Auto Song Setup process, but the song is protected.

Action: Use Global/Media mode to turn off memory protect, and then begin the write, load, or auto song setup operation once again.

MIDI recv error

Meaning: When receiving MIDI exclusive data, the received data had a data size mismatch or had a format that was invalid in some other way.

Action: Check the MIDI connection and the MIDI data.

N

No readable data

Meaning: The file size is 0, or the data to be accessed by the load or other operation did not exist in the file. Alternatively, the data content is damaged and cannot be loaded or accessed.

No media

Meaning: When executing a command in Global/Media mode, the execution-destination media is not inserted.

Action: Insert the media.

No song location

Meaning: When using "Locate": Append to load an SNG file, the load operation would exceed the remaining number of songs that can be loaded.

Action: In Sequencer mode, execute the song command "Delete" to increase the number of songs that can be loaded, and then load the song again.

Not enough mem.

Meaning: When you started realtime recording in Sequencer mode, the minimum required amount of free memory could not be allocated.

Action: Delete other song data to increase the amount of free memory.

Meaning: When you attempted to load an .SNG file or Standard MIDI File in Global/Media mode, there was insufficient free space in sequencer memory.

Action: Delete other song data to increase the amount of free memory.

Not formatted

Meaning: You attempted to perform a logical format (quick format) on the media, but the media had not been physically formatted.

Action: Use a computer to physically format (full format) the media.

R

Read failed

Meaning: An error occurred while reading data from the media.

Action: Try the read operation once again. If the same error occurs, it may be that the data on the media is damaged.

Root dir is full

Meaning: The number of allowable entries in the root directory of the media has been exceeded.

Action: Use a computer to delete files or directories from the root directory.

S

SMF data error

Meaning: You attempted to load a file that was not a Standard MIDI File.

SMF div. error

Meaning: You attempted to load a Standard MIDI File that was timecode-based.

SMF format error

Meaning: You attempted to load a Standard MIDI File of a format other than 0 or 1.

SMF has no data

Meaning: When loading a Standard MIDI File, the file contained no events.

Source is empty

Meaning: There was no data in the track you specified as the source.

Action: Specify a track that contains performance data.

Stop & Retry

Meaning: This will appear if you press the GRID SEQ button during sequencer playback or recording.

Action: Stop the sequencer, and press the GRID SEQ button again.

T

Too Many Events

Meaning: When loading a Standard MIDI File, the maximum number of events in a single measure (approximately 65,535 events) was exceeded.

Meaning: The edit you attempted to perform would exceed the maximum number of events in a single measure (approximately 65,535 events).

Action: Delete unneeded data.

W

Write failed

Meaning: An error (e.g., a verify error) occurred while writing data to media.

Action: It may be that the media is physically damaged; please use other media. Avoid using the media that produced the error.

Write protected

Meaning: The media where you attempted to write data is write-protected.

Action: Disable write-protect on the media, and execute the command once again.

Specifications and option

Specifications

Operating temperature	0 – +40 °C (non-condensing conditions)

Keyboard			61-note natural touch mini-keyboard (velocity sensitive; aftertouch not supported)
System			EDS-i (Enhanced Definition Synthesis - integrated)
	Mode		Combination, Program, Sequencer, Global/Media
Sound Engine		Maximum Polyphony	120 voices max, single mode 60 voices max, double mode * The actual maximum polyphony will vary depending on oscillator settings such as stereo samples and velocity crossfading.
		Preset PCM	49 Mbytes (when calculated as 16-bit linear data) 360 multisamples, 484 drum samples (including 24 stereo)
	Programs	Oscillator	OSC1 (Single), OSC1+2 (Double): Stereo multisamples are supported 4 velocity zones per oscillator, with switching, crossfades and layers.
		Filters	Four types of filter routing (single, serial, parallel, 24 dB) Two multi-mode filters per voice (low pass, high pass, band pass, band reject)
		Modulation	For each voice, two envelope generators (Filter & Amp), two LFOs, two key tracking generators (Filter & Amp), and two AMS mixers In addition, pitch EG, common LFO, and two common key tracking generators
	Combinations	16 Timbres	Up to sixteen timbres, keyboard and velocity split/layer/crossfade, and modifications to the program setting via the Tone Adjust function
		Master Keyboard functionality	These allow you to control external MIDI devices
	Drum Kits		Stereo and mono drumsamples. 4-way velocity switches with crossfades and adjustable crossfade shapes (Linear, Power, Layer).
	The number of ... -Combinations -Programs -Drum Kits	User Combinations	384 Combinations/256 Preload
		User Programs	512 Programs/480 Preload
		User Drum Kits	48 Drum Kits/25 Preload
		Preset Programs	256 GM2 Programs + 9 GM2 Drum Programs
Effects		5 Insert Effects	In-line processing; stereo in - stereo out.
		2 Master Effects	Two effects sends; stereo in - stereo out.
		1 Total Effect	For overall processing on the main outputs, such as compression, limiting, and EQ; stereo in - stereo out.
		Effect types	Total of 134 types (select from 74 types for insert effects, 101 types of master effect 1, 120 types for master effect 2, and 61 types for total effect)
		Modulation	Dynamic modulation, tempo sync delay, LFO
		Effects Control Bus	Stereo side-chaining for limiter, gates, vocoders, etc.
Dual polyphonic arpeggiators			Program mode: one arpeggiator available. Combination and Sequencer modes: two arpeggiators available.
			5 preset arpeggio patterns
			640 user arpeggio patterns (512 preload)
Audition Riff function			383 audition riffs, transposable
Sequencer		Tracks	16 MIDI Tracks & 1 Master Track
		Songs	128 Songs
		Resolution	480 ppq (parts per quarter-note)
		Tempo	40.00–300.00 bpm (1/100 bpm resolution)
		Up to	210,000 MIDI events
		Grid Sequence function	Allows creation of sequence loops for drums etc., with up to 64 grids per note
		Template songs	16 preset/16 user template songs
		Format	Korg (microSTATION) format, SMF (formats 0 and 1) supported
		Demo songs	3 songs
Global/Media	Global		Master tune, transpose, MIDI settings
	Media		Load, Save, Utility

Controllers	Joystick		
	REALTIME CONTROLS	Knobs 1–4 SELECT buttons	REALTIME CONTROL, Arpeggiator Control, Tempo Control
		EXTERNAL	In External mode, the four knobs can be used as MIDI controllers. 128 setups can be stored. (102 are preloaded. These allow you to control software synthesizers or DAW software.)
	Arpeggiator/Audition	AUDITION button, ARP ON/OFF button, ARP LATCH ON/OFF button	
User Interface	Display	16 character x 2 line LCD (with backlight)	
	Mode/Category	Buttons: COMBI, PROG, SEQ, GLB/MEDIA, CATEGORY SELECT, CATEGORY Indicator	
	Value Controllers	Cursor/value ▲▼◄► buttons, function 01–16 buttons (0–9, -, ., ENTER, GROUP DOWN, GROUP UP), COMPARE, WRITE	
	SEQUENCER	Buttons: LOCATE, REC, START/STOP, REW, FF, PAUSE, LOOP, KEY, GRID, SEQ, PLAY/MUTE, Function 01–16	
	Other	VOLUME knob, display contrast	
Audio Outputs	OUTPUT L/MONO, R	6.3 mm monaural phone jack (unbalanced)	
	Headphone output	3.5 mm stereo mini-phone jack	
Control Inputs	DAMPER/PEDAL/SW jack x 1, half-damper supported		
MIDI	IN, OUT		
USB	1 USB (TYPE B), MIDI interface		
SD-Card slot	Capacity recognized: FAT32: 2 Gigabytes (GB). SD and SDHC memory cards are supported.		
Power	AC adapter power supply connector (DC 9V 1700mA), POWER On/Off switch		
Dimensions (W × D × H)	778 × 210 × 82 (mm) / 30.63"× 8.27" × 3.23"		
Weight	2.6 Kg / 5.73 lbs		
Power Consumption	6 W		
Accessories	AC adapter, Easy start guide Accessory disc (microSTATION Parameter Guide (PDF), Operation Guide (PDF), USB-MIDI Setup Guide (PDF), External Setups (PDF), KORG USB-MIDI driver, microSTATION Editor/Plug-In Editor etc.)		

Option

XVP-10	Expression/Volume Pedal
EXP-2	Foot Controller
DS-1H	Damper Pedal
PS-1	Pedal Switch

Operating requirements

KORG USB-MIDI driver

Windows
Computer:
USB port required (a USB host controller made by Intel is recommended)

Operating system:
Microsoft Windows XP Home Edition/Professional/ x64 Edition Service Pack 3 or later

Microsoft Windows Vista Service Pack 2 or later (including 64-bit Edition)

Microsoft Windows 7 (including 64-bit Edition)

Macintosh
Computer:
USB port required

Operating system:
Mac OS X 10.4.11 or   later

microSTATION Editor, microSTATION Plug-In Editor

Windows
Computer:

CPU: Intel Pentium III / 1 GHz or better, Pentium D or Core Duo or better is recommended

Memory: 512 MB or more (1 GB or more is recommended)

Monitor: 1,024 x 768 pixels, 16-bit color or better

A computer that satisfies the operating requirements of Windows XP, Windows Vista or Windows 7 and has a USB port

Operating system:
Microsoft Windows XP Home Edition/Professional Edition Service Pack 3 or later, Windows Vista Service Pack 2 or later, and Windows 7

However, only the stand-alone version will run on 64-bit editions of Windows 7 and Windows Vista Service Pack 2.

Macintosh
Computer:

CPU: Apple G4 800 MHz or better (Intel Mac is supported), G5 or Core Duo or better is recommended

Memory: 512 MB or more (1 GB or more is recommended)

Monitor: 1,024 x 768 pixels, 32,000 colors or better

An Apple Macintosh computer that satisfies the operating requirements of Mac OS X and has a USB port

Operating system:
Mac OS X version 10.4.11 or later

* Formats supported by microSTATION Plug-In Editor:
Windows: VST, RTAS
Macintosh: VST, Audio Unit, RTAS

*   microSTATION Plug-In Editor must also satisfy the operating requirements of the host application.

You cannot run multiple instances of the microSTATION Editor and microSTATION Plug-In Editor on the operating system. This means that you can't use this editor to edit two or more microSTATION units simultaneously.

MIDI Implementation Chart

microSTATION

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 – 16 1 – 16	1 – 16 1 – 16	Memorized
Mode	Memorized Messages Altered	 ✕ **************	3 ✕ 	
Note Number:	 True Voice	0 – 127 **************	0 – 127 0 – 127	All note numbers 0–127 can be transmitted by the Arpeggiator or as sequence data
Velocity	Note On Note Off	◯ 9n, V=1 – 127 ✕	◯ 9n, V=1 – 127 ✕	
Aftertouch	Polyphonic (Key) Monophonic (Channel)	◯ ◯	◯ ◯	Polyphonic aftertouch and Channel aftertouch *A (receive) transmitted only as sequence data *A (receive)
Pitch Bend		◯	◯	*C
Control Change	0, 32 1, 2, 17, 19, 20, 21 4, 5, 7, 8, 10 11, 12, 13 64, 65, 66, 67 70–79 16, 80, 81, 82, 83 91, 92, 93, 94, 95 14, 22, 23, 24, 31 6, 38, 96, 97 100, 101 0–119 0–119 120, 121	◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ✕ ✕ ◯ ◯ ✕	◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯	Bank Select (MSB, LSB) *P Joystick (+Y, –Y), Realtime Knobs1-4B *C Pedal, Portamento Time, Volume, IFX pan, Pan *C Expression, Effect Control 1, 2 *C Damper, Portamento Sw, Sostenuto, Soft *C Sound (Realtime knobs1–4A: 74, 71, 79, 72) *C Foot Switch, Controller (16, 80, 81, 83) *C Send 1, 2, Effect ON/OFF (IFXs, MFXs, TFX) *C Arpeggiator Controllers *C, *2 Data Entry (MSB, LSB), Increment, Decrement *C RPN (LSB, MSB) *C, *3 Realtime Knobs 1-4B, Seq. Data *C (Seq when received) External Mode (Knobs) *C, *4 All Sound Off, Reset All Controllers *C
Program Change	 Variable Range	◯ 0 – 127 **************	◯ 0 – 127 0 – 127	*P
System Exclusive		◯	◯	*E, *5
System Common	Song Position Song Select Tune	◯ ◯ 0 – 127 ✕	◯ ◯ 0 – 127 ✕	*1 *1
System Real Time	Clock Command	◯ ◯	◯ ◯	*1 *1
Aux Messages	Local On/Off All Notes Off Active Sense Reset	✕ ✕ ◯ ✕	◯ ◯ 123 – 127 ◯ ✕	

Notes *P, *A, *C, *E: Transmitted/received when Global/Media MIDI Filter (Program Change, Aftertouch, Control Change, SysEx) is Enable, respectively.
*1: When Global/Media MIDI Clock is Internal, transmitted but not received. The opposite for Ext.MIDI/Ext.USB.
*2: Valid if assigned as a MIDI control change in Global/Media Controllers. The number shown here is the CC default assignment.
*3: RPN (LSB,MSB)=00,00: Pitch bend range, 01,00: Fine tune, 02,00: Coarse tune
*4: Valid if assigned as a MIDI control change in Global/Media External Setup.
*5: In addition to Korg exclusive messages, Inquiry, GM System On, Master Volume, Master Balance, Master Fine Tune, and Master Coarse Tune are supported.

Mode 1: OMNI ON, POLY	Mode 2: OMNI ON, MONO	◯ : Yes
Mode 3: OMNI OFF, POLY	Mode 4: OMNI OFF, MONO	✕ : No

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

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