Song Play mode

In Song Play mode you can read **Standard MIDI Files (SMF)** directly from a floppy disk and play them. If you simply want to play an SMF without editing it, it will be convenient to select this mode.

The pages in Song Play mode

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

P0: Program/Mix	Play SMF data and make settings. Specify the program, pan, and level for each track.
P1: Track	Make MIDI and scale settings for each track. If the separately sold EXB-MOSS option is installed, set related parameters.
P2: Controller Setup	Controller settings.
P3: Select Directory/ Jukebox	Select the directory that contains the desired SMF, and select the playback order of SMF files. Create jukebox lists.
P4:	---
P5:	---
P6:	---
P7:	Arpeggiator settings
P8: Insert Effect	Select and make settings for insert effects. Make settings for the routing, insertion effects, master effects, and individual output assignments of each track in the song.
P9: Master Effect	Select and make settings for the master effects. Master EQ settings.

If the separately sold EXB-MOSS is installed, the special bank F can be used in Song Play mode as well. For details on the bank F parameters, refer to the EXB-MOSS owner's manual.

The parameter settings of Song Play mode are not backed up when the power is turned off. If you wish to save the program, track parameter, and effect settings of the song, use the page menu command "Save Template Song" to save them. If you wish to play SMF song data, you must first load it from external media such as a floppy disk.

The structure of Song Play mode

As shown in the diagram below, Song Play mode consists of tracks 1–16, effects and arpeggiator.

About SMF

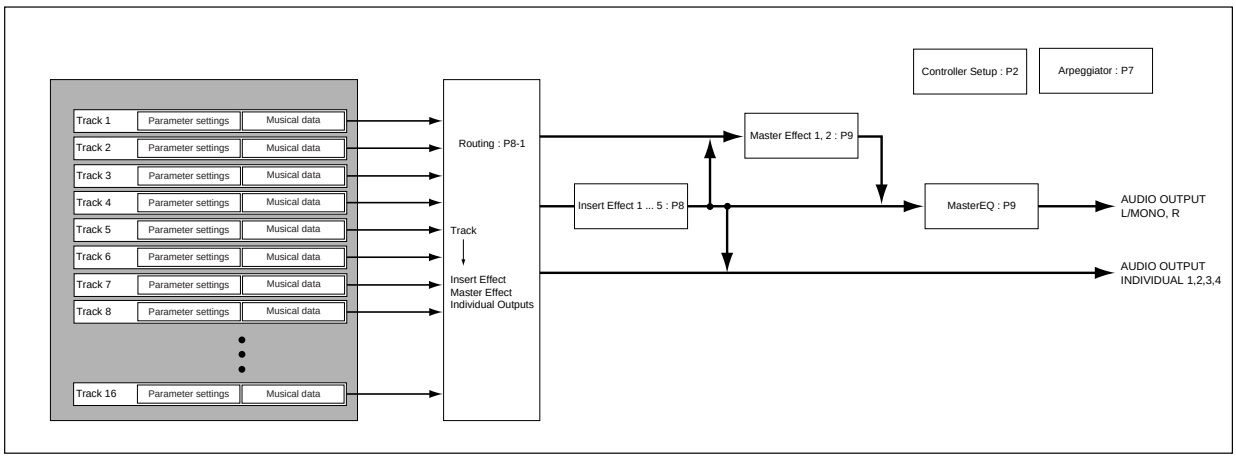
SMF data in **format 0** or **format 1** can be played back in Song Play mode.
The TRITON recognizes only files with an extension of **.MID** as SMF data. Be sure that the filename extension is **.MID**.

About MIDI

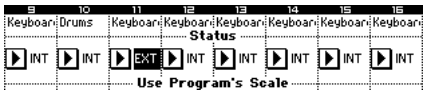
Track status settings in Song Play mode

You can select whether the musical data played by a track, or the data produced by operating the TRITON's keyboard and controllers will sound the TRITON's internal tone generator, and / or will sound an external tone generator.

When the "Status" of a track is set to **INT**, the data played back by that track and the data produced by operating the keyboard or controllers of the TRITON will play and control the TRITON's internal tone generator.



When the “Status” of a track is set to **EXT** or **BTH**, the data played back by that track and the data produced by operating the keyboard or controllers of the TRITON will play and control an external tone generator. (The MIDI channel of the external tone generator must match the “MIDI channel” of the TRITON track that is set to **EXT** or **BTH**.) With a setting of **BTH**, the external tone generator and the TRITON’s own tone generator will be played and controlled simultaneously. (☞p.104 in the *Parameter Guide* “Status”)



GM/GS/XG playback

When you wish to playback SMF data that is compatible with the GM/GS/XG standards, set “Bank Map” (Global P0: System Pref. tab) to **GM(2)** (☞p.123). (☞p.115 in the *Parameter Guide*).

Synchronization with external devices

In Song Play mode, the TRITON will be the master (the controlling device) regardless of the MIDI Clock setting (Global P1: MIDI “MIDI Clock”) (☞p.122).

Mute/Solo function

In P0: Play/Mix, the Program T01–08 and T09–16 tabs provide **PLAY/MUTE buttons** and **SOLO ON/OFF buttons** that allows you play and mute tracks 1–16 in the same way as in Sequencer mode.
You can use these when you wish to mute the melody track and play the part yourself on the keyboard (“minus-one play”), or when you wish to audition a track (☞p.62).

You can use the “Solo Selected Track” page menu command to audition only the currently selected track. This provides a convenient way to hear the parameter settings and effect settings of a track (☞p.47, 102 in the *Parameter Guide).*

Insert effects and master effects

Refer to “About effects” (☞p.108) (☞p.109 in the *Parameter Guide*).

Playing SMF data

Direct playback from external media such as a floppy disk

When you wish to playback SMF data that is compatible with the GM/GS/XG standards, set “Bank Map” (Global P0: System Pref. tab) to **GM(2)**.

① **Press the [S.PLAY] key to enter Song Play mode.**

② **Insert a floppy disk containing SMF data into the TRITON’s disk drive.**

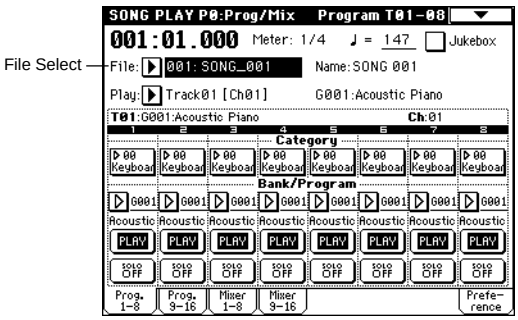
When the separately sold EXB-SCSI option is installed. If you wish to load data from external SCSI media such as a hard disk, refer to the EXB-SCSI owner’s manual, and make sure that the external SCSI drive etc. is connected. Also make sure that the media contains SMF data.

③ **Press either the [LOCATE], [START/STOP], or [PAUSE] key.**

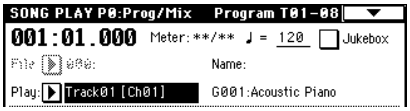
Data will be loaded from the media.

If you press the [START/STOP] key, the data will be loaded and playback will begin (the same as in step ⑥).

④ **“File Select” will show the SMF filenames.**

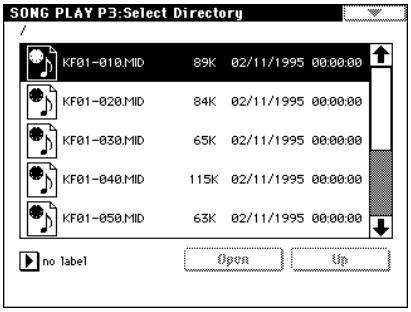


If there is no SMF data in the floppy disk, or if there is no SMF data in the currently selected directory, no filename will be displayed (as shown below).



If no jukebox list has been created, no filenames will be displayed if the “Jukebox” check box is checked. Uncheck the “Jukebox” check box.

To move to a directory that contains SMF data, press the [MENU] key, and then press “P3: Select Directory” to display P3: Select Directory.

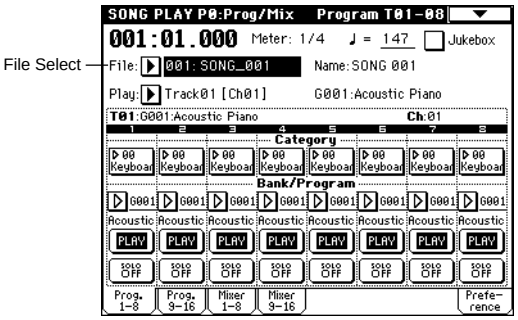


If the separately sold EXB-SCSI option is installed and a hard disk etc. is connected, press the drive select button to select the drive that contains the desired data.

Then press the **Open button** or **Up button** to move between levels, and find the desired SMF.

When the SMF file (make sure that the extension is .SMF) appears in the LCD screen, press the [EXIT] key, and move to P0: Prog / Mix.

⑤ **Press the “File Select” popup button. From the file list, choose the filename that you wish to play back.**



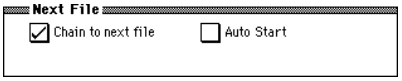
⑥ **Press the [START/STOP] key.**

Playback will begin. At this time, all songs displayed in the “File Select” popup button will playback consecutively (if “Auto Start” is checked).

⑦ **Press the [START/STOP] key once again to stop playback.**

Starting / stopping playback for each song

In the P0 Preference tab, **uncheck** “Chain to next file” or “Auto Start,” and press the [START / STOP] key. Playback will begin, and will stop when each song ends. For details on these settings, refer to p.103 in the *Parameter Guide*.

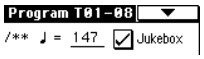


Playback using the Jukebox function

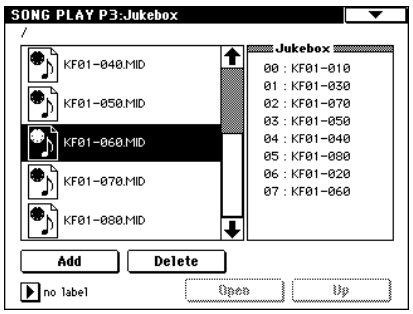
The TRITON provides a Jukebox function that can be used to playback SMF data.
This function allows you to specify the order in which files in the same directory will be played.

A jukebox list you create will be erased when the power is turned off, and can not be recovered. If you wish to keep your jukebox list, refer to the section“Saving a Jukebox list” (next page), and save it on external media.

① **Check the “Jukebox” check box.**



② **Select P3: Jukebox.**



If the separately sold EXB-SCSI option is installed and a hard disk etc. is connected, press the drive select button to select the drive that contains the data you wish to play back.

③ **Use the scroll bar to display the SMF (filename extension .MID) that will be played first, and select that file.**

④ **Press the Add button.**

The filename you specified in step ③ will appear in the Jukebox list.

⑤ **Select the file that will be played second, and press the Add button.**

Add files to the Jukebox list in the order that they will be played. A maximum of 100 files (00–99) can be registered in the Jukebox list.

To delete a file from the Jukebox list, press the **Delete button**.

⑥ **Press the [EXIT] key to display P0: Play/Mix.**

⑦ **Press the [START/STOP] key.**

The files will playback in the order in which they were registered.

⑧ **Press the [START/STOP] key once again to stop playback.**

Only files in the same directory can be registered in a jukebox list.
If you perform the following operations while creating a jukebox list, the jukebox list will be lost.

- Change the directory
- Remove the floppy disk
- Change drives

Saving a Jukebox list

Saving procedure

① Use the procedure described above to create a jukebox list.

② If the separately sold EXB-SCSI option is installed and you wish to save the list on a hard disk etc., use the P3: Jukebox drive select button to select the drive in which you wish to save the data.

③ In P3: Jukebox, select the "Save Jukebox List" page menu command.



④ Use the text edit button to enter a name for the jukebox list (☞p.38).

⑤ Press the OK button.

The jukebox list will be saved to the media.

Loading procedure

① In the Jukebox page, select a jukebox list (filename extension .JKB).

② Press the "Load Jukebox List" page menu command.

The jukebox list will be loaded into the TRITON.

Playing along with SMF data

Minus-one play

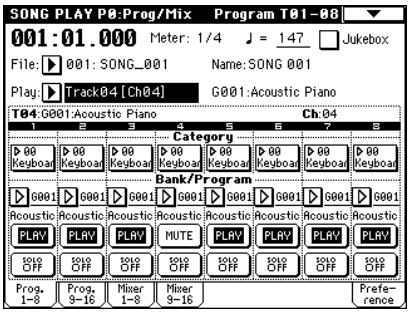
You can enjoy "minus-one" play by playing back SMF data, muting a specific part, and playing that part yourself.

① Playback the SMF data, identify the track whose part you wish to play, and stop playback (☞p.86).

② In P0: Prog/Mix, select the Prog. 1–8 tab or Prog. 9–16 tab.

③ Use "Play Track Select" to select the track for the part that you want to play from the keyboard.

When you play the keyboard, the program of the selected track will be heard.



④ Press the "PLAY/MUTE" button to set the track selected in step ③ to MUTE.

If you want the musical data of the track to playback in addition to your own playing on the keyboard, set "Play / Mute" to **PLAY**.

⑤ Press the [START/STOP] key to begin playback, and play along on the keyboard with the song.

Arpeggiator

During "minus-one" play, you can use the arpeggiator for your keyboard performance (☞p.98). (☞p.107 in the *Parameter Guide*)

Global mode

In Global mode you can make settings that affect the entire TRITON, such as user scales, category names, drum kits, and user arpeggio patterns.

This chapter will describe the procedure for editing a drum kit. For the procedure of editing an user arpeggio pattern, refer to “Arpeggiator settings” (☞p.96). For details on the parameters of other pages (☞p.125). (☞p.113 in the *Parameter Guide*)

When you play the keyboard in Global mode, the TRITON will sound as in the previous mode in which you were previously. Be aware that if you moved from Sampling mode to Global mode in a state where the sampling memory contained no data (such as immediately after the power is turned on), playing the keyboard will not produce sound.

When you move from Sequencer or Song Play mode to Global mode, playing the keyboard will sound the program or arpeggiator that corresponds to the global MIDI channel (set in Global P1: MIDI page).

The settings that you edit in Global mode are preserved as long as the power remains on, but will be lost when the power is turned off. The data handled in Global mode can be classified into three types: **drum kit settings** (P5), **user arpeggio pattern settings** (P6), and all other **global settings** (P0–P4). Each of these three types of data can be written into the memory area. In Disk mode, this data can also be saved on external media such as a floppy disk (☞p.39).

Global mode does not provide a Compare function that lets you make before-and-after comparisons of your editing. Before editing global settings, drum kits, or user arpeggio patterns, you may wish to use “Copy Drum Kit” or “Copy Arpeggio Pattern” to copy the drum kit or user arpeggio pattern to an unused number.

About the pages in Global mode

○ **For details on how to enter each page or modes, refer to “Basic operation of the TRITON” (☞p.12).**

P0: Basic Setup	Basic settings for the entire TRITON. Audio input settings for use outside of Sampling mode.
P1: MIDI	MIDI-related settings for the entire TRITON.
P2: Controller	Controller settings for the pedals etc. connected to the rear panel.
P3: User Scale	User registered scale settings. Specify 16 octave scales, and one all-note scale.
P4: Category Name	Edit category names for programs and combinations.
P5: Drum Kit	Edit drum kits.
P6: User Arpeggio	Edit user arpeggio patterns.
P7:	---
P8:	---
P9:	---

Creating a drum kit

About drum kits

A drum kit assigns a drumsample (PCM waveform data for a drum) to each key, and specifies adjustments in pitch and level etc. for each sample.

The TRITON contains **73** drum kit memory areas. With the factory settings, **00–15 (A/B)** contain preset drum kits suitable for various styles of music. ROM memory areas **64–72 (GM)** contain nine different drum kits compatible with the GM2 sound map.
For the factory preset drum kits, refer to the separate *Voice Name List*.

In Global P5: Drum Kit you can modify these preset drum kits, or create your own original drum kit from an initialized condition. You can also create original drum kits using sample waveforms that you sampled in Sampling mode or loaded into memory in Disk mode.
A drum kit that you edit or create can be written into one of the drum kit memory areas **00–63**. In Disk mode, you can save drum kits on external media such as a floppy disk (☞p.39, p.40).

16(C)–31 and 32(D)–47(D) are provided for the preset patterns of separately sold EXB-PCM series option boards. Please use 48–63 (User) to write the drum kits that you create.

Multisample programs and drum kit programs

There are two types of programs: those whose oscillator uses a **multisample**, and those whose oscillator uses a **drum kit**.
This selection is made by the Program P1: Program Basic tab "OSC Mode" setting. To use a **multisample** for the program, set "Oscillator Mode" to **Single** or **Double**. To use a drum kit, set "Oscillator Mode" to **Drums**.

About program parameters

Just as the character and effect processing of a melodic instrument such as piano, organ, trumpet, and strings is fundamentally different from that of percussion instruments such as drums or timpani, the program parameter structure of a multisample program ("Oscillator Mode" to **Single** or **Double**) is fundamentally different from that of a drum kit program ("Oscillator Mode" to **Drums**).
Since it is difficult to convert multisample program parameters for use as a drum kit (because the filter and amp settings etc. are made with a multisample program in mind), it is best to first select a drum kit program in Program mode, and then edit it in Global mode.

Editing a drum kit

Before editing a drum kit, **uncheck** the Memory Protect (☞p.37).

① **In Program mode P0: Play, select the program that you wish to use while editing the drum kit.**

Select a drum kit program from the preset programs etc. If the drum kit that you will be editing is already being used by a program, select that program. (In the separate *Voice Name List*, programs that use a drum kit are marked by a ⓓ symbol.)

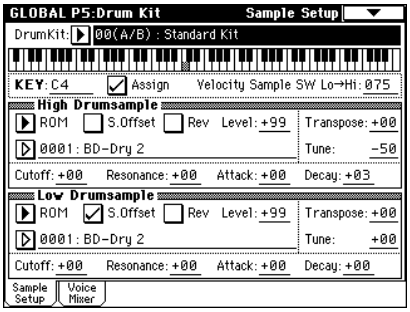
When you wish to edit a drum kit, first use Program mode to select a program that uses a drum kit (whose "Oscillator Mode" is **Drums**), and then move to this page. A program that uses a drum kit will have filter, amp, and effect parameter settings etc. suitable for drum sounds (☞"About program parameter").

Set "Octave" to **+0 [8']**. With a setting other than **+0 [8']**, the relation between the keys and the sounds will be incorrect (☞p.6 in the *Parameter Guide*).

The effects will sound using the settings of the last-selected program.

When you edit a drum kit, all programs that use that drum kit will be affected.

② **In P5: Drum Kit, select the Sample Setup tab.**



③ **In "Drum kit Select," select the drum kit that you wish to edit.**

If necessary, use the "Copy Drum Kit" page menu command to copy settings from a preset drum kit or a GM drum kit.

GM drum kits **64–72 (GM)** cannot be selected here. (It is not possible to edit or write a GM drum kit.) If you wish to modify the settings of one of the drum kits **64–72 (GM)**, you can use "Copy Drum Kit" to copy it to **00–63**, and then edit the copy.

④ **Press "KEY."**

⑤ **Select the note number that you wish to edit.**

You can select a note number by the [VALUE] controllers and also, holding down the [ENTER] key and playing a note on the keyboard.
The parameter settings for the drumsample of the selected note number will appear.

⑥ **Refer to the explanations below for the "Sample Setup tab" and "Voice/Mixer tab," and make the desired settings.**

The parameters are located in the Sample Setup tab and the Voice / Mixer tab.

⑦ **As necessary, repeat steps ④–⑥ to set the parameters for each key.**

To change the drum kit name, use the "Rename Drum Kit" page menu command (☞p.38).

⑧ **If you wish to save the edited drum kit into internal memory, be sure to Write the drum kit.**

If you turn off the power without writing, your edits will be lost (☞p.39).

Sample Setup tab

Assign

Normally you will **check** this. The settings of each parameter will be valid. If this is **unchecked**, drumsample parameters will not be assigned to that key. Playing that key will sound the settings of the key to its right, at a pitch one semitone lower. Use this when you wish to play a tom or cymbal with the same settings but with a different pitch.

Velocity Sample SW Lo fi Hi

You can specify different drumsamples for High Drumsample and Low Drumsample, and use velocity (keyboard playing dynamics) to switch the drumsample that will sound. This is referred to as **velocity drumsample switching**.

☞ This function is similar to the velocity multisample switching of a program (☞p.46 "About High / Low").

If you are not using this function, set the "Velocity Sample SW Lo fi Hi" value to **001**. When you play, only the High Drumsample will sound.

Bank

ROM: Select drumsamples from the TRITON's internal ROM memory.

RAM: Select samples that were sampled in Sampling mode or loaded in Disk mode.

EXB*: Select drumsamples from a separately sold EXB-PCM series option board.

Some EXB-PCM series boards do not contain drumsamples.

About ROM drumsamples

The TRITON contains 413 drumsamples in its internal ROM memory.

When you press the popup button, the ROM drumsamples will be displayed in 15 different categories. You can use the tabs located at the left and right to select a category, and choose drumsamples from the selected category in the LCD screen.
For the drumsample names, refer to the separate *Voice Name List*.

Voice / Mixer tab

Exclusive Group

Make this setting when you want to group related drumsamples together.
For example if the "KEY" to which a open hi-hat and a closed hi-hat drumsample are assigned are set to the same exclusive group number, they will be grouped so that the open hi-hat and closed hi-hat can not be sounded simultaneously, ensuring that the hi-hat performance will sound natural.

BUS Select (IFX Indiv.Out Assign)

The drumsample assigned to the "KEY" can be sent to an insert effect or to one of the AUDIO OUTPUT (INDIVIDUAL) 1–4 jacks.
For example you can specify **IFX1** for snare drums and **IFX2** for kick drums, so that different types of drums are sent to insert effects 1 and 2. Alternatively, you can set this to **1–4**, **1/2** or **3/4** so that only specific drum sounds are sent to the AUDIO OUTPUT (INDIVIDUAL) 1–4 jacks.
These settings are valid if "Use DKit Setting" (Program P8: Routing tab) is **checked** in the Routing tab of Program P8 for the program that uses this drum kit (☞p.24, 147, 148 in the *Parameter Guide*).

Pan

This sets the panning. This setting is valid if "Use DKit Setting" (Program P4: Amp1 Lvl / Pan tab) is **checked**.

Send 1 (MFX1), Send 2 (MFX2)

These set the send levels to the master effects. This setting is valid if "Use DKit Setting" (Program P8: Routing tab) is **checked**.

Other parameters

The parameters in the Sample Setup tab are set independently for the High Drumsample and the Low Drumsample. The parameters in the Voice / Mixer tab apply to both the High and Low Drumsamples.
If you wish to use the settings from another "KEY," you can use the "Copy Key Setup" page menu command. For details on each parameter (☞p.125 in the *Parameter Guide*).

Disk mode

How Disk mode is organized

In Disk mode you can use floppy disks or a connected external SCSI device (if the separately sold EXB-SCSI is installed) to save or load various types of data. You can also make settings related to saving and loading functionality.

For details on connecting an external SCSI device and setting the ID etc., refer to the owner's manual for the separately sold EXB-SCSI option.

The pages of Disk mode

Load	Load the selected file or directory into internal memory.
Save	Save data from internal memory to external media such as a disk.
Utility	Rename, copy, or delete a disk or file, create new directories, and set the date and time.
Media Information	View information for the selected media.

Types of media that can be used

Floppy disks

The TRITON can use **MS-DOS format 3.5 inch 2HD** or **2DD** floppy disks. The capacity of a floppy disk after formatting will be 1.44 MB (18 sectors / track) for a 2HD disk, or 720 KB (9 sectors / track) for a 2DD disk. (☞For details on formatting, refer to p.142 of the *Parameter Guide*.)

note We recommend that you use **2HD** floppy disks.

External SCSI storage media (when the separately sold EXB-SCSI option is installed)

If the separately sold EXB-SCSI option is installed, the TRITON can save data on external SCSI media (maximum 4 GB) such as a hard disk, Zip, Jaz, or MO drive. When the EXB-SCSI option is installed, an external SCSI device of up to 4 GB can be formatted.

Quick Format is possible only on 512 bytes / block media (such as 640 MB MO disks etc.).

Loading data

Types of data that can be loaded

The various types of data that can be loaded from external media (floppy disk etc.) are shown in the illustration on the following page. For details on each type of data, refer to p.132 in the *Parameter Guide*.
If the separately sold EXB-SCSI option is installed, data can also be loaded from media such as a hard disk or CD-ROM.

Data loading procedure

Loading Programs, Combinations, Drum kits, User arpeggio patterns, and Global settings (loading a .PCG file)

As an example, we will explain how to load a .PCG file. A .PCG file contains programs, combinations, drum kits, user arpeggio patterns, and global settings (refer to the lower diagram on the following page).

You will select a .PCG file for loading when you wish to re-load a set of programs and combinations etc. that you created and saved by the "Save All" or "Save PCG" command, or when you wish to restore the preloaded data (factory settings) from the included floppy disk. You will normally use this method to **load a .PCG file from a floppy disk that was included with the separately sold EXB-PCM series option or EXB-MOSS option**.

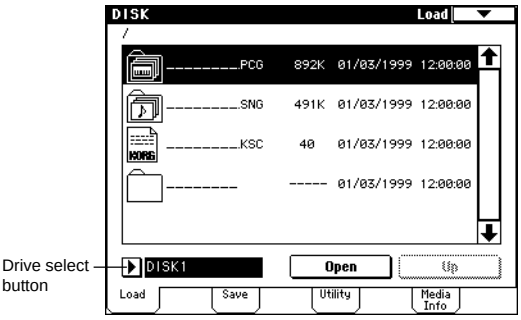
Before loading programs, combinations, songs, drum kits, and user arpeggio patterns, you must turn off memory protect in Global mode (☞p.37).

① **If you will be loading data from a floppy disk, insert the floppy disk into the TRITON's floppy disk drive.**

Please be sure to read "Cautions when handling floppy disks" for details on handling floppy disks (☞p.95).

(If the separately sold EXB-SCSI option is installed) Before loading from external SCSI media such as a hard disk, refer to the EXB-SCSI owner's manual, and make sure that the external SCSI drive is connected correctly and that the media contains the file that you wish to load.

② **Press the [DISK] key. You will enter Disk mode.**



③ **Press the Load tab.**

The screen will appear, and file information will be displayed.

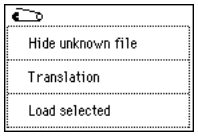
④ **If you are loading from external SCSI media, press the drive select button to select the drive that contains the data to be loaded.**

⑤ **Select a .PCG file.**

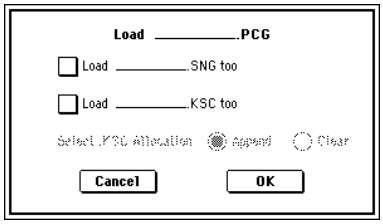
The display will be highlighted.
If the file to be loaded is located in a level above or below the current directory, use the **Open button** or **Up button** to display the file so that it can be selected.

When you load a .PCG file, the data in the TRITON's internal memory will be replaced by the data in that .PCG file (programs, combinations, drum kits, user arpeggio patterns, global settings). If you wish to keep the data that is currently in internal memory, use "Save All" or "Save PCG" to save it.

⑥ **Press the page menu button, and press the "Load Selected" page menu command.**



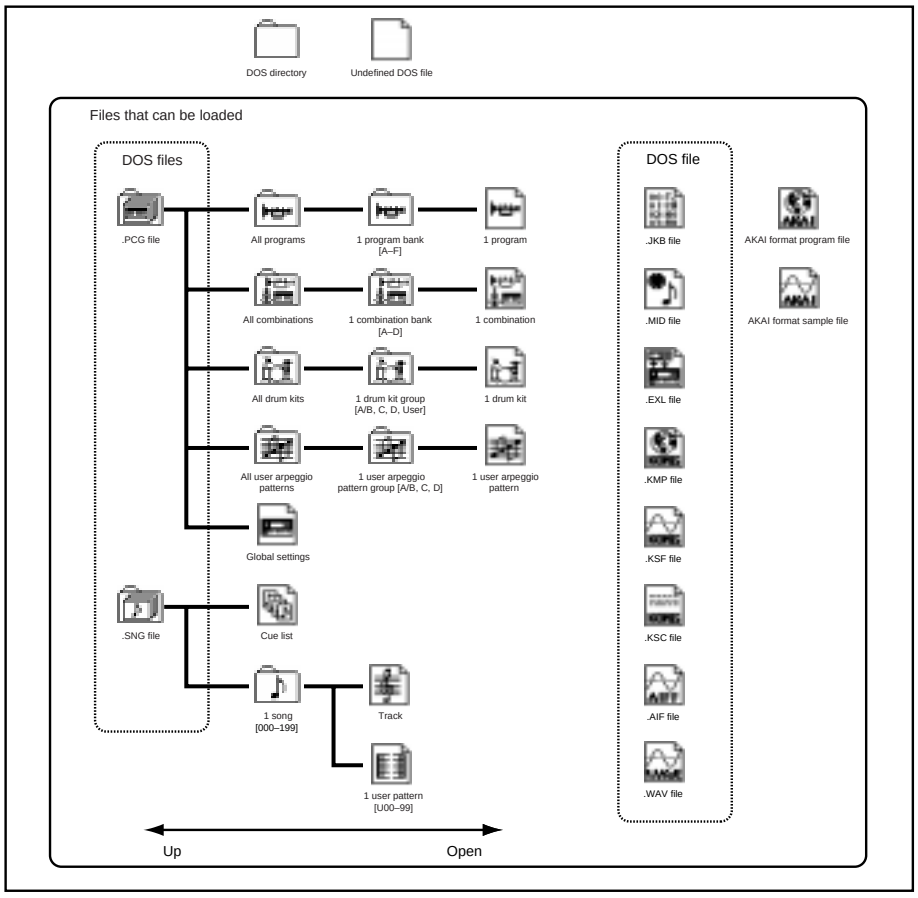
A dialog box will appear. The display and settings of the dialog box will depend on the type of file to be loaded. For details on each type of file, refer to p.132 in the *Parameter Guide*.



⑦ **If "Load *******.SNG too" is checked when you load the data, the .SNG file will also be loaded at the same time that the .PCG file is loaded.**
If "Load *****.KSC too" is checked when you load the data, the .KSC file will also be loaded at the same time that the .PCG file is loaded.**

⑧ **Press the OK button and the date will be loaded.**

Never attempt to remove the media while data is being loaded.



Loading a .PCG file from the floppy disk included with a separately sold EXB-PCM series option

When loading EXB-PCM series programs and combinations, use the following procedure. When doing so, you will specify the loading destination bank (C, D) in step ⑤.
To load the data into bank C, select "**C_BANK.PCG**."
To load the data into bank D, select "**D_BANK.PCG.**"

When you load "**C_BANK.PCG**," the programs and combinations of banks A, B, and C, all drum kits, all user arpeggio patterns, and global setting data will be loaded into the internal memory area of the TRITON, and any prior data will be overwritten.

When you load "**D_BANK.PCG**," the programs and combinations of banks A, B, and D, all drum kits, all user arpeggio patterns, and global setting data will be loaded into the internal memory area of the TRITON, and any prior data will be overwritten.

If you wish to keep the data that is in the internal memory area, use "Save All" or "Save PCG" to save it before loading other data.

Saving data

For the procedure of saving data to a floppy disk or to external SCSI media, refer to "Saving on external media" (☞p.40).

Types of data that can be saved

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

- **.PCG files**
  Programs, combinations, global settings, drum kits, user arpeggio patterns (the data specified by the check boxes when saving will be saved).
- **.SNG files**
  Songs and cue lists
- **.KSC files**
  Script file (KSC files) listing the multisamples and samples created in Sampling mode, with multisamples (KMP files) and samples (KSF files)
- **Standard MIDI files (SMF)**
  Sequencer mode songs can be saved as SMF data.
- **System exclusive data**
  System exclusive data received by the TRITON from an external MIDI device (the TRITON can be used as a data filer).

note For the icons associated with each file, refer to the lower diagram on the preceding page.

Formatting media

The TRITON can format a floppy disk or external SCSI media.

Newly purchased media or media that has been used by another device cannot be used as it is. Such media must be formatted before using it on the TRITON for the first time.

For the formatting procedure, refer to p.143 in the *Parameter Guide*.
In the case of a floppy disk, the formatting operation can be performed on a MS-DOS compatible computer. In the case of SCSI media, you must use the TRITON to format the media.

Quick Format is possible only on 512 bytes / block media (such as 640 MB MO disks etc.).

Cautions when handling floppy disks

When handling floppy disks, please observe the following points. Data loss may occur if a floppy disk is handled improperly.

Floppy disk type and format

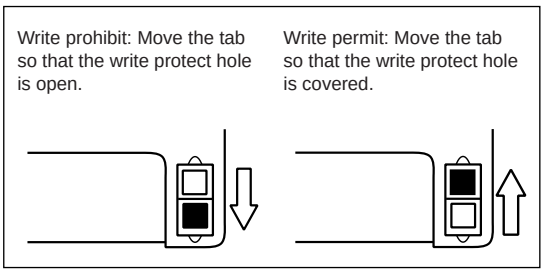
The TRITON can use 2HD or 2DD 3.5 inch floppy disks.

Floppy disk handling

- Do not open the shutter of a floppy disk or touch the magnetic surface inside the disk. If the magnetic disk becomes soiled or scratched, it will no longer be possible to read data.
- Never transport the TRITON with a floppy disk in the disk drive. Vibration may cause the disk drive heads to scratch the floppy disk, making it unusable.
- Do not allow a floppy disk to be placed near a device that emits a magnetic field, such as a television, computer, computer display, speaker, or power supply transformer. This can erase data on the disk.
- Do not use or store floppy disks in locations of excessive temperature or humidity, in direct sunlight, or in dusty or dirty locations.
- Do not place objects on top of a floppy disk.
- While the disk drive is operating, do not attempt to remove the floppy disk, and do not subject the TRITON to physical shock.

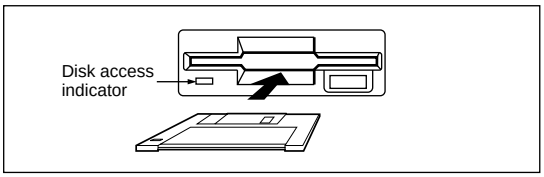
Floppy disk write protect

Floppy disks have a small write protect hole that can be used to prevent data from being erased or rewritten accidentally.
After saving data to disk, move the write protect tab so that the hole is uncovered. This will prohibit writing to the disk, and will prevent the data from being destroyed accidentally.



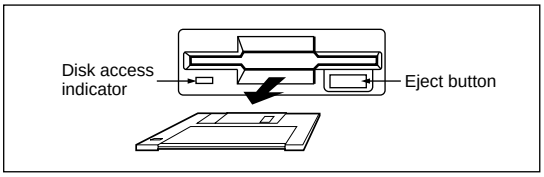
Inserting a floppy disk

With the label of the floppy disk facing upward, insert it into the disk drive. Press the disk inward until it clicks into place.
Malfunctions will occur if you use excessive force to insert the disk. Disks must be inserted gently, and straight in.



Removing a floppy disk

To remove a floppy disk, first make sure that the disk access indicator is dark. Then press the eject button and remove the disk.
If the disk does not come out when you press this button, do not attempt to remove the disk by force. Please contact your dealer.



Head cleaning

If the heads of the disk drive are soiled, errors may occur during saving or loading. It is important to clean the heads regularly using a commercially available wet-type 3.5 inch double-sided head cleaning disk. For the cleaning procedure, refer to the owner's manual for your cleaning disk.

Arpeggiator settings

This chapter describes the procedure for making arpeggiator settings in each mode. For details on the arpeggiator function, refer to “Using the arpeggiator while you play” (☞p.29).

Arpeggiator settings for a program

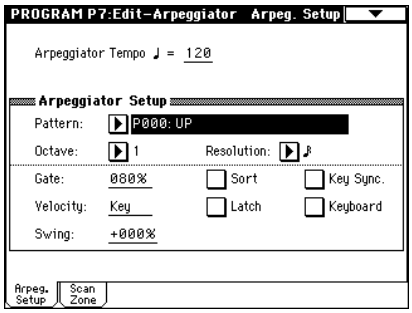
Arpeggiator on / off

Each time you press the ARPEGGIATOR [ON / OFF] key, the arpeggiator will be switched on or off. When on, the LED will light. When you play the keyboard, an arpeggio will play according to the selected arpeggio pattern.

note The on / off setting is stored when the program is written.

Arpeggiator settings

① **In Program P7: Edit-Arpeggiator, select the Arpeg.Setup tab.**



② **In “Arpeggiator Tempo,” set the tempo.**

You can also rotate the ARPEGGIATOR [TEMPO] knob to adjust this. The LED will blink at the specified timing.

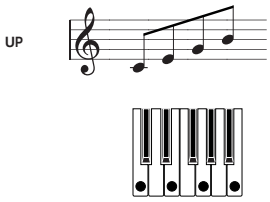
If “MIDI Clock” (Global P1: MIDI) setting is set to **External MIDI** or **External PCI/F**, this setting will be displayed as “♩=” **EXT**. This allows the tempo to synchronize to an external MIDI device. In this case, it is not possible to adjust the tempo on the TRITON.

③ **In “Pattern,” select the arpeggio pattern.**

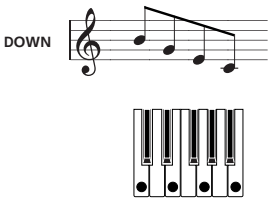
Select from preset arpeggio patterns **P000–P004** and user arpeggio patterns **U000–231**. You can use numeric keys [0]–[9] to select user arpeggio patterns **U000–231**.

The way in which the pattern is played will depend on settings such as “Octave” and “Sort.” **P000–P004** in the following diagrams show how the arpeggio will be played when “Octave” is set to **1**, and “Sort” is **checked**. **P004**: **RANDOM** is one possibility.

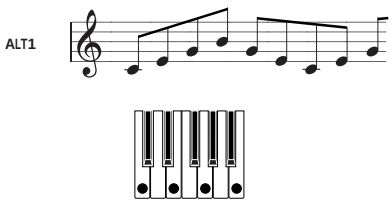
P000: UP



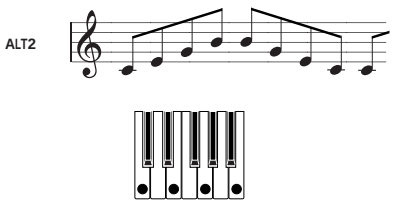
P001: DOWN



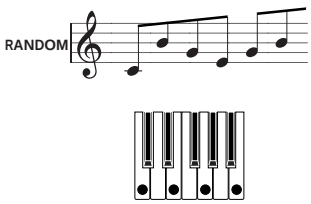
P002: ALT1



P003: ALT2



P004: RANDOM



U000(A / B)–U179 (A / B)
With the factory settings, various arpeggio patterns are preset. These include a variety of patterns such as drum or bass phrases, or guitar or keyboard backing riffs.
Arpeggio pattern names are listed in the separate *Voice Name List*.

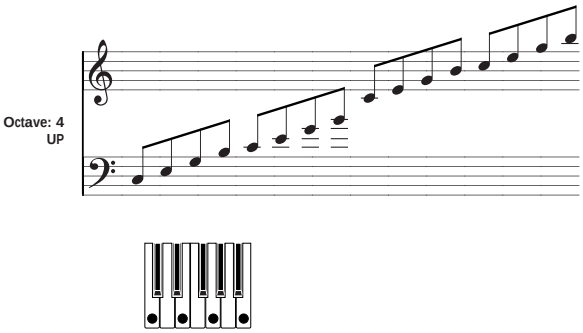
U180(A / B)–U199 (A / B)

U200–U215 (C) / U216…U231 (D)
With the factory settings, these do not contain patterns. User arpeggio patterns that you create can be written to these memories.
If certain separately sold EXB-PCM series option boards are installed and the included disk is loaded,

other arpeggio patterns will be added to U200–U215(C) / U216–U231(D).

④ **Make settings for the various parameters.**

"Octave": Select the octave range in which the arpeggio will be played.



If a user arpeggio pattern is selected, the "Octave Motion" setting (Global P6: Pattern Setup tab) will affect the way in which the arpeggio is played.

"Resolution": Specify the spacing of the arpeggio notes over a range of 𝅘𝅥𝅯₃ – 𝅗𝅥.

"Gate": Specify the length (gate time) of each note in the arpeggio. If a user arpeggio pattern is selected, you can set this to **Step**. In this case, the value of the "Gate" setting for each step (Global P6: Pattern Edit tab) will be used.

This is the setting that will apply when the ARPEGGIATOR [GATE] knob is in the center position (12 o'clock). When setting this parameter, make sure that the knob is in the center position.

"Velocity": Specify the velocity of the notes in the arpeggio. If this is set to **Key**, the velocity with which you actually played the note will be used. If a user arpeggio pattern is selected, you can set this to **Step**. In this case, the value of the "Velocity" setting for each step (Global P6: Pattern Edit tab) will be used.

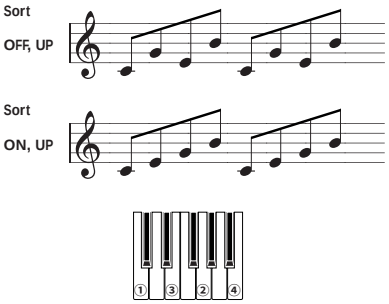
This is the setting that will apply when the ARPEGGIATOR [VELOCITY] knob is in the center position (12 o'clock). When setting this parameter, make sure that the knob is in the center position.

note When a preset user arpeggio pattern is selected, setting the **"Gate"** or **"Velocity"** to **Step** will add a sense of groove to the arpeggio pattern.

"Swing": This adjusts the timing of the even-numbered notes in the arpeggio (counting from the first note), to give the pattern a sense of "swing."

"Sort": If this is checked, the notes of the arpeggio will be sounded in the order of their pitch, regardless of the order in which the notes were actually played on the keyboard (ON).

If this is **unchecked**, the notes of the arpeggio will be sounded in the order in which they were actually played on the keyboard (OFF).



"Latch": If this is **checked**, the arpeggio will continue playing when you remove your hand from the keyboard.
If this is **unchecked**, the arpeggio will stop when you remove your hand from the keyboard.

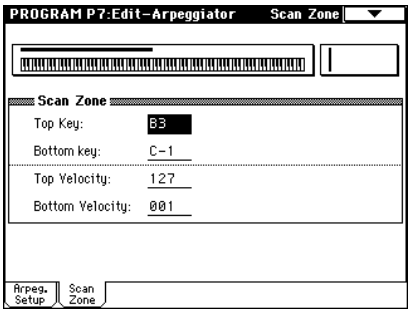
"Key Sync.": If this is **checked**, the arpeggio pattern will start from the beginning when you play a note after having released all notes. This setting is suitable when you are playing in realtime, and want the arpeggio to start at the beginning of the measure.
If this is **unchecked**, the arpeggio pattern will always be synchronized to the tempo of the MIDI clock. For details on synchronization, refer to "About arpeggiator synchronization" (☞p.105).

"Keyboard": If this is **checked**, the notes you play on the keyboard will be heard as well as the arpeggiated notes.
If this is **unchecked**, only the arpeggiated notes will be heard.

These are linked to the identically-named parameters in the P0: Arpeggio tab. They can be edited in the same way from either location.

note You can use the "Copy Arpeggiator" page menu command to copy arpeggiator settings from another program or combination (☞p.23 in the *Parameter Guide*).

⑤ **In the Scan Zone tab, specify the range in which the arpeggiator will operate.**



"Top Key," "Bottom Key": The arpeggiator will operate when you play keys within the specified range. Keys outside of this range can be played in the normal manner, and will not be affected by the arpeggiator on / off.

note For example, suppose that you set “Pattern Select” to **P0: UP**, **check** “Latch,” set “Top Key” to **B3** and “Bottom Key” to **C–1**. The arpeggiator will operate when you play keys in the range of **B3** and below. Since “Latch” is on, the arpeggio will continue playing even after you release your hand from the keyboard. You can use the keys above **B3** to play normally in realtime, to the accompaniment of the arpeggio. To change the chord that is being arpeggiated, play a different chord in the range below **B3**.

“Top Velocity,” “Bottom Velocity”: The arpeggiator will operate when you play notes with a velocity (playing strength) that is within the specified range. Notes played with a velocity outside this range will be sounded normally, without regard to the arpeggiator on / off.

⑥ **If you wish to save the edited program settings to internal memory, turn off memory protect in Global mode (☞p.37), and write the program (☞p.38).**

Linking the arpeggiator to a program

If you want the arpeggiator settings written in a program to be selected when that program is selected, check **Program** for “Auto Arpeggiator” (Global P0: Basic tab).

Arpeggiator settings in Combination, Song, and Song Play modes

In Combination, Sequencer, and Song Play modes, the TRITON provides dual arpeggiator functionality that lets you use two arpeggio patterns simultaneously. The settings in each of these modes are made in the similar way.

As an example, the following explanation shows how to make settings in Combination mode. For a detailed explanation and example settings (☞p.39, 73, 107 in the *Parameter Guide*).

The dual arpeggiator functionality lets you do the following things.

- Assign an arpeggiator for each timbre. Choose from **Off**, (arpeggiator) **A**, or (arpeggiator) **B**. ☞step⑤
- Independently specify whether A and B will operate. ☞step⑥
- Select an arpeggio pattern and set parameters independently for **A** and **B**. ☞step⑦
- Make Scan Zone settings so that you can use keyboard range or playing velocity to switch between normal playing and arpeggiated playing, or to switch between arpeggiators **A** and **B**. ☞step⑧
- Make settings for timbres that will be silent when the arpeggiator is not operating, and will sound only when the arpeggiator is operating. ☞step⑩

Arpeggiator on / off

Each time you press the ARPEGGIATOR [ON / OFF] key, the arpeggiator will be switched on or off. When on, the LED will light. The selected arpeggio pattern will begin when you play the keyboard. The on / off setting is saved when the program is written into memory.

When “Arpeggiator Assign” is **Off**, turning it on will not make the arpeggiator operate if “Arpeggiator Run are **unchecked**.

Arpeggiator settings

Select any desired programs for the timbres 1–4 that we will be using as an example here.

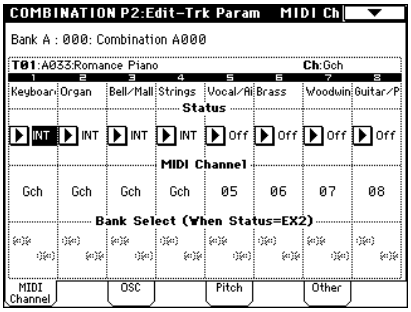
① **Select Combination P1: Edit-Program/Mixer.**

Select any desired programs for the timbres 1–4 that we will be using as an example here.

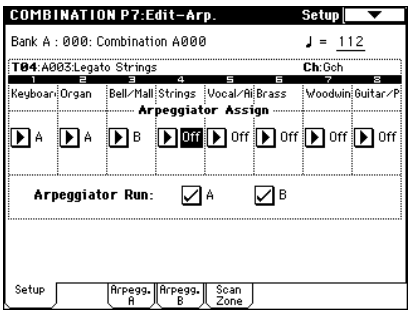
② **In Combination P2: Edit-Trk Param, select the MIDI Channel tab.**

For the timbres that you will be using, set “Status” to **INT**, and set “MIDI Channel” to **Gch** or to the global MIDI channel (set in Global P1: MIDI “MIDI Channel”).

For this example, set timbres 1–4 to a “Status” of **INT**, and timbres 5–8 to a “Status” of **Off**. Set the “MIDI Channel” of timbres 1–4 to **Gch**.



③ **In Combination P7: Edit-Arp., select the Setup tab.**



④ **Set the ARPEGGIATOR [TEMPO] knob to specify the tempo.**

This is the same as for a program (☞p.96). However, the tempo is shared by both arpeggiators A and B.

⑤ **Make “Arpeggiator Assign” settings.**

Assign arpeggiator A or B to the desired timbres. Each timbre will be played by the arpeggiator that has been assigned to it.
In the example shown in the illustration, arpeggiator A is will play timbres 1 and 2, and arpeggiator B will play timbre 3.

⑥ **Make “Arpeggiator Run” settings.**

Check the arpeggiator(s) that you want to operate. The arpeggiator(s) checked here will run when the ARPEGGIATOR [ON / OFF] key is turned on.

With the settings shown in the LCD screen for steps ② and ③, turning the ARPEGGIATOR [ON / OFF] key on will cause arpeggiator A to operate for timbres 1 and 2, and arpeggiator B to operate for timbre 3. When the ARPEGGIATOR [ON / OFF] key is turned off, timbres 1–4 will sound as a layer.
If all timbres “Arpeggiator Assign” are **Off**, or if neither “Arpeggiator Run” **A** or **B** is **checked**, the arpeggiator will not function.

⑦ **In the Arpeggiator A and Arpeggiator B tabs, set the parameters for arpeggiators A and B.**

The parameters for A and B are the same as for a program (☞p.96).

⑧ **In the Scan Zone tab, specify the range in which arpeggiators A and B will operate.**

The parameters for A and B are the same as for a program (☞p.97).

You can use keyboard ranges or playing velocity to operate the arpeggiator, or to switch between arpeggiators A and B. By setting the Key Zone tab and Vel Zone tab parameters of Combination P4: Edit-Zone / Ctrl to set keyboard ranges and velocity ranges in conjunction with each other, you can create even more variations.

⑨ **If you wish to save the edited combination settings in internal memory, turn off memory protect in Global mode (☞p.37), and write the combination. (☞p.38).**

⑩ **The “Status,” “MIDI Channel” and “Arpeggiator Assign” settings shown in the LCD screen of steps ② and ③ can be made so that certain timbres will sound only when the arpeggiator is running, and will be silent when the arpeggiator is not running.**

Although this is a somewhat sophisticated editing technique, we will describe the settings of one of the preset combinations as an example.

Combination A003: Drum’n’Bass Kit

Select combination **A003: Drum’n’Bass Kit**, and play it.

Before you play, make sure that the global MIDI channel (Global P1: MIDI “MIDI Channel”) is set to **01**.

- Arpeggiator A is assigned to **T** (timbre) **1** and **7**. When you play the keyboard, only the **T1** program **B068: Drum’n’Bass Kit** will be sounded by the **U158 (A/B): Drum’n’Bass 6** arpeggio pattern.
- The arpeggio pattern will use the “Arpeggio Tone Mode” (Global P6: User Arpeggio, Pattern Setup tab) **Fixed Note**, as appropriate for a drum arpeggio performance. With this setting, the arpeggio pattern will always be played with the specified pitches, regardless of the note numbers played on the keyboard (☞p.127 in the *Parameter Guide*).
- The A “Top Key” and “Bottom Key” (Combination P7: Scan Zone tab) are set so that arpeggiator **A** will operate only for notes **B3** and lower.
- Arpeggiator **A** is also assigned to **T7**, but this is so that the **T1** program **B068: Drum’n’Bass Kit** will sound only when the arpeggiator is on.

Notice the timbre settings for T1 and T7

	Status	MIDI Channel	Arpeggiator Assign
T1	INT	02	A
T7	Off	Gch	A

- When the arpeggiator is off, playing the keyboard will sound timbres that are set to **Gch** or the global MIDI channel (in this example, **01**). **T1** will not sound since its “MIDI Channel” of **02**. **T7** will not sound since its “Status” is **Off**, even if **T7** is set Gch.
- The arpeggiator will be operated by any MIDI channel assigned to a timbre. In this example, these are MIDI channels **02** and **Gch** (global MIDI

channel). When the arpeggiator is on, playing the keyboard will cause arpeggiator **A** (which is assigned to **T7** (**Gch**)) to run. **T1** will be sounded by arpeggiator A. **T7** will not sound since its "Status" is **Off**.

- In this example, the "Status" of **T7** is **Off**, so it will not sound regardless of whether the arpeggiator is on or off. It is a "dummy" timbre that is used to make **T1** sound only when the arpeggiator is on.

Combination B86: [<Moon Jam>]

Select and play combination **B86: [<Moon Jam>]**.

Before you play, make sure that the global MIDI channel (Global P1: MIDI "MIDI Channel") is set to **01**.

- Arpeggiator **A** is assigned to **T3**, and arpeggiator **B** is assigned to **T6** and **7**. When you play the keyboard, the **T3** program **A012: Smooth Sine Lead** will be sounded by the arpeggio pattern **P000: UP**. The **T6** program **A020: House Kit** will be sounded by the arpeggio pattern **U161: House 2 BD&SD**.
- The A and B "Top Key" and "Bottom Key" (Combination P7: Scan Zone tab) are set so that arpeggiators A and B will operate only for the **C4** note and above.
- Arpeggiator **B** is assigned to **T7** as well, but this setting is so that the **T6** program **A020: House Kit** will sound only when the arpeggiator is on. Refer to the preceding section "Select and play Combination A003: Drum'n Bass Kit."

Linking the arpeggiator to the combination

If you want the arpeggiator settings of a combination to become active when that combination is selected, check **Combination** for "Auto Arpeggiator" in the Basic tab of Global P0: Basic Setup.

Creating an user arpeggio pattern

About user arpeggio patterns

The patterns that can be selected on the TRITON's arpeggiator are called "arpeggio patterns." There are two types of arpeggio patterns: preset arpeggio patterns and user arpeggio patterns.

Preset arpeggio patterns: There are five patterns; **UP**, **DOWN**, **ALT1**, **ALT2**, and **RANDOM**. The operation of these patterns is fixed, and cannot be edited. (☞p.29 "Using the arpeggiator while you play")
User arpeggio patterns: There are 232 patterns **U000(A/B)–U213(D)** which can develop chords or phrases in a wide variety of ways, based on the pitches that you play on the keyboard or the timing at which you play them. These patterns can be edited.
With the factory settings, **U000(A/B)—U179(A/B)** contain a diverse assortment of arpeggio patterns (☞the separate *Voice Name List*).

In Global P6: User Arpeggio you can modify these user arpeggio patterns, or create a new user arpeggio pattern from an initialized condition. Edited user arpeggio patterns can be written to internal memory areas **U000(A/B)–U231(D)**. In Disk mode, they can also be saved on external media such as a floppy disk. (☞p.39, p.40)

U200 (C)–U215 (C) and U216(D)–U213(D) are provided as preset arpeggio patterns for certain separately sold EXB-PCM series option boards.

Editing a user arpeggio pattern

When you wish to edit an user arpeggio pattern, first turn off memory protect by unchecking the Memory Protect "user arpeggio pattern" check box in the Preference tab of Global P0: Basic Setup.

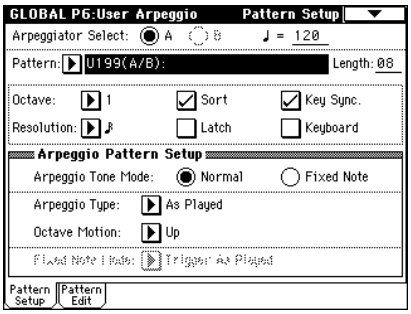
If you move here from Program mode, your editing will apply to the arpeggio pattern specified for the selected program.

① **In Program mode, select a program for which the arpeggio pattern you wish to edit is selected, or a program that you wish to use as a basis for editing the arpeggio pattern.**

② **Press the ARPEGGIATOR [ON/OFF] key to turn on the arpeggiator (the LED will light).**

Even if you moved to Global mode from a program in which the arpeggiator was turned off, you can use the ARPEGGIATOR [ON / OFF] key to turn it on.

③ **In Global P6: User Arpeggio, select the Pattern Setup tab.**



④ **If you moved here from Program mode, A will automatically be selected for "Arpeggiator Select."**

⑤ **In "Pattern," select the arpeggio pattern that you wish to edit.**

For this example, select an empty user arpeggio pattern.

If you have moved from Program mode, the arpeggio pattern selected by the program will be displayed.

If a blank pattern is selected, playing the keyboard will not start an arpeggio. Although preset arpeggio patterns **P000–P004** can be selected, they cannot be edited.

When you edit a user arpeggio pattern, the changes will have an effect anytime that this pattern is used in Program, Combination, Sequencer, or Song Play mode.

⑥ **In "Length," specify the length of the pattern.**

After the pattern has played for the length specified here at the note interval specified by "Resolution," it will return to the beginning. This setting can also be changed during or after editing. For this example, set it to **8**.

note For the preset arpeggio patterns **U000(A/B)–U179(A/B)**, simply changing the "Length" can significantly change the character of the pattern. Try changing the length and listening to the result.

⑦ **Make settings for the "♩," "Octave," "Resolution," "Sort," "Latch," "KeySync.," and "Keyboard" parameters.**

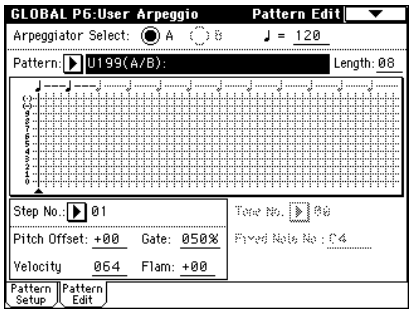
These are program parameters, but can be set from here as well.
If after moving here from Program mode, you modify these parameters and wish to keep your changes, return to Program mode and write the program. These parameters are not saved by "Write Arpeggio Pattern."

For this example, make the settings shown in the illustration ③.

⑧ **In Arpeggio Pattern Setup, make settings to specify how the arpeggio will be played.**

These settings can be changed during or after editing (☞p.127 in the *Parameter Guide*).

⑨ **Select the Pattern Edit tab.**
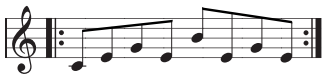


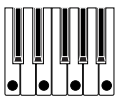
A pattern consists of **Steps** and **Tones**.

- **Step:** A user arpeggio pattern can have a maximum of 48 steps. The arpeggiator will play from the first step, at intervals of the note value specified by "Resolution." The vertical lines of the grid shown in the center of the LCD screen indicate the steps.
  Use "Step No." to select the step. For each step, specify "Pitch Offset," "Gate," "Velocity" and "Flam."
- **Tone:** At each step, a chord consisting of up to 12 tones ("Tone No." **00–11**) can be sounded.
  To input tones, select "Step No." and then use numeric keys [0]–[9], [–], and [. / 10's HOLD] to input tones. The "Tone No." corresponds to the [0]–[9], [–], and [. / 10's HOLD] keys as shown below. Each time you press a [0]–[9], [–], or [. / 10's HOLD] key, the corresponding tone will be turned on / off. The horizontal lines of the grid shown in the center of the LCD screen indicate the tones.

  Tone00–09: [0]–[9] keys
  Tone10: [–] key
  Tone11: [. / 10's HOLD] key

Creating an example pattern





① **Set "Step No." to 01, and press the [0] key.**

② **Set "Step No." to 02, and press the [1] key.**

③ **Set "Step No." to 03, and press the [2] key.**

④ **Set "Step No." to 04, and press the [1] key.**

⑤ **Set "Step No." to 05, and press the [3] key.**

⑥ **Set "Step No." to 06, and press the [1] key.**

⑦ **Set "Step No." to 07, and press the [2] key.**

⑧ **Set "Step No." to 08, and press the [1] key.**

You can also select “Step No.” by using the [△][▽] keys, the [VALUE] slider, the [VALUE] dial, or the popup menu.



⑨ **When you play the keyboard as shown in the illustration, the arpeggiator will begin playing.**

Tone 0 corresponds to the pitch of the lowest key of chord you play on the keyboard. (If “Sort” is **unchecked**, it will correspond to the pitch of the first note you play.)

⑩ **For steps 01–08, make settings for “Pitch Offset,” “Gate,” “Velocity,” and “Flam.”**

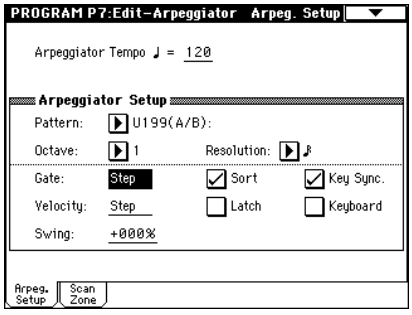
“Pitch Offset”: This offsets the pitch of the arpeggio note in semitones up or down. You can input the same tone for each step, and change the “Pitch Offset” value for each to create a melody using a single tone. (☞“Using Pitch Offset”)

“Gate”: Specify the length of the arpeggio note for each step. With a setting of **Legato**, the note will continue sounding either until the next note of the same tone or until the end of the pattern. With a setting of **Off**, the note will not sound.

“Velocity”: Specify the strength of the note. With a setting of **Key**, the note will sound at the strength with which it was actually played.

The “Gate” and “Velocity” settings you make here will be valid if the “Gate” and “Velocity” parameters (Program P7: Edit-Arpeggiator, Arpeg. Setup tab) of the program selected in Program mode are set to **Step**. If these parameters have a setting other than **Step**, the “Gate” and “Velocity” that were specified for each individual step will be ignored, and all notes of the arpeggio will sound according to the settings in Program P7: Edit-Arpeggiator. Be sure to verify the settings of the program.

Set the **“Gate”** and **“Velocity”** by using the ARPEGGIATOR [GATE] and [VELOCITY] knobs to the center position (12 o’clock).



⑪ **To change the user arpeggio pattern name, use the “Rename Arpeggio Pattern” page menu command (☞p.38).**
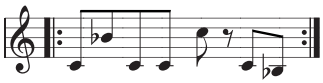
⑫ **If you wish to save the edited user arpeggio pattern to internal memory, be sure to Write the user arpeggio pattern (☞p.39).**

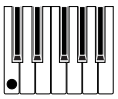
If you turn off the power without writing, the edited contents will be lost.

⑬ **If you wish to save the state of the program at the same time, return to Program mode and write the program (☞p.38).**

Other examples of creating a user arpeggio pattern

Using Pitch Offset





① **Set “Step No.” to 01, and press the [0] key. Set “Pitch Offset” to +00.**

② **Set “Step No.” to 02, and press the [0] key. Set “Pitch Offset” to +10.**

③ **Set “Step No.” to 03, and press the [0] key. Set “Pitch Offset” to +00.**

④ **Set “Step No.” to 04, and press the [0] key. Set “Pitch Offset” to +00.**

⑤ **Set “Step No.” to 05, and press the [0] key. Set “Pitch Offset” to +12.**
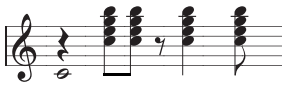
⑥ **For “Step No.” 06, do not enter a tone.**

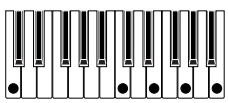
⑦ **Set “Step No.” to 07, and press the [0] key. Set “Pitch Offset” to +00.**

⑧ **Set “Step No.” to 08, and press the [0] key. Set “Pitch Offset” to –02.**



Chordal pattern





① **Set “Step No.” to 01, and press the [0] key.**

② **For “Step No.” 02, do not enter a tone.**

③ **Set “Step No.” to 03, and press the [1], [2], [3], [4] keys.**

④ **Set “Step No.” to 04, and press the [1], [2], [3], [4] keys.**

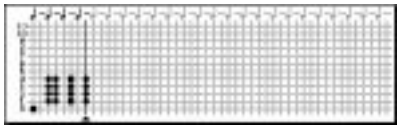
⑤ **For “Step No.” 05, do not enter a tone.**

⑥ **Set “Step No.” to 06, and press the [1], [2], [3], [4] keys.**
Set “Gate” to Legato.

⑦ **For “Step No.” 07, do not enter a tone.**

⑧ **Set “Step No.” to 08, and press the [1], [2], [3], [4] keys.**

In Program mode, select an acoustic guitar program, and then select the user arpeggio pattern you create here. In Program P7: Edit-Arpeggiator, choose the Arpeg.Setup tab and set “Gate” to **Step**.



Return to the Pattern Edit tab of Global P6: User Arpeggio. Set “Flam” to **positive (+)** values for odd-numbered steps, and to **negative (–)** values for even-numbered steps. This will simulate the characteristic nuances of guitar chording.

Drum pattern

Here’s how you can use the arpeggiator to play a rhythm pattern by using the “**Fixed Note**” setting that is ideal for a drum program.

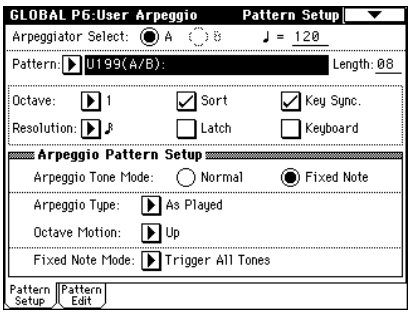
① **In Program mode, select a drum kit program.**

For this example, select the preset program **A036: Standard Kit**.

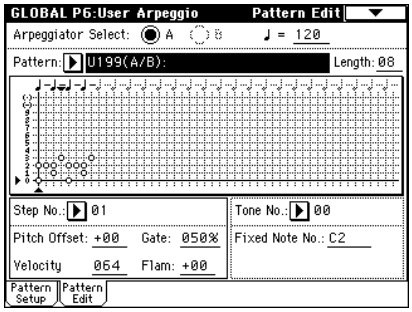
② **In Global P6: User Arpeggio, select the Pattern Setup tab, and make Arpeggio Pattern Setup settings.**

“Arpeggio Tone Type”: Set this to **Fixed Note**. This will cause the tone to always sound at the specified pitch.

“Fixed Note Mode”: If you set this to **Trigger All Tones**, playing a single note on the keyboard will sound all **tones**.
If you set this to **Trigger As Played**, the tones will be sounded according to the notes you play on the keyboard.



③ **Select the Pattern Edit tab.**

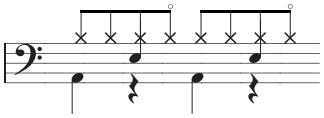


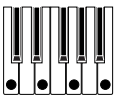
Each **Tone** in the display will be shown as a small circle.
Now you will can set “Tone No.” and “Fixed Note No.” Select “Tone No.,” and set “Fixed Note No.” to the note number that will be sounded by that tone.
For each horizontal line (**Tone**) in the display, you will specify the drumsample (note number) of the drum kit.
Here, set “Tone No.” and “Fixed Note No.” as follows.

Tone00: C2 (kick)
Tone01: F2 (snare)
Tone02: F#3 (closed hi-hat)
Tone03: G#3 (open hi-hat)

The drumsamples that correspond to each note number will differ depending on the drum kit. You will find it convenient to audition the drum sounds from the keyboard, and then input the “Fixed Note No.” by holding down the [ENTER] key and playing the desired note.

Creating a drum pattern





① **Input the kick (Tone00). Set “Step No.” to 01, and press the [0] key. Then set “Step No.” to 05, and press the [0] key.**

② **Input the snare (Tone01). Set “Step No.” to 03, and press the [1] key. Then set “Step No.” to 07, and press the [1] key.**

③ **Input the closed hi-hat (Tone02). Set “Step No.” to 01, 02, 03, 05, 06, and 07, and press the [2] key for each.**

④ **Input the open hi-hat (Tone03). Set “Step No.” to 04, and press the [3] key. Then set “Step No.” to 08, and press the [3] key.**

You can also select “Step No.” by using the [△][▽] keys, the [VALUE] slider, the [VALUE] dial, or the popup menu.

If "Fixed Note Mode" is set to **Trigger All Tones**, playing a single note on the keyboard will cause the rhythm pattern to play.

If "Fixed Note Mode" is set to **Trigger As Played**, playing a single note on the keyboard will cause only the kick (**Tone00**) to play. Playing two notes on the keyboard will cause only the kick (**Tone00**) and snare (**Tone01**) to play. In this way, the number of keys that you play will be played by the same number of **tones**.

⑤ **Set the parameters for each step.**

Use "Velocity" etc. to add accents to the rhythm pattern.

The "Gate" and "Velocity" settings you make here will be valid if the "Gate" and "Velocity" parameters (Program P7: Edit-Arpeggiator, Arpeg. Setup tab) of the program selected in Program mode are set to **Step**. If these parameters have a setting other than **Step**, the "Gate" and "Velocity" that were specified for each individual step will be ignored, and all notes of the arpeggio will sound according to the specified gate and velocity.

Set the ARPEGGIATOR [GATE] and [VELOCITY] knobs to the center position (12 o'clock).

Dual arpeggiator editing

Here we will use a combination as an example in our explanation.
For details on how the arpeggiator operates differently in Sequencer and Song Play modes than in Combination mode, refer to the following section "note."

If you have moved from Combination mode, the arpeggio pattern selected by the combination will be affected by your editing.

① **In Combination mode, select a combination that uses the arpeggio pattern you wish to edit.**

For this example, select a combination to which arpeggiators A and B is assigned.

② **Press the ARPEGGIATOR [ON/OFF] key to turn on the arpeggiator (the LED will light).**

Even if the arpeggiator had been turned off when you moved here, you can use the ARPEGGIATOR [ON / OFF] key to turn it on. However, if "Arpeggiator Run" **A** or **B** are not checked, and if no timbres have been assigned in "Arpeggiator Assign," then the arpeggiator will not operate.

③ **In Global P6: User Arpeggio, select the Pattern Setup tab.**

④ **If you moved here from Combination mode, use the "Arpeggiator Select" radio buttons A and B to select the arpeggiator that you wish to edit.**

If this is **A**, your editing will apply to the parameters and user arpeggio pattern of arpeggiator A.

If this is **B**, your editing will apply to the parameters and user arpeggio pattern of arpeggiator B.

⑤ **Switch between arpeggiators A and B, and edit their respective user arpeggio patterns.**

If you wish to stop one of the arpeggiators, return to Combination mode, and in P0: Play, select the Arpeggio Play tab and **uncheck** the "Arpeggiator Run" check box.

⑥ **To modify the name of a user arpeggio pattern, use the page menu command "Rename Arpeggio Pattern" (☞p.38).**

⑦ **If you wish to save the edited user arpeggio pattern in internal memory, you must write the user arpeggio pattern.**

In this case, both user arpeggio patterns will be written simultaneously. If you turn off the power without writing, the edited contents will be lost (☞p.39).

⑧ **If you wish to save the state of the combination at the same time, return to Combination mode and write the combination (☞p.38).**

note You can edit a user arpeggio pattern in Sequencer and Song Play modes in the same way as in Combination mode.
However, when you play the keyboard in Global mode, the program and arpeggiator of tracks that match the global MIDI channel (set in Global P1: MIDI) will be heard.

For example, suppose that you assign track 1 to MIDI channel **01** and arpeggiator **A**, and assign track 2 to MIDI channel **02** and arpeggiator **B**. (MIDI channel is set in Sequencer mode P2: Trk Param by MIDI Ch1–8, 9–16, and is fixed in Song Play mode.)
Use "Track Select" to select the track that you wish to play from the keyboard. If you select track 1, you will be able to play arpeggiator A. If you select track 2, you will be able to play arpeggiator B. If in this state you move to Global mode, arpeggiator A (track 1) will be played if the global MIDI channel is 01, or arpeggiator B (track 2) will be played if the global MIDI channel is 02.

When editing a user arpeggio pattern, pay attention to the global MIDI channel, the channel of each track, and the arpeggiator assignments, and make sure that the arpeggiator you are hearing is the pattern that you wish to edit.

If you moved here from Sampling mode, the arpeggiator will not turn on. Nor will it be possible to edit arpeggio patterns.

About arpeggiator synchronization

The note timing of the arpeggiator will depend on the setting of its “Key Sync.” check box.
If this is **checked**, the arpeggiator will operate at the timing that you play the first note-on after having released all notes.
If this is **unchecked**, the arpeggiator will synchronize to the timing of the internal / external MIDI clock.

The following paragraphs explain how synchronization occurs when the “Key Sync.” check box is not **checked**.

Arpeggiator and sequencer synchronization in Sequencer or Song Play mode

When MIDI Clock (Global P1: MIDI “MIDI Clock”) is set to “♩” **EXT** in Sequencer mode, the arpeggiator will synchronize to the external MIDI sequencer etc. connected via a MIDI cable.
In Song Play mode, it is not possible to synchronize to an external MIDI clock.

When the song is stopped:

- The arpeggiator will synchronize to the “♩” based on the timing of the internal / external MIDI clock.
- When a Sequencer mode RPPR pattern is playing, the arpeggiator will synchronize to the “♩” based on that timing.

When the song is playing or recording:

- The arpeggiator will synchronize to the “♩” based on the timing of the song.

Synchronization with song start

- When the arpeggiator is on (ARPEGGIATOR [ON / OFF] key is set to on) and is running, an incoming Song Start message will cause the arpeggiator to reset to the beginning of the pattern.

Synchronization with an external sequencer in Program or Combination mode

When MIDI Clock (Global P1: MIDI “MIDI Clock”) is set to “♩” **EXT** in Program or Combination modes, the arpeggiator will synchronize to MIDI Clock or Start messages etc. received from an external MIDI sequencer etc. connected via a MIDI cable.

Synchronization with external MIDI clock

- The arpeggiator will synchronize to the “♩” based on the timing of the external MIDI clock.

Synchronization with song start

- If the arpeggiator is on and running, receiving a song start will reset the arpeggiator to the beginning of the pattern.

Synchronizing arpeggiators A and B

In Combination, Sequencer, or Song Play modes, the two arpeggiators can be operated simultaneously. At this time if one arpeggiator is running and the other arpeggiator (whose “Key Sync.” is not **checked**) is started, the second arpeggiator will synchronize to the “♩” based on the timing of the first arpeggiator.

note If “Key Sync.” is **checked**, arpeggiators A and B will operate with independent timing.

Effects settings

The effect section of the TRITON provides five **insert effects**, two **master effects**, one **master EQ** (stereo 3-band EQ), and a mixer that controls the routing of these components.
You can choose from 102 types of full-digital effects for each insert effect, and from 89 types for each master effect. The effects are categorized as follows.

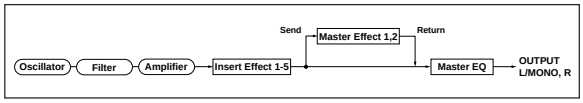
Categories of the 102 effect types

001–015	Filter and dynamics effects, such as EQ and compressor
016–031	Phase modulation effects, such as chorus and phaser
032–040	Other modulation and pitch-shift effects such as rotary speaker and pitch shifter
041–051	Early reflection and delay effects
052–057	Reverb effects
058–089	Mono + mono chain effects that internally connect two mono effects in series
090–102	Double-size effects

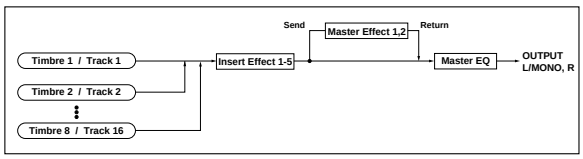
Effects **000–089** can be selected for IFX1, 2, 3, 4, 5, or MFX 1 or 2. Effects **090–102** are double-size effects, and will use twice the processing area of other effects. They can be selected for IFX2, IFX3 or IFX4.

Effects in each mode

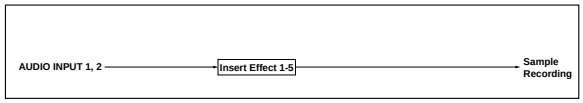
In **Program mode**, **insert effects** can be used as part of the sound-creating process, in the same way that the output sound of the oscillator (OSC) is processed by the filter and amp to create the final sound. Then the **master effects** can be used to apply spatial-type effects such as reverb. The stereo 3-band **master EQ** located immediately before the OUTPUT (MAIN) L / MONO and R outputs is used to make final adjustments in tone. These settings can be made independently for each program.



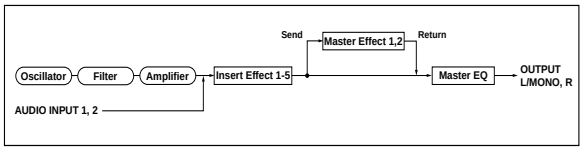
In **Combination mode**, **Sequencer mode**, and **Song Play mode**, **insert effects** can be used to help create the sound of each timbre / track. The **master effects** are used to apply overall spatial processing, and the **master EQ** is used to make overall adjustments in tone. These settings are made in Combination mode independently for each combination, in Sequencer mode for each song, and in Song Play mode for the entire mode.



In **Sampling mode**, the sound of an external source that is input from AUDIO INPUT 1 and 2 can be processed by the **insert effects** as the sound is sampled. Settings in Sampling mode are made in "Audio Input (Sampling)" of Sampling P0: Input / Setup. These settings are valid only within Sampling mode.



The external input from AUDIO INPUT 1 and 2 can be used outside of Sampling mode. In Program, Combination, Sequencer, and Song Play modes, the external input sound can be processed by the **insert effects**, **master effects**, and **master EQ**.
This means that you can use the TRITON as a 2-in / 6-out effect processor. When **093: Vocoder** is selected, the TRITON can be used as a vocoder effect processor in which its internal sounds are controlled by an external mic input.



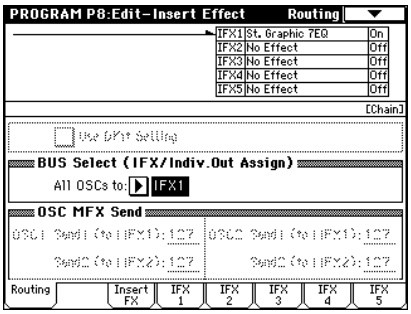
Routing settings and effect settings

The insert effects, master effects, and master EQ have the same structure in all modes, but the routing settings will determine how the oscillators of a program or the timbres of a combination or track of a song will be sent to each insert effect or master effect. In the pages that follow, we will explain how you can make routing settings and effect settings in each mode.

Effect settings for a program

Routing

① **In Program P8: Edit-Insert Effect, select the Routing tab.**



② **Use "BUS Select (IFX/Indiv.Out Assign) to specify the bus (insertion effect) to which the output of the oscillator will be sent.**

This specifies the bus (or the insert effect) to which the oscillator output will be sent.

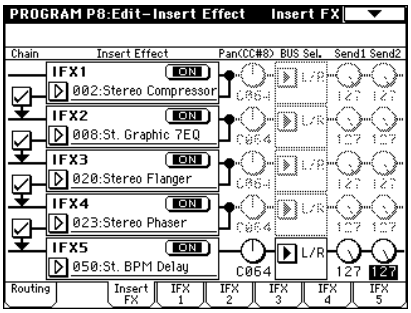
L/R: The output will not be sent to the insert effects. After passing through the master EQ, the sound will be sent to AUDIO OUTPUT (MAIN) L / MONO and R.
IFX1–5: The output will be sent to insert effect IFX 1, 2, 3, 4, or 5.
1, 2, 3, 4, 1/2, 3/4: The output will be sent to AUDIO OUTPUT (INDIVIDUAL) 1, 2, 3, or 4. It will not be sent to the insert effects, the master effects, or the master EQ.
Off: The output will not be sent to AUDIO OUTPUT (MAIN) L / MONO, R, or to (INDIVIDUAL) 1, 2, 3, 4. (After passing through the master effects, it will be output from AUDIO OUTPUT (MAIN).) Select this when you wish to connect the output to the master effects in a series connection at the send levels specified by "Send 1 (MFX1)" and "Send 2 (MFX2)."
For this example, select IFX1.

③ **"OSC MFX Send" specifies the send level from each oscillator to the master effects.**

This can be set only when "BUS Select (IFX / Indiv.Out Assign)" is either **L/R** or **Off**.
If "BUS Select (IFX / Indiv.Out Assign)" is set to **IFX1–5**, the send level to the master effects is set by "Send 1" and "Send 2" (Insert FX tab) after the signal passes through the insertion effects.

Insert effects

④ **Select the Insert Effect tab.**



⑤ **For IFX1–5, select the effect type for each insert effect.**

When you press the popup button, all effects will be displayed, organized into six categories. Use the tabs located at the left to select a category, and select an effect from that category on the LCD screen.

Effects **000–089** can be selected for IFX1, 2, 3, 4, 5, and MFX1 and 2. Effects **090–102** are double-size effects, and require twice the processing area of other effects. These can be selected for IFX2, IFX3, and IFX4.

note Each time you press the **ON/OFF button**, the insertion effect will be switched on / off. A setting of **OFF** will be the same as when **000: No Effect** is selected. The input sound will be output without any change.

note You can use the "Copy Insert Effect" page menu command to copy effect settings from another program etc. Also, you can use "Swap Insert Effect" to exchange (for example) IFX1 and IFX5.

⑥ **Make "Chain" settings.**

If the "Chain" check box is **checked**, the insert effect will be connected in series. Since the output of the oscillator is being sent to IFX1 in ②, making settings as shown in the diagram ④ would connect all five insertion effects IFX1 fi IFX2 fi IFX3 fi IFX4 fi IFX5 in series, so that these effects would be inserted into the output of the oscillator.

⑦ **Make settings for "Pan," "BUS Sel. (BUS Select)," "Send 1," and "Send 2" for the sound after it has passed through the insert effects.**

If the insertion effects are chained, these settings will apply after the last IFX.
"Pan": Set the pan. This is valid only when BUS Sel. is L / R.
"BUS Sel." (BUS Select**):** Specify the output destination. Normally you will set this to **L/R**. If you wish to send the sound that has passed through the insert effects to AUDIO OUTPUT (INDIVIDUAL) 1–4, select **1–4**, **1/2**, or **3/4**.

“Send 1”, “Send 2”: Set the send levels to the master effects. For this example, set this to **127**.

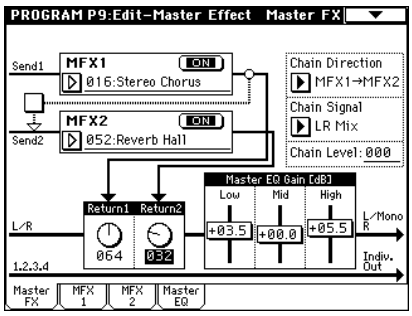
⑧ **Select the IFX1–5 tabs, and set the parameters for each of the selected effects.**

For details on the parameters of each effect (☞p.155 in the *Parameter Guide*).

Master effects

The input levels to the master effects are set by the “Send 1, 2” levels (step ③ or ⑦). If “Send 1, 2” are zero, the master effects will not apply. “Send 1” corresponds to MFX1, and “Send 2” corresponds to MFX2.

⑨ **In Program P9: Edit-Master Effect, select the Master FX tab.**



⑩ **In MFX1 and MFX2, select the type of each master effect (☞⑤).**

The procedure is the same as when selecting an insertion effect.

The master effects cannot use double-size effects.

The master effects are mono-in / stereo-out. Even if a stereo-input effect is selected, it will function as mono input.

note Each time you press the **ON/OFF button**, the master effect will be switched on / off. When **OFF**, the output of the master effect will be muted.

⑪ **Use “Return 1” and “Return 2” to adjust the output levels of the master effects.**

For each effect, the **Wet** value of the “Wet / Dry” parameter is the output level at the effect. The return value is multiplied with this (“Return” = **127** will be x1.0) to determine the actual output level of the master effect.

⑫ **Select the MFX1 and MFX2 tabs, and set the parameters for each selected effect.**

For details on the parameters of each effect, refer to p.155 in the *Parameter Guide*.

Master EQ

⑬ **Use the stereo 3-band master EQ to make final equalizing adjustments immediately before the sound is output from the AUDIO OUTPUT L/MONO and R jacks.**

Move the slider for each band to make adjustments.

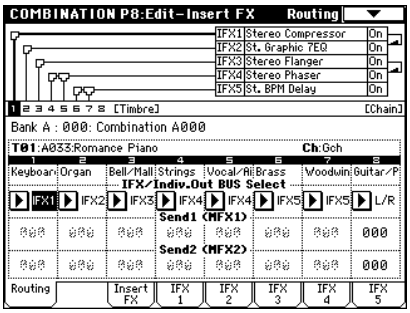
You can select the Master EQ tab, and adjust the band frequency of the master EQ (☞p.207 in the *Parameter Guide*).

Effect settings in Combination, Song, and Song Play modes

In Combination, Sequencer, and Song Play modes, you can specify the routing of each timbre / track to the insert effects and master effects. These settings are made in the same way in each of these modes. We will be using the example of Combination mode in our explanation here.

Routing

① **In Combination P8: Edit-Insert Effect, select the Routing tab.**



② **Select “IFX/Indiv.Out BUS Select.” Here you can specify the bus (insert effect) to which the output of each timbre will be sent.**

note The routing, insert effects, and chain settings are shown graphically in the upper part of the display screen. In this example, T01 (timbre 1) uses IFX1 and 2. T02 uses IFX2, T03 uses IFX3 and 4, T02 and T05 use IFX4, and T06 and T07 use IFX5. Selection of each effect type, the on / off setting, and chain settings are made in the Insert Effect tab.

③ **Make settings for Send 1 and Send 2.**

For each timbre, you can set the send levels to the master effects.

This can be set only if “IFX / Indiv.Out BUS Select” is set to **L/R** or **Off**.

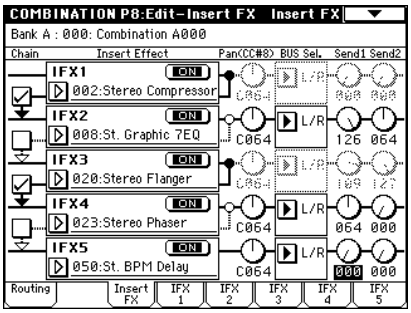
The actual send level is determined by multiplying this by the “Send 1” or “Send 2” settings for oscillators 1 and 2 within the program selected by the timbre. If the program parameter “Send 1” or “Send 2” is set to **0**, the resulting level will still be **0** even if you raise this send level.

If “IFX / Indiv.Out BUS Select” is set to **IFX1–5**, the send levels to the master effects are set by “Send 1” and “Send 2” (Insert FX tab) following the insert effects.

Insert effects

Select an effect for IFX1–IFX5, and set “Pan,” “BUS Sel. (BUS Select),” “Send 1” and “Send 2” for the signal that

has passed through each insertion effect. If effects are chained, the settings after the last IFX in the chain will be used. “Send 1” and “Send 2” adjust the amount of master effect that is applied to the signal that has passed through the IFX. These settings can be made in the same way as for a program (☞p.107).



Master effects
Master EQ

These settings can be made in the same way as in “Effect settings for a program” (☞p.108).

Effect settings in Sampling mode

In Sampling mode, insert effects can be applied to an external audio source connected to the AUDIO INPUT 1 and 2 jacks, and sampled.

Routing

① **In Sampling P0: Recording, select the Audio Input tab.**

The parameters in “Audio Input (SAMPLING)” specify the insert effect to which the external audio input from the AUDIO INPUT 1 and 2 jacks will be sent. For details on these settings, refer to “Sampling (recording a sample)” (☞p.78).

Insert effects

Select an effect for IFX1–IFX5, and set “Pan,” “BUS Sel. (BUS Select),” “Send 1” and “Send 2” for the signal that has passed through each insertion effect. If effects are chained, the settings after the last IFX in the chain will be used. “Send 1” and “Send 2” adjust the amount of master effect that is applied to the signal that has passed through the IFX. These settings can be made in the same way as for a program (☞p.107).

Master effects
Master EQ

The master effects and master EQ cannot be used in Sampling mode.

Effect settings for the AUDIO INPUT

Even in modes other than Sampling mode, the TRITON’s effects can be applied to the external audio source connected to the AUDIO INPUT 1 and 2 jacks. The effect section of the TRITON can be used as a 2-in 6-out effect processor. When 093: Vocoder is selected, you can use the TRITON as a vocoder that combines the internal sounds with the sound from an external microphone.

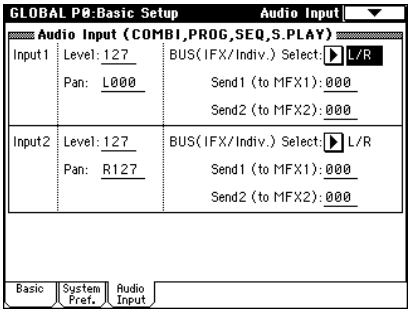
Routing

In modes other than Sampling mode (i.e., in Combination, Program, Sequencer, and Song Play modes), the settings in Global P0: Basic Setup Audio Input tab specify the routing of the external audio input from the AUDIO INPUT 1 and 2 jacks.

① **Move from Program mode to Global mode.**

If you move from Sampling mode to Global mode, the “Audio Input” settings of Sampling mode will be maintained, and you will not be able to hear the results of the settings you make in this page. Be sure to move from a mode in which the external audio signal can be input (Combination, Program, Sequencer, Song Play). In Sampling mode, the settings you make here will not apply. Settings for the rear panel AUDIO INPUT 1 and 2 jacks in Sampling mode are made in the same way in Sampling P0: Recording Input / Setup tab “Audio Input (SAMPLING).”

② **In Global P0: Basic Setup, select the Audio Input tab.**



③ **Set the parameters for Input 1 and 2.**

Input 1 corresponds to AUDIO INPUT 1 jack and INPUT 2 jack corresponds to AUDIO INPUT 2.

“Level”: Set the signal level from AUDIO INPUT 1 and 2. Normally you will set this to **127**. If the sound is still distorted even when this level is lowered significantly, it is possible that the distortion is occurring before the AD converter. Adjust the rear panel [LEVEL] knob or the output level of your external audio source.

“Pan”: Set the panning of the signal from AUDIO INPUT 1 and 2. When you are inputting a stereo audio source, you will normally set Input 1 to **L000**, and Input 2 to **R127** (or Input 1 to **R127**, and Input 2

to **L000**). When you are inputting a monaural audio source, you will normally set this to **C064**.

"BUS (IFX/Indiv.) Select": In the same way as for the oscillator of a program, specify the bus to which the external audio source from AUDIO INPUT jacks 1 and 2 will be sent.

"Send 1 (to MFX1)", "Send 2 (to MFX2)": In the same way as for the oscillator of a program, specify the level at which the external audio source from AUDIO INPUT jacks 1 and 2 will be sent to the master effects. This setting can be made only if "BUS (IFX / Indiv.) Select" is **L/R** or **Off** (☞p.107).

If "BUS (IFX / Indiv.) Select" is set to **IFX1–5**, this is set by "Send 1" and "Send 2" (Insert Fx tab) after the sound has passed through the insert effects.

If "BUS (IFX / Indiv.) Select" has a setting other than **Off**, and you raise the "Level" value, the external audio source will be input to the TRITON. At this time if audio cables are connected to the rear panel AUDIO INPUT 1 and 2 jacks, noise may be input to the TRITON via the AD converter even if no audio input is actually present, and depending on the settings, may be output from AUDIO OUTPUT L / R, 1, 2, 3, or 4. If you will not be using an external audio source, but are using only the internal sounds of a program, combination, or song, set "BUS (IFX / Indiv.) Select" to **Off**, or set "Level" to **0**.

If no audio cables are connected to the rear panel AUDIO INPUT 1 and 2 jacks, the data that is input to the TRITON from the AD converter will be set to zero, and no noise will be output.

About dynamic modulation (Dmod) D-mod

Dynamic modulation (Dmod) is a function that lets you use the TRITON's controllers or MIDI messages to control specific effect parameters while you play, to make the effects change in realtime.
The BPM / MIDI Sync function also lets you control effect parameters in a similar way. This can be used to synchronize the LFO speed of a modulation-type effect or the delay time of a delay-type effect etc. to the tempo of the arpeggiator or sequencer.

For details on each of these functions, refer to "Appendices: Dynamic modulation" (☞p.214 in the *Parameter Guide*).

Setting example:

We will show how you can use dynamic modulation to control an effect parameter in realtime.

① **As described in the procedure for "Effect settings for a program" (☞p.107), set "IFX1" to 049: L/C/R BPM Delay. Verify that a delay sound is being output.**

② **Select the IFX1 tab.**

Using Dmod to change the delay level by moving the joystick away from yourself

① **Set "Input Level Dmod" to +100.**

② **Set "Src" to JS+Y: CC#01. The delay sound will disappear.**

The input level to the effect can be controlled by the joystick. As you move the joystick away from yourself, the delay sound will gradually increase.

Using Dmod to modify the feedback level from [SW1] key

① **In P1: Edit-Basic, select the Controller Setup tab, and set the function of "SW1" to SW1 Mod.: CC#80 (Toggle).**

② **Return to P8. Set "Feedback Src" to SW 1: CC#80.**

③ **Set "Amt" to +30.**

When you press the [SW1] key, the feedback level will increase, and the delay sound will continue for a longer time. (Move the joystick away from yourself so that the delayed sound is output.) The "Amt" setting specifies the feedback level that will be in effect when the [SW1] key is pressed. If "Amt" is set to **–10**, pressing the SW1 key will reduce the feedback level to **0**.

Using the BPM / MIDI Sync. function to synchronize the delay time to arpeggiator tempo changes.

① **Set "BPM" to MIDI.**

② **For L, C, and R, set "Delay Base Note" and "Times" as desired.**

For this example, set "Delay Base Note" to ♪ and "Times" to **x1** so that the effect will be easily understandable. The delay time will repeat at an interval of a 8th note.

③ **Rotate the [TEMPO] knob, and the delay time will change.**

(When you move the joystick away from yourself, the delay sound will be output.)

④ **When you turn on the ARPEGGIATOR [ON/OFF] switch, the arpeggiator will begin playing.**

Select any desired arpeggio pattern. When you rotate the [TEMPO] knob, the delay time will change in synchronization with the changing tempo of the arpeggio.

If you rotate the [TEMPO] knob to change the tempo while the delay is sounding, noise may occur in the delay sound. This is because the delay sound becomes discontinuous, and is not a malfunction.

note For some effects, you can synchronize the LFO frequency to the tempo. Set the effect parameters "BPM / MIDI Sync" to **On**, and "BPM" to **MIDI**. For details refer to p.159 in the *Parameter Guide*.

MIDI applications

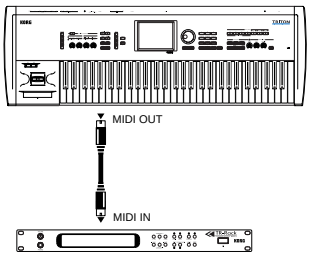
About MIDI

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

Connecting MIDI devices / computers (MIDI connectors)

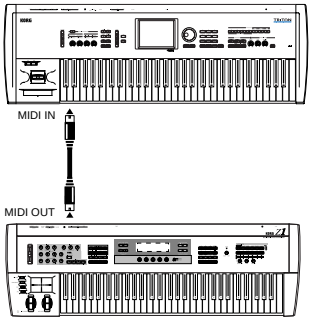
Controlling an external MIDI tone generator from the TRITON

When you wish to use the TRITON's keyboard, controllers, and sequencer etc. to play an external MIDI tone generator, use a MIDI cable to connect the TRITON's MIDI OUT connector to the MIDI IN connector of the external MIDI tone generator.



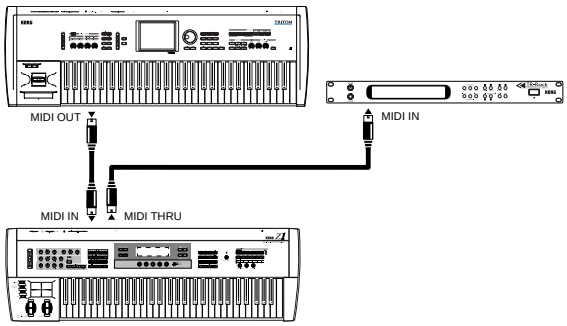
Controlling the TRITON's tone generator from an external MIDI device

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

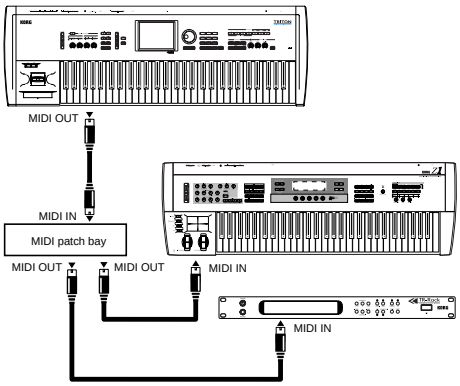


Controlling two or more external MIDI tone generators from the TRITON

You can use the MIDI THRU jack to simultaneously control multiple MIDI devices. (This type of connection should be used to connect no more than three devices. If you wish to connect a larger number of MIDI devices, we recommend that you use a MIDI patch bay as shown in the second diagram below.)



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



The "Convert Position" setting

On the TRITON, the Global P0: Basic tab parameters "Key Transpose," "Velocity Curve" and "After Touch Curve" allow you to transpose the pitch, adjust the velocity sensitivity, and adjust the after touch sensitivity (☞p.113 in the *Parameter Guide*).
The effect that these settings will have on the internal sequencer and on the MIDI data that is transmitted and received will depend on "Convert Position" (Global P1: MIDI) setting (☞p.118 in the *Parameter Guide*).

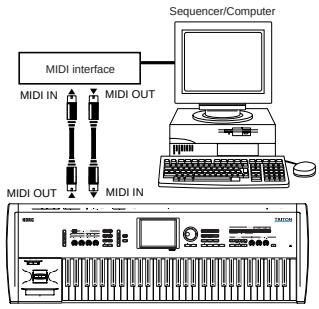
- When controlling an external MIDI tone generator from the TRITON, select "**Pre MIDI**." The above-listed settings will affect the MIDI data that is transmitted. These settings will also affect the data that is recorded on the internal sequencer.

Incoming MIDI data will be handled with settings equivalent to "Key Transpose" **0**, "Velocity Curve" **4**, and "After Touch Curve" **3**.

- When controlling the TRITON's tone generator from an external MIDI device, select "PostMIDI." The above-listed settings will affect the MIDI data that is received. These settings will also affect the data that is played back from the internal sequencer.
  Outgoing MIDI data will be handled with settings equivalent to "Key Transpose" **0**, "Velocity Curve" **4**, and "After Touch Curve" **3**.

Connecting an external MIDI sequencer or computer etc.

You can play the TRITON's keyboard and record your performance on an external MIDI sequencer / computer (connected via a MIDI interface), and then play back the recorded performance to sound the TRITON's tone generator (i.e., using the TRITON as an input keyboard and MIDI tone generator). To do this, connect the MIDI OUT and MIDI IN connectors of the TRITON and your external MIDI sequencer / computer to each other.



Local Control On settings

When connections are made as shown above, turn on the Echo Back function of the external MIDI sequencer or computer (so that data received at MIDI IN will be re-transmitted from MIDI OUT), and turn off the TRITON's Local Control setting (so that the TRITON's keyboard and tone generator will be internally disconnected). When you play the keyboard of the TRITON, the musical data will be transmitted to the external MIDI sequencer or computer, and then echoed back to play the TRITON's tone generator. In other words, by turning Local Control OFF, you can prevent notes from being sounded in duplicate, as would otherwise occur if a note were sounded by the TRITON's own keyboard and again by the data that was echoed-back.

If the arpeggiator function is on, playing the TRITON's keyboard will not cause the arpeggiator to operate, and only the musical data produced by playing the keyboard will be transmitted. The arpeggiator will operate only in response to the notes that are echoed-back and received at MIDI IN. In this way, turning off Local Control prevents the arpeggiator from operating in duplicate.
Use this setting when you wish to record on the external MIDI sequencer or computer only the notes that trigger the arpeggiator, and to use the echoed-back notes to operate the arpeggiator while monitoring your recording or during playback.

To turn **off** Local Control, select the Global P1: MIDI, and press the "Local Control On" check box to **uncheck** it (☞p.117 in the *Parameter Guide*).
When using the TRITON by itself, leave Local Control turned on. (If this is **off** when the TRITON is used by itself, playing the keyboard will not produce sound.)

If you want the note data produced by the arpeggiator to be recorded on the external sequencer / computer, set Local Control on, and turn off the Echo Back setting of the external sequencer / computer.

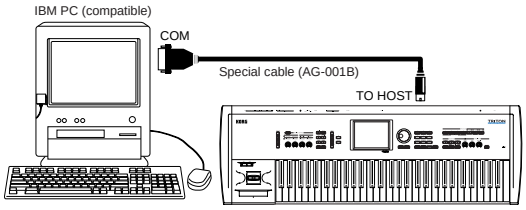
Connecting a computer (TO HOST connector)

By using a special cable to connect the TRITON's TO HOST to your computer, and installing the "Korg MIDI Driver," you can play and control the TRITON from your computer. Direct cable connections are possible with the following computers.

Connecting an IBM PC (compatible)

To connect an IBM PC (compatible) with the TRITON, you will need a separately sold AG-001B connecting kit (cable and Korg MIDI Driver software).

① **Use the special AG-001B cable to connect the serial port (COM port) of the IBM PC (compatible) to the TRITON's TO HOST connector.**



If the serial port of your computer uses a 25-pin connector, you will need to obtain a 9 pin - 25 pin adapter.

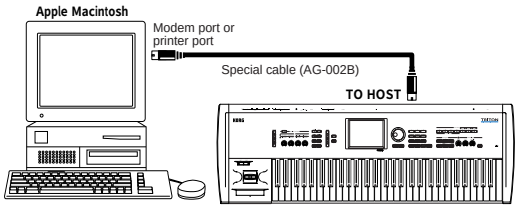
② **In Global P0: Basic Setup, set "PC I/F Baud Rate" to 38.40 [kBPS]. (☞"PC I/F Baud Rate settings")**

③ **If you are using Windows, install the Korg MIDI Driver. For the installation procedure, refer to "Installing and setting up the Korg MIDI Driver" (☞p.129).**

Connecting an Apple Macintosh

To connect an Apple Macintosh with the TRITON, you will need a separately sold AG-002B connecting kit (cable and Korg MIDI Driver software).

① **Use the special AG-002B cable to connect the modem port or printer port of the Apple Macintosh to the TRITON's TO HOST connector.**



If the application program (sequencer) you are using has a Clock setting, set it to 1 MHz.

② **In Global P0: Basic Setup, set "PC I/F Baud Rate" to 31.25 [kBPS]. (☞"PC I/F Baud Rate settings")**

③ **If you will be installing the Korg MIDI Driver (☞p.131 "Installing the Korg MIDI Driver into a Macintosh").**

PC I/F Baud Rate settings

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

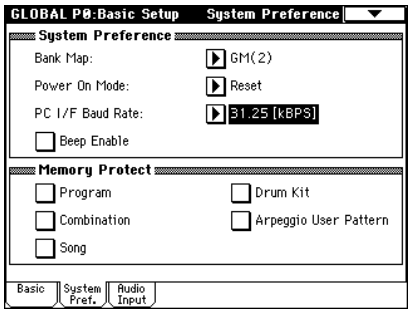
② **Press the [MENU] key, and then press the [EXIT] key to enter P0: Basic Setup.**

③ **Press the System Pref. tab.**

④ **Press the "PC I/F Baud Rate" popup button, and select the setting that is appropriate for your computer.**

31.25 [kBPS]:
Connection to an Apple Macintosh.

34.80 [kBPS]:
Connection to an IBM PC (compatible).



Messages transmitted and received by the TRITON

[...] indicates hexadecimal notation

MIDI channels

MIDI messages can be exchanged when the transmitting and receiving devices are set to the same MIDI channel. MIDI uses sixteen channels, numbered **1–16**. The way in which channels are handled will differ depending on the mode.

Program mode and Sampling mode

- Transmission / reception is performed on the global MIDI channel*.

* The **global MIDI channel** is the basic channel that the TRITON uses for MIDI transmission / reception, and is set by Global P1: MIDI "MIDI Channel."

Combination mode

- The global MIDI channel is used to transmit / receive messages for selecting a combination and turning effects on / off, and to transmit / receive exclusive data.
- The MIDI channel specified for each timbre (in Combination P2: MIDI channel tab) is used to transmit / receive MIDI data for each timbre.
- The MIDI channel specified for each of the insert effects and master effects is used to control dynamic modulation, and to control the pan and send 1 / 2 after the sound has passed through the insert effects.
- When you operate the keyboard or controllers of the TRITON, messages will be transmitted on the global MIDI channel, and will also be transmitted on the MIDI channel of any timbre whose "Status" is set to **EXT** or **EX2**.
- Channel messages will be received if they match the MIDI channel of a timbre whose "Status" is set to **INT** (☞p.33 in the *Parameter Guide* "Status" and "MIDI Channel").

Sequencer mode and Song Play mode

- The global MIDI channel is used to transmit / receive exclusive data and for messages that switch effects on / off.
- MIDI data of each track is transmitted / received on the MIDI channel specified for each track (in the Sequencer P2: MIDI Channel tab).
- The MIDI channel specified for each of the insert effects and master effects is used to control dynamic modulation, and to control the pan and send 1 / 2 after the sound has passed through the insert effects.
- When you operate the keyboard or controllers of the TRITON, messages will be transmitted on the MIDI channel selected by "Track Select." However, messages will be transmitted only if the track selected by "Track Select" has a "Status" of **BTH**, **EXT**, or **EX2**. (☞p.46 in the *Parameter Guide* Track Select "MIDI").
- When the sequencer is played back, musical data of tracks whose "Status" is **BTH**, **EXT**, or **EX2** will be transmitted on the specified MIDI channels.
- Tracks whose "Status" is **INT** or **BTH** will receive channel messages of the matching MIDI channel (☞p.55, 104 in the *Parameter Guide* "Status" and "MIDI Channel").

Note on / off

Note-on [9n, kk, vv]
Note-off [8n, kk, vv]
(n: channel, kk: note number, vv: velocity)

When you play a note on the TRITON's keyboard, it will transmit note-on / off messages. When the arpeggiator is running, note-on / off messages will be transmitted by the arpeggiator. (If Local Control is off, the arpeggiator will not transmit note-on / off data. ☞p.112 "Local Control On settings")
However, most instruments do not receive or transmit note-off velocity, and neither does the TRITON.

Program Change / Bank Select

Changing the program / bank

Program change [Cn, pp]
(n: channel, pp: program number that allows 128 sounds to be selected)

- Programs 000–127 in banks A, B, C, D, E, and F correspond to program changes [Cn, 00]–[Cn, 7F].
- Programs 001–128 in banks G, g(1), g(2), g(3), g(4), g(5), g(6), g(7), g(8), g(9), and g(d) correspond to program changes [Cn, 00]–[Cn, 7F].

Bank select MSB (CC#0) [Bn, 00, mm]
Bank select LSB (CC#32) [Bn, 20, bb]
(n: channel, mm: bank number upper byte, bb: bank number lower byte)

- The internal banks that correspond to each bank select number will depend on the "Bank Map" setting (Global P0: Preference tab). With the factory settings, this will be **GM(2)**. (☞"Bank Map" on p.115 in the *Parameter Guide*.)

Simply receiving a Bank Select message will not cause the program or bank to change. The program or bank will actually change when a Program Change message is received.

Program mode

- In Program P0: Play, program change and bank select messages are transmitted and received on the global MIDI channel. These messages are not received in P1: Edit-Basic – P9: Edit-Master Effect.

Combination, Sequencer, and Song Play modes

- Program change and bank select messages can be received on the MIDI channel specified for each timbre / track to select programs on that timbre / track.
- When you select a combination, program change and bank select messages will be transmitted by timbres whose "Status" is **EXT** or **EX2**.
- In Sequencer and Song Play modes, program change or bank select messages will be transmitted by tracks whose "Status" is **BTH**, **EXT**, or **EX2** when you select the "Bank / Program" (P0: Program tab), when you select a song, or when you return to the beginning of a measure. (☞p.30, 47 in the *Parameter Guide* "Bank / Program"–"MIDI")
- In Combination and Sequencer modes, transmission / reception can be switched on / off for each timbre / track. (P3: MIDI Filter and MIDI 1 tab "Enable Program Change.") (☞p.35, 57 in the *Parameter Guide*).

Selecting combinations

You can use program change and bank select messages to select combinations in the same way that you select programs.

- Combinations 000–127 in banks A, B, C, and D correspond to program changes [Cn, 00]–[Cn, 7F].
- Similarly as for program banks, the internal banks that correspond to each bank select number will depend on the "Bank Map" setting (Global P0: Preference tab). (☞"Bank Map" on p.115 in the *Parameter Guide*.)
- In Combination P0: Play, program change and bank select messages are transmitted / received on the global MIDI channel. They are not received in P1: Edit-Program / Mixer – P9: Edit-Master Effect.

note All program changes can be turned off in Global P1: MIDI "MIDI Filter."

As needed, you can independently turn all program changes on / off, specify whether or not incoming messages will be able to change combinations, and turn reception / transmission of bank select messages on / off.

- If "Combination Change" is unchecked, the combination will not change even if a program change on the global MIDI channel is received in Combination P0: Play. In this case, the program of the timbre that matches the MIDI channel of the received message will change.
- If "Bank Change" is unchecked, bank select messages will not be transmitted or received (☞p.118 in the *Parameter Guide* "MIDI Filter").

After touch

Channel after touch [Dn, vv]
(n: channel, vv: value)

When you apply pressure to the keyboard after playing a note, an after touch effect will be applied, and Channel After Touch messages will be transmitted. When these messages are received, an after touch effect will be applied.

- After touch for the entire instrument can be turned off in Global P1: MIDI "MIDI Filter."
- In Combination and Sequencer modes, after touch can be switched on / off independently for each timbre / track (P3: MIDI 1 tab "Enable After Touch) (☞p.35. 57 in the *Parameter Guide* "MIDI Filter").

Polyphonic key pressure [An, kk, vv]
(n: channel, kk: note number, vv: value)

There is another type of after touch called Polyphonic Key Pressure, which allows after touch to be applied independently for individual keys. This message can be used as an alternate modulation source, but cannot be transmitted by the TRITON's keyboard. In order to use this message, it will have to be received from an external device, or recorded on your sequencer.

The after touch mentioned in this manual refers to Channel After Touch.

Pitch bender

Pitch bender change [En, bb, mm]
(n: channel, bb: lower byte of the value, mm: upper byte of the value, together expressing a value of 16,384 steps where 8,192 [bb, mm = 00H, 40H] is the center value)

When the TRITON's joystick is moved in the X axis (left / right), a pitch bend effect will be applied, and pitch bender messages will also be transmitted. When these messages are received, a pitch bend effect will be applied.

note The range of pitch change that is produced by pitch bend messages can also be adjusted via MIDI. (☞p.120 "Changing the pitch bend range")

Control change

[Bn, cc, vv]
Transmitted and received as (n: channel, cc: control change no., vv: value)

Refer to "MIDI transmission when controllers are operated" (p.221) and "How the TRITON transmits / receives control changes" (p.223) in the *Parameter Guide*.

- Control changes can be turned on / off as a whole in Global P1: MIDI "MIDI Filter."

- In Combination and Sequencer modes, the P3: MIDI Filter settings allow transmission / reception of control changes to be individually turned on / off for each timbre / track. For the assignable controllers ([SW1], [SW2], REALTIME CONTROLS [1]–[4] knobs, Foot Pedal / Switch), MIDI filter settings will apply to the control change number to which each controller is assigned. "Other Control Change" applies to control changes that are not covered by the items of the other check boxes (P3: MIDI Filter) (☞p.35, 57 in the *Parameter Guide* "MIDI Filter").

note MIDI **CC#00–CC#95** can be selected for the B-mode of REALTIME CONTROLS [1]–[4] knobs.

Selecting program / combination banks

Bank select (CC#00, CC#32)
☞p.114 "Program Change / Bank Select"

Using the joystick to apply modulation

Modulation 1 depth (CC#01) [Bn, 01, vv]
When you move the TRITON's joystick in the +Y direction (away from yourself), Modulation 1 Depth messages will be transmitted. When these messages are received, the same effect will be applied as when the TRITON's joystick is operated. Normally this will apply a vibrato effect (pitch LFO).

- In Combination and Sequencer modes, transmission / reception can be switched on / off for each timbre / track (P3: MIDI2 tab "Enable JS+Y"). (☞p.35, 57 in the *Parameter Guide* "MIDI Filter")

Modulation 2 depth (CC#02) [Bn, 02, vv]
When you move the TRITON's joystick in the –Y direction (toward yourself), Modulation 2 Depth messages will be transmitted. When these messages are received, the same effect will be applied as when the TRITON's joystick is operated. Normally this will apply a wah effect (filter LFO).

- In Combination and Sequencer modes, transmission / reception can be switched on / off for each timbre / track (P3: MIDI2 tab "Enable JS-Y"). (☞p.35, 57 in the *Parameter Guide* "MIDI Filter")

note Other manufacturers use this message for other purposes (e.g., breath controller, etc.)

Controlling the portamento effect

Portamento time (CC#05) [Bn, 05, vv]
When the above CC# is assigned as a B-mode function for one of the REALTIME CONTROLS [1]–[4] knobs, rotating that knob will transmit Portamento Time messages, and will modify the speed at which the portamento pitch changes. When this message is received, the result will be the same as when the controller is operated.

Portamento switch (CC#65) [Bn, 65, vv]
When the above CC# is assigned to [SW1], [SW2] or the ASSIGNABLE SWITCH, operating that switch will transmit vv=127 [7F] for ON or vv=0 [00] for OFF, and the portamento effect will be switched on / off. When this message is received, the result will be the same as when the controller is operated. (vv of 63 [3F] or less will be OFF, and 64 [40] or greater will be ON.) (☞p.217 in the *Parameter Guide* "SW1, SW2 Assign List")

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (P3: MIDI1 tab "Enable Portamento SW"). (☞ p. 35 and 58 in the *Parameter Guide*.)
- In Sequencer mode, portamento time / switch messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** when you set "Portamento" (P2: OSC tab), re-select a song or SMF, or return to the beginning of a measure. (☞p.55 in the *Parameter Guide* "Portamento"-"MIDI")

Controlling the volume

Volume (CC#07) [Bn, 07, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Volume messages, and the volume will change. When this message is received, the result will be the same as when the controller is operated.

Expression (CC#11) [Bn, 0B, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Expression messages, and the volume will change. When this message is received, the result will be the same as when the controller is operated.

The volume of the TRITON is determined by multiplying the value of the **Volume message** with the value of the **Expression message**.
If adjusting the Volume message does not increase the volume as you expect, or if there is no sound, transmit MIDI messages from an external device to reset the value of the Expression message (set vv to 127). In Sequencer mode, this will be reset when the "Location" of the song is moved to **001:01.000**.

- In Combination mode, Volume messages will be transmitted by each timbre whose "Status" is **EXT** or **EX2** when you re-select the combination.
- When you change the "Volume" setting (P0: Mixer tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the song in Sequencer mode, volume messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2**.

note Regardless of the "Status" settings, re-selecting a song, or returning to the beginning will reset the internal Volume value to the value specified by each track (the starting settings), and will reset the Expression value to the maximum.

note You can control the volume independently for each track. You will normally use Volume messages to set the initial volume level for each track (the starting settings), and use Expression messages to create changes in dynamics within the

musical data of the song. (☞p.31, 49 in the *Parameter Guide* "Volume" - "MIDI)

By using the universal exclusive Master Volume message, you can adjust the overall volume without changing the volume balance between timbres or tracks. (☞p.120 "About system exclusive messages")

Controlling panpot (stereo position)

Panpot (CC#10) [Bn, 0A, vv]
(vv: value, where 00 is far left, 64 is center, and 127 is far right)

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Panpot messages, and the panning will change. When this message is received, the result will be the same as when the controller is operated.

- When you set the "Pan" (P0: Mixer tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the measure in Sequencer mode, Panpot messages (except for RND) will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** (☞"Pan" - "MIDI" on p.49 and 103 in the *Parameter Guide*).

Post insert effect panpot (CC#08)
[Bn, 08, vv] (vv: value, where 00 is far left, 64 is center, and 127 is far right)

When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Post Insert Effect Panpot messages, and the panning of the sound following the insert effect will change. When this message is received, the result will be the same as when the controller is operated.

- In Program mode and Sampling mode, this message is transmitted / received on the global MIDI channel. In Combination, Sequencer, and Song Play modes, this message is transmitted / received on the MIDI channel specified for each insert effect.
- When you set "Pan (CC#8)" (P0: Insert Effect tab) in Sequencer mode or Song Play mode, or when you re-select the song or return to the beginning of the measure in Sequencer mode, Post Insert Effect Panpot messages will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2** (☞"Insert Effect" - "MIDI" on p. 76 and 110 in the *Parameter Guide*).

Effect control

Effect control 1 (CC#12) [Bn, 0C, vv]
Effect control 2 (CC#13) [Bn, 0D, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Effect Control 1 / 2 messages, and the specified dynamic modulation will be controlled. When this message is received, the result will be the same as when the controller is operated.

Although various types of control change can be selected as dynamic modulation sources, Effect Control 1 (CC#12) and 2 (CC#13) are dedicated for dynamic modulation.

Effect 1 depth (Send 2) (CC#91) [Bn, 5B, vv]
Effect 3 depth (Send 1) (CC#93) [Bn, 5D, vv]
When the above CC# is assigned to the ASSIGNABLE PEDAL or as the B-mode function of a REALTIME CONTROL knob [1]–[4], operating that controller will transmit Effect 1 Depth (Send 2) or Effect 3 Depth (Send 1) messages, and the send level 1 or 2 to the master effects **MFX1** or **MFX2** will be controlled respectively. When this message is received, the result will be the same as when the controller is operated.
On the corresponding MIDI channels, this will simultaneously control the timbre / track setting as well as the setting following the insertion effect.

- In Combination, Sequencer, and Song Play modes, the actual send level of the timbre / track is determined by multiplying this value with the send 1 / 2 settings for each oscillator (Program P8: Routing tab). (☞"Send 1, 2" - "MIDI" on p.25, 26, 42, 75, and 110 in the *Parameter Guide*.)
- When you adjust "Send 1" or "Send 2" (P8: Routing tab, Insert Effect tab) in Sequencer mode or Song Play mode, or when you re-select a song or return to the beginning of the measure in Sequencer mode, Send 1 / 2 will be transmitted by each track whose "Status" is **BTH**, **EXT**, or **EX2**. (☞"Send 1, 2," "Insert FX" - "MIDI" on p.76 and 110 in the *Parameter Guide*).

Effect 2 depth (IFX1–5 on / off) (CC#92) [Bn, 5C, vv]
Effect 4 depth (MFX1 on / off) (CC#94) [Bn, 5E, vv]
Effect 5 depth (MFX2 on / off) (CC#95) [Bn, 5F, vv]
Separately from the effect on / off settings in each mode, Global P1: Basic Setup "Effect Global SW" allows you to turn off insert effects IFX1–5 and master effects MFX1 and MFX2. If you **check** "IFX1–5 Off," "MFX1 Off" or "MFX2 Off," the corresponding message will be transmitted with vv=0 [00]. If you **uncheck** these settings, the corresponding message will be transmitted with vv=127 [7F]. If you check these settings, the corresponding effect(s) will be turned off as a group. If you uncheck these settings, the on / off settings of each mode will be used. The same applies to reception. (vv of 00 is off, and 01 or greater is the original setting.) These messages are transmitted / received on the global MIDI channel. (☞"ON / OFF" - "MIDI" on p.26 and 27 in the *Parameter Guide*.)

note These messages are defined simply for use in adjusting the effect levels, and may not have the same function on another instrument connected to the TRITON.

Using various controllers for control

Foot controller (CC#04) [Bn, 04, vv]
If the above CC# is assigned as the ASSIGNABLE PEDAL function, this message will be transmitted when the controller is operated.

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI2 tab "Enable Foot Pedal / Switch").

Ribbon controller (CC#16) [Bn, 10, vv]
This message will be transmitted when the TRITON's ribbon controller is operated.

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI2 tab "Enable Ribbon").

Controller (CC#18) [Bn, 12, vv]
This message will be transmitted when the TRITON's [VALUE] slider is operated.
This is valid in Program P0: Play and Combination P0: Play when the program or combination number / name is selected (highlighted).

Knob modulation 1, 2, 3, 4 (CC#17, 19, 20, 21) [Bn, 11, vv], [Bn, 13, vv], [Bn, 14, vv], [Bn, 15, vv]
If the above CC# are assigned to the B-mode of REALTIME CONTROLS [1]–[4] knobs, these messages will be transmitted when the knobs are operated.

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI3 tab "Enable REALTIME CONTROLS Knob 1, 2, 3, 4").

Controller (CC#83) [Bn, 53, vv]
If the above CC# is assigned to the B-mode of REALTIME CONTROLS [1]–[4] knobs, this message will be transmitted when the knob is operated.

SW1 modulation (CC#80) [Bn, 50, vv]
SW2 modulation (CC#81) [Bn, 51, vv]
If the above CC# are assigned as the function of [SW1] or [SW2], operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF. (These can also be set as the B-mode functions of the REALTIME CONTROL knobs [1]–[4].)

- In Combination and Sequencer modes, transmission / reception of these messages can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide*P3: MIDI3 tab "Enable SW1," "Enable "SW2"

Foot switch (CC#82) [Bn, 52, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF. (This can also be set as a B-mode function of the REALTIME CONTROL knobs [1]–[4].)

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI Filter MIDI2 tab "Enable Foot Pedal / Switch").

When "Foot controller (CC#04)"–"Foot switch (CC#82)" are operated on the TRITON, the specified alternate modulation or dynamic modulation etc. will be controlled. When these messages are received, the result will be the same as if the controller had been operated. For "SW1 modulation (CC#80)"–"Foot switch (CC#82)," vv of 63 [3F] or less will be OFF, and 64 [3F] or greater will be ON.

Damper pedal (CC#64) [Bn, 40, vv]
This message is transmitted when you operate a damper pedal (separately sold Korg DS-1H etc.) connected to the DAMPER jack, and the damper effect will be turned on / off. If the DS-1H is used, a half-damper effect can be applied.

- In Combination and Sequencer modes, transmission / reception of this message can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI1 tab "Enable Damper").

Sostenuto (CC#66) [Bn, 42, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF, and the sostenuto effect will be turned on / off. When this message is received, the result will be the same as when the controller is operated (OFF for vv=63 [3F] or below, and ON for vv=64 [40] or above).

Soft pedal (CC#67) [Bn, 43, vv]
If the above CC# is assigned as the function of the ASSIGNABLE SWITCH, operating the switch will transmit this message with vv=127 [7F] for ON, and vv=00 [00] for OFF, and the soft pedal effect will be turned on / off. When this message is received, the result will be the same as when the controller is operated.

Controlling the tone / envelope of a program

CC#70-78 control specific parameters of a program. For details on the program parameters that correspond to each control change, and how the TRITON will respond in each mode when these are received, refer to "TRITON operations when control changes are transmitted / received" on p.223 of the *Parameter Guide.*

Low pass filter cutoff (CC#74) [Bn, 4A, vv]
Resonance level / High pass filter cutoff (CC#71) [Bn, 47, vv]
Filter EG intensity (CC#79) [Bn, 4F, vv
Release time (CC#72) [Bn, 48, vv]
These messages are transmitted when you operate the TRITON's REALTIME CONTROLS [1]–[4] knobs in A-mode. (They can also be set as B-mode functions.)

Sustain level (CC#70) [Bn, 46, vv]
Attack time (CC#73) [Bn, 49, vv]
Decay time (CC#75) [Bn, 4B, vv]
LFO 1 speed (CC#76) [Bn, 4C, vv]
LFO 1 depth (pitch) (CC#77) [Bn, 4D, vv]
LFO 1 delay (CC#78) [Bn, 4E, vv]
These messages are transmitted when assign the above CC# to the REALTIME CONTROLS [1]–[4] knobs and operate them.

When you operate these, the corresponding program parameters will be controlled, and the sound and envelope will change. When these messages are received, the result will be the same as when the controller is operated. (When the message has a value vv=64 [40], the setting will have the value that was set by the program parameter.)

- In Combination and Sequencer modes, transmission / reception can be turned on / off independently for each timbre / track (☞p.35, 57 in the *Parameter Guide* P3: MIDI Filter MIDI2 tab "Enable REALTIME CONTROLS Knob 1, 2, 3, 4").

note In Program mode, the corresponding program parameters will be temporarily edited by these messages. You can Write the program to save the modified state (except for certain parameters). The Write operation can also be performed by a MIDI exclusive Program Write Request message, in addition to the usual method of using the TRITON's switches. When you write the data, the values of the corresponding program parameters will be rewritten.

note The results of receiving these messages will depend on the instrument. The operation may be different when a device other than the TRITON is connected.

Silencing all notes on a specific channel

All note off (CC#123) [Bn, 7B, 00] (value 00)
When this is received, all currently-sounding notes on that channel will be turned off (as though the keys had been released). However, the release portion of the notes will remain.

All sound off (CC#120) [Bn, 78, 00] (value 00)
When this is received, all currently-sounding notes on that channel will be silenced. While the All Note Off message allows the release portion of the notes to remain, the All Sound Off message will silence the notes immediately.

However, these messages are provided for emergency use, and are not something that you will use while performing.

Resetting all controllers on a specific channel

Reset all controllers (CC#121) [Bn, 79, 00] (value 00)
When this is received, the value of all controllers on that channel will be reset.

Using RPN to edit

RPN (Registered Parameter Number) is a type of message that allows settings to be made in a way that is common between instrument manufacturers. (NRPN (Non-registered Parameter Numbers) and exclusive messages can be freely used in non-compatible ways by different manufacturers and models of instrument.)

RPN messages can be used for editing with the following procedure.

① Use RPN MSB (CC#101) [Bn, 65, mm] and RPN LSB (CC#100) [Bn, 64, rr] (n: channel, mm, rr: upper and lower bytes of the parameter number) messages to select the parameter.
② Use data entry MSB (CC#6) [Bn, 06, mm] and data entry LSB (CC#38) [Bn, 26, vv] (n: channel, mm, vv: upper and lower bytes of the value, together expressing 16,384 levels) to specify the value.
③ You can use data increment (CC#96) [Bn, 60,00] or data decrement (CC#97) [Bn, 61, 00] (n: channel, value is fixed at 00) to change the value in steps of one.

The TRITON can receive the following three RPN messages (tuning, transpose, and pitch bend range).

Tuning

RPN fine tune [Bn, 65, 00, 64, 01]
This RPN message can be used to adjust the detuning for a program or timbre (in Combination mode), or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 01]: Select RPN parameter 01.
② [Bn, 06, mm, 26, vv]: Use data entry to set the value. A value of 8192 [mm, vv=40, 00] is center, 0 [mm, vv=00, 00] is -100 cents, and 16383 [mm, vv=7F, 7F] is +100 cents.

note You can use the universal exclusive Fine Tune message to adjust the overall tuning that corresponds to the Global P0: Basic Setup "Master Tune" parameter. (☞p.120 "About system exclusive messages")

Transposing

RPN coarse tune [Bn, 65, 00, 64, 02]
This RPN message can be used to adjust the transposition for a program or timbre (in Combination mode), or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 02]: Select RPN parameter 02.
② [Bn, 06, mm, 26, vv]: Use data entry to set the value. Normally only the upper byte is used.

A value of 8192 [mm, vv=40, 00] is center, 6656 [mm, vv=34, 00] is -12 semitones, and 9728 [mm, vv=4C, 00] is +12 semitones.

note You can use the universal exclusive Coarse Tune message to adjust the overall tuning that corresponds to the Global P0: Basic Setup “Transpose” parameter. (☞p.120 “About system exclusive messages”)

Changing the pitch bend range

RPN pitch bend range [Bn, 64, 00, 65, 00]
This RPN message can be used to adjust the pitch bend range for a program or timbre (in Combination mode) or for a track (in Sequencer or Song Play modes).

The procedure is as follows.

① [Bn, 65, 00, 64, 00]: Select RPN parameter 00.

② [Bn, 06, mm, 26, vv]: Use data entry to set the value. Normally only the upper byte is used.

A value of 0 [mm, vv=00, 00] is +00, and a value of 1536 [mm, vv=0C, 00] is +12 (one octave). Although it is possible to set a negative value for a timbre / track, only positive values can be set using RPN messages.

Controlling the arpeggiator (NPRN)

Arpeggiator operations can be controlled using NRPN (Non Registered Parameter Number) messages. NRPN messages can be freely used in non-compatible ways by different manufacturers and models of instrument.

The procedure for using NRPN messages is the same as for RPN, but you will use NRPN MSB (CC#99) [Bn, 63, mm] and NRPN LSB (CC#98) [Bn, 62, rr] messages (n: channel, mm, rr: upper and lower bytes of the parameter number) to specify the parameter.

NRPN arpeggiator on / off
[Bn, 63, 00, Bn, 62, 02, Bn, 06, mm]
This message will be transmitted when you press the ARPEGGIATOR [ON / OFF] switch. When the switch is turned ON the data will be mm=127 [7F], and when turned OFF the data will be mm=0 [00], and the arpeggiator will be turned on / off accordingly. (This can also be specified as a function of the ASSIGNABLE SWITCH.)
Similarly, the arpeggiator will be turned on / off when this message is received. (ON when mm is 64 [40] or greater, and OFF when 63 [3F] or less.)

NRPN arpeggiator gate control
[Bn, 63, 00, Bn, 62, 0A, Bn, 06, mm]
This message will be transmitted when you operate the ARPEGGIATOR [GATE] knob, and the arpeggiator gate will change. When this message is received, the result will be the same.

NRPN arpeggiator velocity control
[Bn, 63, 00, Bn, 62, 0B, Bn, 06, mm]
This message will be transmitted when you operate the ARPEGGIATOR [VELOCITY] knob, and the arpeggiator velocity will change. When this message is received, the result will be the same.

About system exclusive messages

Since the way in which these messages are used is left up to each manufacturer, they are mainly used to transmit and receive sound data and editing data for parameters that are unique to a particular instrument. The TRITON’s system exclusive message format is [F0, 42, 3n, 50, ff, ... F7]

F0: exclusive status
42: Korg ID
3d: [n=0–F] global MIDI channel 1–16
50: TRITON model ID
ff: function ID (type of message)
– ...
F7: end of exclusive

All models of the TRITON series use the same model ID. Exclusive data can be exchanged between models of the TRITON series.

note To obtain a copy of the “MIDI Implementation” which includes MIDI exclusive format information, please contact your Korg distributor.

Universal system exclusive

Certain of the system exclusive messages are publicly defined for a specific use, and these are called universal system exclusive messages.
The TRITON uses the following six universal system exclusive messages.

Inquiry message request [F0, 7E, nn, 06, 01, F7]
Inquiry message [F0, 7E, nn, 06, 02, (nine bytes), F7]
When an inquiry message request is received, the TRITON will respond by transmitting an inquiry message that means “I am a Korg TRITON series instrument, with system version ...”

GM system on [F0, 7E, nn, 09, 01, F7]
When this message is received in Song Play mode, the TRITON will be initialized for GM playback.

Master volume [F0, 7F, nn, 04, 01, vv, mm, F7]
(vv: lower byte of the value, mm: upper byte of the value, together indicating 16384 steps)

This message is transmitted if you assign **Master Volume** as the function of the ASSIGNABLE PEDAL or as a B-mode function of a REALTIME CONTROLS [1]–[4] knob and operate the controller. This will adjust the overall volume balance without changing the relative volume balance between timbres / tracks. When this message is received, the result will be the same as when the controller is operated.

Master balance [F0, 7F, nn, 04, 02, vv, mm, F7]
(vv: lower byte of the value, mm: upper byte of the value, together indicating 16384 steps, where 8192 is the default position, and lower values will move the sound toward the left)

When this is received, the overall panning will be adjusted without changing the relative panning between timbres / tracks.

Master fine tuning [F0, 7F, nn, 04, 03, vv, mm, F7]
(A value of 8192 [mm, vv=40, 00] is center, 4096 [mm, vv=20, 00] is -50 cents, and 12288 [mm, vv=60, 00] is +50 cents.)

When this is received, the Global P0: Basic tab "Master Tune" parameter will be set.

Master coarse tuning [F0, 7F, nn, 04, 04, vv, mm, F7]
(Normally only the upper byte mm is used. A value of 8192 [mm, vv=40, 00] is center, 6656 [mm, vv=34, 00] is -12 semitones, and 9728 [mm, vv=4C, 00] is +12 semitones.)

When this is received, the Global P0: Basic tab "Transpose" parameter will be set.

Transmitting sound settings data (Data Dump)

Data for programs, combinations, drum kits, user arpeggio patterns, global settings, and sequencer data can be transmitted as MIDI exclusive messages. The operation of sending this system exclusive data to an external device is called a "**data dump**."
By performing a data dump, you can store the TRITON's sounds and settings on an external device, or rewrite the sounds and settings of another TRITON series instrument.

There are the following three types of data dump.

- When you use the Global P1: MIDI "Data Dump" page menu command to dump data, various types of internal memory data will be transmitted. If this data is received by the TRITON, the data will be written directly into internal memory, and it will not be necessary to perform the Write operation. (☞"Transmission," "Reception" on pages 119 and 120 in the *Parameter Guide*.)
- If the Global P1: MIDI "Enable Exclusive" setting is checked, selecting a combination in Combination P0: Play will transmit data for one combination. Selecting a program in Program Play P0: Play will transmit data for one program.

  This data is the edit buffer data for the currently selected combination or program. If this data is received by the TRITON, the data will be written into the edit buffer, so if you wish to save it to internal memory, you will need to perform the Write operation. The Write operation can also be performed by a MIDI exclusive Program Write Request or Combination Write Request message, in addition to the usual method of using the TRITON's switches. (☞p.37 "Saving data")
- If the Global P1: MIDI "Enable Exclusive" setting is checked, data will also be dumped in response to a Dump Request message. This data is transmitted and received on the global MIDI channel.

Editing sounds etc.

By using various MIDI exclusive data dumps, you can rewrite all programs or an individual program. By using parameter change messages, you can edit individual parameters as follows.

Parameter changes

- In Program mode, all parameters other than the program name can be edited. Performance editor parameters are included.
- In Combination mode, parameters other than the combination name can be edited.

Drum kit parameter change / User arpeggio pattern parameter change

- In Global mode, you can edit drum kits and user arpeggio patterns.

Since the other global parameters or Sequencer mode data cannot be edited, you will use data dumps to transfer this data. Data dumping of Sampling mode data is not supported.

The global MIDI channel is used to transmit and receive this data.

First check Global P1: MIDI "Enable Exclusive," so that exclusive data can be transmitted and received. When you change modes on the TRITON, a mode change message will transmitted. When you change programs or combinations, the parameters for one program or one combination will be transmitted together with the program change. When you edit individual parameters, parameter change, drum kit parameter change, or user arpeggio pattern parameter change messages will be transmitted.
When these messages are received, the same editing operation will be performed as on the transmitted device.
After MIDI exclusive data has been received and processed, a Data Load Completed message will be transmitted. The control master device must not transmit the next message until this message is received (or until a sufficient interval of time has elapsed).

When you change programs or combinations, or use parameter changes to edit, the changes will affect the data in the edit buffer and will not be stored in internal memory unless you Write, so that the changes will be lost if you re-select the program or combination. The Write operation can be performed by a MIDI exclusive Program Write Request or Combination Write Request message, in addition to the usual method of using the TRITON's switches. (☞p.37 "Saving data")

If notes are "stuck"

If for some reason, notes become "stuck" and will not stop sounding, you can usually stop the sound by changing the mode. If notes played via MIDI are stuck, you can disconnect the MIDI cable.
MIDI transmits a message called Active Sensing [FE] at regular intervals. A device that receives this message will be aware that an external MIDI device is transmitting to it. Subsequently, if no MIDI messages are received for a certain interval of time, the receiving device will decide that the connection has been broken, and will turn off any notes that had been sounded via MIDI and reset its controller values.

Playing the TRITON multi-timbrally from an external device

The TRITON can be connected to an external device and played multi-timbrally in the following ways.

- MIDI messages from the external device can play a combination (8-part multi-timbral performance). You can change the overall settings (programs, levels, and effects) by using program change messages to switch combinations.
- MIDI messages from the external device can be used to play a song (using the TRITON as a 16-part multi-timbral tone generator). However if the Global P1: MIDI "MIDI Clock" is **INT**, it will not be possible to switch the overall settings.
- MIDI Clock messages from the external device can be used to make the TRITON playback a song (set "MIDI Clock" to **EXT**, and run the TRITON's sequencer). (☞"Synchronizing the playback of the arpeggiator or sequencer") You can change the overall settings (programs, levels, effects) by using song select messages to switch songs.

Synchronizing the playback of the arpeggiator or sequencer

The choice of whether the TRITON will be the master (the controlling device) or the slave (the controlled device) is made by Global P1: MIDI "MIDI Clock."

Using the TRITON as master and the external MIDI device as slave

Connect the TRITON's MIDI OUT connector to the MIDI IN connector of the external MIDI device. Alternatively, connect the TRITON's TO HOST connector to your computer (☞p.111, 112).

- When you set "MIDI Clock" to **Internal**, the TRITON will be the master device, and will transmit MIDI timing clock messages.

  Arpeggiator: The tempo can be controlled from the TRITON. Simultaneously, the performance of the arpeggiator will be transmitted via MIDI. (In Combination, Sequencer, and Song Play modes, data will be transmitted by timbres / tracks whose "Status" is **BTH**, **EXT**, or **EX2**.) An external tone generator connected to MIDI OUT will sound, and the tempo of an external sequencer can be controlled.

  Sequencer: The musical data can be played back and controlled on the TRITON. Simultaneously, the sequencer playback will be transmitted via MIDI from tracks whose "Status" is **BTH**, **EXT**, or **EX2**. An external tone generator connected to MIDI OUT will sound, and the tempo of an external sequencer can be controlled.

  However, since exclusive data cannot be recorded on the TRITON's sequencer, you can use the Global P1: MIDI "Dump Sequencer" page menu command if the slave device is the TRITON. If the slave device is another model, you can use the TRITON's Disk mode data filer function ("Receive and Save MIDI Exclusive," "Load and Transmit MIDI Exclusive Data").

Using the external MIDI device as master and the TRITON as slave

Connect the TRITON's MIDI IN connector to the MIDI OUT connector of the external MIDI device. Alternatively, connect the TRITON's TO HOST to your computer (☞p.111, 112).

- When you set "MIDI Clock" to **External MIDI** or **External PCI/F**, the TRITON will be the **slave** device.

  Arpeggiator: The tempo will follow the MIDI timing clock. If you playback the external sequencer, the TRITON's arpeggiator will synchronize to the external timing clock. (☞p.105)

  Even if "MIDI Clock" is **External MIDI** or **External PCI/F** and the TRITON is being controlled from the external device, the performance of the arpeggiator will still be transmitted via MIDI. (In Combination and Sequencer modes, the arpeggiator performance will be transmitted from timbres / tracks whose "Status" is **BTH**, **EXT**, or **EX2**.)

  Sequencer: It will not be possible to control the playback from the TRITON; playback will be controlled by the external device connected to the TRITON's MIDI IN. If you wish to playback the external sequencer to make the TRITON's sequencer playback in synchronization to the external timing clock, you must first set the same time signature and starting measure locations on both devices.

  Even if "MIDI Clock" is set to **External MIDI** or **External PCI/F** and the TRITON is being controlled from an external device, musical data will be transmitted by tracks whose "Status" is **BTH**, **EXT**, or **EX2**.

Recording musical data from an external device

There are two ways in which you can play back an external sequencer and record its playback on the TRITON.

- Set Global P1: MIDI "MIDI Clock" to **Internal**, begin recording, and then start the external sequencer. With this method, the MIDI messages will be recorded without the two devices being synchronized. Since the incoming musical data will simply be recorded, this method allows the performance to be reproduced faithfully, but since measure divisions etc. will not be kept track of, this method is not suitable if you intend to edit the data later.

- If you set Global P1: MIDI "MIDI Clock" to **External MIDI** or **External PCI/F**, the start of recording and the tempo etc. will all be under the control of the external sequencer. Since the two devices will be synchronized during the recording process, measure divisions etc. will be accurately preserved. (You will need to set the time signature before recording.) However, tempo changes during the performance will not be recorded, so you will have to insert any tempo changes later. For normal multi-track recording, you will use this method. (☞p.66 "Multi (multitrack recording)")

About GM/GS/XG

The TRITON supports the GM standard. It also supports the GM2 sound map (including bank select) with 256 programs and 9 drum programs provided in ROM banks G, g(1)–g(9), and g(d). (Banks g(1)–g(9) are GM2 variation programs, and g(d) contains drum programs.)

GM is a standard that ensures basic compatibility of sounds etc. between different GM-compatible instruments made by different manufacturers, but you need to be aware of the following.

- The GM System On message is received only in Song Play mode. (☞p.102 in the *Parameter Guide* "GM Initialize")

Roland GS and Yamaha XG are specifications by which these respective manufacturers have extended the GM standard.
The TRITON automatically converts the GS/XG sound maps to the GM2 sound map, and supports some of their messages. This allows GS/XG music data to be played back in Song Play mode etc.

Since the TRITON does not support all of the GS/XG sound maps or messages, some data may not be played back correctly.

When you wish to playback a music data conform to GM/GS/XG format or load it into a song, select the Global P0: Preference tab and set "Bank Map" to **GM(2)**.

Converting the GS/XG bank/program maps to the GM2 bank/program map

- When bank select/program change messages used by GS/XG are received, they will automatically be converted to the G, g(1)–g(9), g(d) bank/program map of the TRITON.
- The same conversion is performed when a SMF is loaded into a song in Disk mode.

For banks that are used in common by GS/XG, GS Reset/XG System ON will be received to automatically convert to the optimal bank/program map for each.

Support for GS/XG part mode exclusive messages

- In Song Play mode when GS/XG part mode exclusive messages Drum or MDrm 1–4 are received, bank g(d) (GM2 drum bank) will be selected for the specified track.

  Until this part mode state is defeated, bank select messages will no longer be received for the specified track.
- When an SMF is loaded into a song in Disk mode, any bank select messages in a track that is set to a part mode of Drum or MDrm 1–4 will be ignored, and will not be loaded.

Support for NRPN messages used in GS/XG music data

The following NRPN messages can be received to modify the sound.

Vibrato Rate	[Bn, 63, 01, Bn, 62, 08, Bn, 06, mm]
Vibrato Depth	[Bn, 63, 01, Bn, 62, 09, Bn, 06, mm]
Vibrato Delay	[Bn, 63, 01, Bn, 62, 0A, Bn, 06, mm]
Filter Cutoff	[Bn, 63, 01, Bn, 62, 20, Bn, 06, mm]
Resonance	[Bn, 63, 01, Bn, 62, 21, Bn, 06, mm]
EG Attack Time	[Bn, 63, 01, Bn, 62, 63, Bn, 06, mm]
EG Decay Time	[Bn, 63, 01, Bn, 62, 64, Bn, 06, mm]
EG Release Time	[Bn, 63, 01, Bn, 62, 66, Bn, 06, mm]
Drum Filter Cutoff	[Bn, 63, 14, Bn, 62, kk, Bn, 06, mm]
Drum Filter Resonance	[Bn, 63, 15, Bn, 62, kk, Bn, 06, mm]
Drum EG Attack Time	[Bn, 63, 16, Bn, 62, kk, Bn, 06, mm]
Drum EG Decay Time	[Bn, 63, 17, Bn, 62, kk, Bn, 06, mm]
Drum Coarse Tune	[Bn, 63, 18, Bn, 62, kk, Bn, 06, mm]
Drum Fine Tune	[Bn, 63, 19, Bn, 62, kk, Bn, 06, mm]
Drum Volume	[Bn, 63, 1A, Bn, 62, kk, Bn, 06, mm]
Drum Panpot	[Bn, 63, 1C, Bn, 62, kk, Bn, 06, mm]*
Drum Rev Send(Send2)	[Bn, 63, 1D, Bn, 62, kk, Bn, 06, mm]
Drum Cho Send(Send1)	[Bn, 63, 1E, Bn, 62, kk, Bn, 06, mm]

kk: Drum Inst No. ([0C...6C] corresponds to C0...C8)
* [00, 01...7f] corresponds to Random, L000...R127)

About standard MIDI files

Standard MIDI files (SMF) make it possible for different computer programs or musical instruments made by different manufacturers to exchange time-based MIDI data. Each standard MIDI file contains one song. The TRITON supports **format 0 (type 0)** in which all of the MIDI data is combined into one track, and **format 1 (type 1)** in which the data is separated by track.

When a SMF is played back in Song Play mode or loaded into a song in Disk mode, the program bank that is selected will differ depending on the Global P1: System Preference tab "Bank Map" setting. When playing/loading SMF data that conforms to the GM/GS/XG specifications, set "Bank Map" to **GM(2)**.

Song Play mode

- In Song Play mode, the TRITON can playback SMF data directly from a disk or external SCSI device (if the separately sold EXB-SCSI option is installed); i.e., the data will be played back as it is being read, and does not need to be loaded into memory.
- If the SMF data contains a GM System On message, the TRITON will be initialized for GM playback (☞p.102 in the *Parameter Guide* “GM Initialize”).

Sequencer mode

In Disk mode when you convert a song into a Standard MIDI File and save it, you can choose either **format 0 or format 1**.

- If TRITON song data that was saved as a format 1 SMF file is loaded into another device, the track configuration may be different than it was before being saved. This is because tracks that contain no musical data are omitted, and the remaining tracks are moved into the unused tracks. This will not affect the playback itself.
- If song data that was saved by another device as a format 1 SMF file is loaded into the TRITON, the track configuration may be different than it was before being saved. This is because tracks that contain no musical data are omitted, and the remaining tracks are moved into the unused tracks. This will not affect the playback itself.

When exchanging sequence data between two TRITON series instruments, we recommend that you save the sequence data in the TRITON’s native format (“Save SEQ”).
When sequence data is saved in the TRITON’s native format, all of the settings and patterns unique to the TRITON will be saved, which will ensure a higher level of reproducibility than when the data is saved as a Standard MIDI File (“Save to Std MIDI File”).

Tuning to another instrument / Transposing

When you play the TRITON together with other instruments, or along with music on a CD or tape, you may need to adjust the tuning so that the pitch matches. To adjust the tuning, use Global P0: Basic tab "Master Tune." The tuning can be adjusted in a range of –50 – +50 cents (one semitone is 100 cents).

You can also transpose by changing the pitch in semitone steps. To transpose the pitch of the entire TRITON, use Global P0: Basic tab "Key Transpose." The pitch can be transposed over a range of ±1 octave.

Here we will explain how to adjust the tuning and transposition of the entire TRITON.

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

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

③ **Select the Basic tab.**

④ **To adjust the tuning, select "Master Tune." to adjust the transposition, select "Key Transpose."**

⑤ **Use the VALUE controllers to adjust the setting.**

You can use numeric keys [0]–[9] to enter a value and press the [ENTER] key. Alternatively, you can use the [VALUE] dial, the [VALUE] slider, or the [△][▽] keys.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

Bypassing the effects

Normally, effects are turned on / off within each program, combination, or song, or in Sampling mode or Song Play mode. However if you want the entire TRITON not to use its insert effects or master effects, you can bypass these effects.

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

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

③ **Select the Basic tab.**

④ **To turn off insert effects 1–5, check the "IFX1-5 Off" check box.**

To turn off master effect 1, check the "MFX1 Off" check box. To turn off master effect 2, check the "MFX2 Off" check box.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

Specifying the function of the ASSIGNABLE Switch and ASSIGNABLE Pedal

Set the function of an assignable switch (separately sold option, Korg PS-1) connected to the **ASSIGNABLE SWITCH** jack.

This switch can act as a source for alternate modulation or effect dynamic modulation, or switch portamento on / off, control the sostenuto effect, turn the soft pedal effect on / off, turn the arpeggiator on / off, select programs or combinations (up / down), start / stop the sequencer, punch-in / out on the sequencer, or be a trigger to advance the cue list step (☞p.219 in the *Parameter Guide*).

- This setting is made in Global P2: Controller "Foot Switch Assign."

You can specify the function that will be performed by an assignable pedal (the separately sold Korg XVP-10 or EXP-2) connected to the **ASSIGNABLE PEDAL** jack.

This pedal can be used to control master volume, alternate modulation or effect dynamic modulation, portamento pitch change speed, volume, the pan following an insert effect, pan, volume, or send levels to the master effects (☞p.220 in the *Parameter Guide*).

- This setting is made in Global P2: Controller "Foot Pedal Assign."

note You can use this as a source for alternate modulation or effect dynamic modulation, and use it to control program parameters or effect parameters. In this case, set "Foot Switch Assign" to **Foot SW (CC#82)**, and "Foot Pedal Assign" to **Foot Pedal (CC#04)**.

Here we will show how to make settings that allow an assignable switch to change programs or combinations.

① **Connect a separately sold Korg PS-1 to the ASSIGNABLE SWITCH jack.**

② **Press the [GLOBAL] key to enter Global mode.**

③ **After pressing the [MENU] key, and press the P2: Controller.**

④ **Press the "Foot Switch Assign" popup button, and press either Program Up or Program Down.**

Program Up will cause the next higher program number to be selected each time you press the foot switch.
Program Down will cause the next lower program number to be selected each time you press the foot switch.

⑤ **Set the "Foot Switch Polarity" to the polarity of the foot switch you have connected.**

If you have connected a Korg PS-1 pedal switch, set this to (–) KORG Standard. If the polarity is not set correctly, the pedal will not function appropriately.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

⑥ **Either press the [PROG] key to enter Program P: Play, or press the [COMBI] key to enter Combination P0: Play. When you press the foot switch, the program/combination will change.**

Adjusting the way in which velocity or after touch will affect the volume or tone

You can adjust the way in which changes in velocity or after touch will affect the volume or tone. By changing this, you can (for example) make the volume of the notes more consistent even when they are played with varying velocities (dynamics). Each curve has its own character, so you can select the curve that is appropriate for your own playing dynamics, playing style, and the effect that you wish to obtain (☞p.113, 114 in the *Parameter Guide*).

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

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

③ **Select the Basic tab.**

④ **To change the velocity curve, select "Velocity Curve" and specify the desired curve.**

To change the after touch curve, select "After Touch Curve," and specify the desired curve.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

* This setting will affect the operation of the entire TRITON.

* Each program has parameters that allow you to adjust the effect of velocity (playing dynamics), and the change will depend on the settings of these parameters. These parameters can be individually set in detail in Program mode.

Creating original scales

You can create your own original scales. You can create sixteen different User Octave Scales in which the pitch of each note in the octave is repeated for all octaves, and one User All Note Scale in which the pitch of each of the 128 notes can be specified independently.

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.39).

The user scales you create here can be used by specifying the scale for a program, for each timbre of a combination, or for each track of a song (Sequencer / Song Play). (☞"Changing the scale")

Changing the scale

You can specify the scale for each program, for each timbre in a combination, or for each track of a song (Sequencer / Song Play mode).

These settings are made by "Type" in the following pages, and by "Use Program's Scale" for a combination or song.

Program	P1: Edit-Basic, Program Basic
Combination	P2: Edit-Trk Param, Other
Song	P2: Trk Param, Other T01–08/T09–16
Song Play mode	P1: Track, Status/Scale T01–08/T09–16

Here we will show how to make settings in Sequencer mode.

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

② **After pressing the [MENU] key, and press the P2: Trk Param.**

③ **Select the Other T01-08 tab or the Other T09-16 tab.**

④ **If you wish to use the scale that is specified for the program used by a track, check the "Use Program's Scale" check box for that track.**

Tracks that are not checked will use the scale specified by Scale "Type."

⑤ **Set "Type" to select the scale for the entire currently selected song.**

note If you want this setting to be preserved after the power is turned off, save the setting (☞p.38, p.39, and the *Parameter Guide* p.48 and 102).

Setting the function of [SW1] and [SW2]

You can specify the function of the [SW1] and [SW2] keys (☞p.217 in the *Parameter Guide*).

The functions of the [SW1] and [SW2] keys are set independently for each program, combination, and song. In Sampling mode and Song Play mode, the functions of these keys are set for the entire mode.

You can specify the function that will be performed by the [SW1] and [SW2] keys, and can also select between **Toggle** (when the function will be switched on / off each time the [SW1] or [SW2] key is pressed) and **Momentary** (when the function will be on only while you continue holding the [SW1] or [SW2] key).

These settings are made by "Panel Switch Assign" in the following pages.

Program	P1: Edit-Basic, Controller Setup
Combination	P4: Edit-Zonr/Ctrl, Control
Song	P4: Zonr/Ctrl, Controller Setup
Sampling mode	P4: Controller Setup
Song Play mode	P2: Controller Setup

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

note You can use these keys as alternate modulation or effect dynamic modulation sources, and control program parameters or effect parameters.
In this case, you will normally select **SW1 Mod.:CC#80** and **SW2 Mod.:CC#81**.

For an example in which the [SW1] key is specified as an effect dynamic modulation source for a program and used to control an effect, refer to ☞p.110.

note If you wish to keep these settings after the power is turned off, you must save them (☞p.38, p.39, and the *Parameter Guide* p.48 and 102). However, the settings of Sampling mode cannot be saved.

Setting the B-mode functions of REALTIME CONTROLS [1]–[4]

You can specify the B-mode functions of REALTIME CONTROLS knobs [1]–[4].

The B-mode functions are set independently for each program, combination, or song. The functions in Sampling mode or Song Play mode are set for the entire mode.

These settings are made by "Realtime Control Knob B-Assign" in the following pages.

Program	P1: Edit-Basic, Controller Setup
Combination	P4: Edit-Zonr/Ctrl, Control
Song	P4: Zonr/Ctrl, Controller Setup
Sampling mode	P4: Controller Setup
Song Play mode	P2: Controller Setup

note You can use these knobs as sources for alternate modulation or effect dynamic modulation, and control program parameters or effect parameters.
In this case, you will normally select **Knob Mod.1:CC#17**, **Knob Mod.2:CC#19**, **Knob Mod.3:CC#20**, and **Knob Mod.4:CC#21**.

Here we will give an example of how knob [1] can be used to control the filter and amp EG attack of a program.

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

② **After pressing the [MENU] key, and press the P1: Edit-Basic.**

③ **Press the Controller tab.**

④ **Press the Realtime Control Knob B-Assign "Knob 1-B" popup button, and select F/A Attack.**

⑤ **Press the [REALTIME CONTROLS] key to select B-mode, and rotate knob [1]. The EG attack of the filter and amp will change.**

note If you wish to keep these settings after the power is turned off, you must save them (☞p.38, p.39, and the *Parameter Guide* p.48 and 102). However, the settings of Sampling mode cannot be saved.

Adjusting the contrast (brightness) of the LCD screen

Use the rear panel contrast knob to make adjustments.

Sounding a beep when the LCD screen is pressed

If the Global P0: System Preference tab "Beep Enable" check box is turned on, a beep will sound when you press an object in the LCD screen.

Using the TRITON as a data filer

MIDI exclusive data transmitted from an external device can be received by the TRITON and saved on a floppy disk (the Data Filer function). This is done using the Disk mode Save tab "Save Exclusive" page menu command (☞p.141 in the *Parameter Guide*).

Shortcuts

[MENU] key + numeric keys [0]–[9]

- Access the pages within a mode

[ENTER] key + numeric keys [0]–[9]

- Access the page menu commands in each page (up to ten items)

[ENTER] key + keyboard

- Input note number values or velocity values
- Select “KEY” in Global P5: Drum Kit, Sequencer P5: RPPR Setup tab
- Select base key and index in Sampling mode

[ENTER] key + [LOCATE] key

- In Sequencer mode and Song Play mode, set the current location as the “Location” (equivalent to the “Set Location” page menu command)