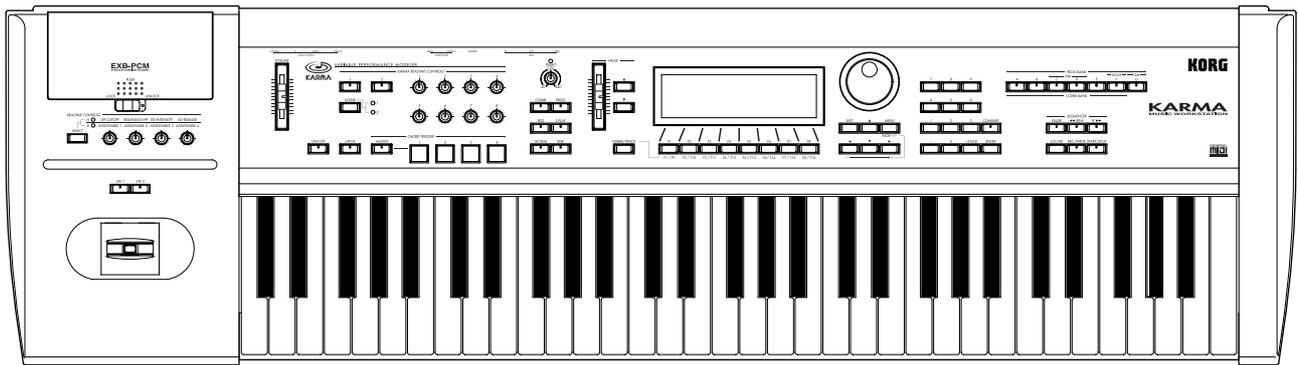


# KARMA

## MUSIC WORKSTATION

# SYSTEM VERSION 2.0



## Update Guide



# KORG

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## About this manual

This manual explains the new functions that have been added in KARMA Music Workstation system version 2.0, and the improvements that have been made from version 1.0.

- **“Introduction”** provides an overview of the major new functions of version 2.0, and explains how to update your system.
- **“KARMA functionality”** explains the new functionality that has been added to the KARMA function in Program, Combination, Sequencer, and Song Play modes.
- **“Sequencer mode,” “Global mode,” and “Disk mode”** explain the new functions and improvements for each of these modes.
- **“Other functions”** explains added functions and improvements that were not covered in the above sections.

## Conventions in this manual

**PG:** “Parameter Guide” is abbreviated as PG.

**BG:** “Basic Guide” is abbreviated as BG.

**GE:** “GE Guide” is abbreviated as GE.

Other conventions are the same as used in the “Parameter Guide,” “Basic Guide,” and “GE Guide.”

\* KARMA™ (Kay Algorithmic Realtime Music Architecture) Technology has been licensed from Stephen Kay, and is protected by U.S. Patents 5,486,647, 6,084,171, 6,087,578, 6,103,964, 6,121,532, 6,121,533, and 6,326,538. Other patents pending.

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# Introduction

## Main features of version 2.0

System version 2.0 adds numerous new features to the KARMA music workstation.

## KARMA function

### 1. Extended GE support

In addition to the 1,190 preset GEs (Generated Effects) used to generate phrases and patterns within a KARMA module, system version 2.0 gives you **320 user GE memories (32 x 10 banks)**.

Planned future products in the EXB-PCM 04/05 will include new programs and combinations created especially for the KARMA music workstation, as well as newly created GE data. This GE data can be loaded into the internal user GE memory of the KARMA music workstation to give you even broader possibilities for music production and performance.

By using KARMA MW\* (dedicated software for the KARMA Music Workstation), you can edit and create your own GEs on your computer. You can edit any of the more than 400 internal parameters that make up a GE, so you can create original user GE data, plus template data such as Rhythm Patterns, CC Patterns, and Drum Patterns that can be utilized by your custom GEs. The GE data you create can be loaded via floppy disk or MIDI dump into the 320 memories (32 x 10 banks) of the KARMA music workstation.

The KARMA MW software also lets you **convert SMF (Standard MIDI File) data into a GE**. You can quickly convert short sections of MIDI performance data into user GEs, and then immediately use the KARMA Realtime Controls to freely randomize and modify the phrases. This functionality is tightly integrated for efficient use. The Karma workstation can respond to a MIDI request from KARMA MW by **converting sequence data you created in Sequencer mode into SMF data, and then transmitting it to KARMA MW as a MIDI dump**. The data can then be converted by KARMA MW into a **user GE** and loaded back into the Karma workstation, letting you use the KARMA function to modify the phrase and transform it into countless unique variations.

\* Produced by Karma Lab (<http://www.karma-lab.com>). Macintosh and Windows versions are available. English version only.

**note** For details on obtaining this software and user support, please contact the Korg distributor for your country.

### 2. Freeze Randomize

You can now freeze (capture for playback) the infinitely-varying phrases generated by KARMA's Randomize features. The newly added **"Start Seed" parameter** lets you select which of over four billion random starting points KARMA will use to generate a new musical effect. Use the **"Freeze Loop Length" parameter** to specify the measures at which Freeze will be turned on and off and the length of a repetitive loop. Use the **"Random Capture" Utility Command** to capture the state of the randomizations at any time, to put it under your control for triggering or looping. Thanks to this new functionality, you can capture and re-

use any desired phrase that was generated by the KARMA function, giving you total control and predictability over what is happening.

### 3. Time Signature Control

You now have realtime control over the time signature of the phrases generated by a KARMA module. For example, a 4/4 phrase can be instantly changed to a 3/4 phrase. Multiple grooves in a combination such as drums, bass, guitar riffs, and lead phrases can be controlled simultaneously. This new function is an ideal way to develop variations or exciting performance twists from your phrases.

### 4. Tap Tempo Control

The front panel [TIMBRE/TRACK] key can now be used as a **tap tempo controller**. You can press the key at the desired tempo to adjust the playback tempo of the KARMA function in realtime. This can control not only the KARMA function, but the sequencer and SMF playback tempo as well. A foot switch can also be used to control tap tempo.

### 5. KARMA Tx Filter "Notes"

This feature applies filtering to only the note data that is being generated by a KARMA module, allowing other MIDI data such as CC modulation and pitch bend to still be generated. Since the note phrase generated by the KARMA module will not sound, you can use this to make the KARMA module generate control data such as pan, filter cutoff, or resonance that will apply modulation to the phrases or chords you play manually on the keyboard.

### 6. K.RTC (KARMA REALTIME CONTROLS) value display function

When you operate the KARMA REALTIME CONTROLS knobs and switches in the KARMA RTC page of each mode, **the values of the parameters you are controlling will be displayed**. This convenient function provides realtime visual indication of the GE parameter and RT parameter values of the modules you are controlling.

### 7. Auto K.RTC Name function

Based on the GE parameters and RT parameters that are being controlled, appropriate names (out of the 407 names such as Rhythm Swing% and Rhythm Complexity) can be **automatically assigned** for the KARMA REALTIME CONTROLS knobs and switches. You can use this when creating new KARMA function assignments, or changing GE selections.

### 8. Copy/Swap KARMA SCENE

You can now copy or swap (exchange) the SCENE 1/2 settings of the KARMA function. This lets you make more efficient use of the SCENE function which stores the state of the KARMA REALTIME CONTROLS knobs and switches.

### 9. GE parameters

KARMA Music Workstation system version 2.0 adds several new GE parameters and GE parameter values. Planned future products in the EXB-PCM 04/05 are expected to include new programs, combinations, and GE data designed for the KARMA music workstation that will use these parameters.

---

## Sequencer mode

### 1. "Tone Adjust" parameters

The "Tone Adjust" parameters let you make temporary adjustments to the sound of the Programs used by each track as an edit that is only used for the current song. For example, you can make the bass less bright or speed up the attack of the strings without returning to Program mode and editing the programs.

### 2. Support for MIDI system exclusive parameter changes

Individual track parameters and effect parameters in Sequencer mode now support MIDI system exclusive parameter changes. When you connect an external sequencer and use the KARMA workstation as a 16-track multi-timbral tone generator, these parameters can now be changed via MIDI, giving you total control for your mixing needs.

### 3. Auto song setup function

The program or combination settings of Program mode or Combination mode can be instantly set up for a song, so that you can begin recording simply by pressing the [START/STOP] key. This seamlessly integrates song production with your performance on a program or combination, so that inspiration and ideas that occur to you while using KARMA can be immediately turned into a song.

### 4. Swing quantize parameter

A swing quantize parameter has been added to the Quantize function that corrects the timing of performance data. For example, this makes it easy to add a subtle shuffle or hip-hop feel to a "square" 16-beat performance.

### 5. "Copy from Program"

You can easily copy Program settings (including effects and KARMA settings) to a Song or Combination, ensuring that the sound you liked in Program mode sounds the same way in these other modes.

### 6. MultiREC Standby option

A MultiREC Standby option has been added to the utility menu command "Copy From Combination." This function automatically makes the proper settings for recording a complex KARMA-driven Combination in the sequencer as you copy it in.

## Global mode

### 1. MIDI clock "Auto" mode

With this new feature, the KARMA music workstation will automatically synchronize to the incoming clock if MIDI clock messages are being input from a connected external device, or to its own internal clock if no external clock messages are being received. You can use this to keep the KARMA in external sync mode while working with an external sequencer, yet still be able to start and play the KARMA function while the external sequencer is not running or sending MIDI clock.

### 2. MIDI "Realtime Command" filter

You can now filter MIDI Common messages and Realtime messages (Song Position Pointer, Start, Continue, Stop), so that the KARMA workstation can be used as a multitimbral sound source with an external sequencer more effectively.

### 3. Foot switch / foot pedal function

Controller functions of the KARMA music workstation can be assigned to a connected foot switch or foot pedal. For example, you could use a foot switch or foot pedal to control the KARMA REALTIME CONTROLS knobs, or to control the speed of the rotary effect that you previously controlled from the joystick.

### 4. "Start/Stop Out P/C" (Start/Stop Out Prog/Combi) parameter

You now have the option of transmitting a MIDI start message from MIDI OUT when you trigger the KARMA function, and a MIDI stop message when the KARMA function is turned off. This lets you make an external MIDI sequencer or rhythm/groove machine start playing at the moment that the KARMA function begins playing in Program or Combination mode.

## Disk mode

### 1. Load/Save

GE data from an EXB-PCM 04/05 expansion board containing GE data for the KARMA Music Workstation (planned for future release) can be loaded into the internal user GE memory.

## Installing the system

In order to upgrade your KARMA music workstation to system version 2.0, you must first install the "System Boot Disk for KARMA Music Workstation" system file into your KARMA music workstation and then load the GE data from the "GE Disk for KARMA Music Workstation."

**note** The system software version is displayed in the lower right of the LCD when you turn on the power.



## Installing the software into the KARMA Music Workstation

In order to upgrade to system version 2.0, you must install the following two types of data into the KARMA music workstation.

- **System Boot Disk for KARMA Music Workstation**

This is the system update data. It is provided on three MS-DOS format 2HD floppy disks.

- **GE Disk for KARMA Music Workstation**

This is the data for updating the GE data. It is provided on two MS-DOS format 2HD floppy disks.

 When you update the system, all the data in the internal memory of the KARMA music workstation will be initialized. If you want to keep the data that is currently in internal memory, you must use "Save All" or "Save PCG" to save it before you update the system. (☞BG p.40, PG p.153)

 **To update the system to version 2.0, you must first update the system, and then update the GE data.**

 For details on how to obtain the "System Boot Disk for KARMA Music Workstation" and "GE Disk for KARMA Music Workstation" disks, please contact your nearest Korg distributor.

## Updating the system data

You will need to obtain the set of three MS-DOS format 2HD floppy disks "System Boot Disk for KARMA Music Workstation."

① Hold down the [ENTER] key and [LOCATE] key of the KARMA music workstation, and turn on the power. The LCD screen will indicate "Please insert System 1 disk."

② Insert the "System Boot disk No.1" into the floppy disk drive of the KARMA music workstation. The system will begin loading automatically, and the LCD screen will show the following messages.

"Now loading..."

↓

"Now erasing ROM"

↓

"Checking the system's check sum"

When "System Boot disk No.1" has finished loading, the LCD screen will show "Please change to System 2 disk."

 If a disk error is displayed during this process, remove the disk and turn off the power of the KARMA music workstation. Then load the system again, starting from step ①.

 While the system is being loaded, do not touch the switches of the KARMA music workstation, and under no circumstances should you turn off the power.

③ Remove the disk and insert "System Boot disk No.2". Messages will appear in the same way as for "System Boot disk No.1." When loading is completed, the display will ask "Please change to System 3 disk."

④ Remove the disk and insert "System Boot disk No.3". Messages will appear in the same way as for "System Boot disk No.1." When the system has been updated successfully, the display will indicate "System was completed," and the system will start up automatically.

⑤ Turn off the power of the KARMA music workstation, and then update the GE data.

 **After updating the system, you must also update the GE data.**

## Updating the GE data

 **You must update the GE data after updating the system.**

You will need to obtain the set of two MS-DOS format 2HD floppy disks "GE Disk for KARMA Music Workstation."

① Hold down the [ENTER] key and [LOCATE] key of the KARMA music workstation, and turn on the power. The LCD screen will indicate "Please insert System 1 disk."

② Insert the disk marked "GE disk No.1" into the floppy disk drive of the KARMA music workstation. The GE data will begin loading automatically, and the following messages will appear in the LCD screen.

"Now loading..."

↓

"Now erasing ROM"

↓

"Checking the system's check sum"

When "GE disk No.1" has been loaded, the LCD screen will indicate "Please change to System 2 disk."

 If a disk error is displayed during this process, remove the disk and turn off the power of the KARMA music workstation. Then load the data again, starting from step ①.

 While the data is being loaded, do not touch the switches of the KARMA music workstation, and under no circumstances should you turn off the power.

③ Remove the disk, and insert "GE disk No.2." Messages will appear in the same way as for "GE disk No.1". When the GE data has been updated successfully, the LCD screen will indicate "System was completed," and the system will start up automatically.

④ Load the preloaded data or the data you backed up. For details on how to load, refer to ☞BG p.93 Disk mode "Data loading procedure."

# KARMA function

## GE Select

In addition to the 1,190 preset GEs (Generated Effects) that generate phrases and patterns within each KARMA module, system version 2.0 gives you 320 rewritable user GE memories. In conjunction with this addition, you can now select user GEs in the “GE Select” fields of each mode.

“GE Select” appears in the following pages.

Program mode	PROG 1.1-3a (PG p.5) PROG 6.1-1a (PG p.26)
Combination mode	COMBI 1.1-4a (PG p.47) COMBI 6.1-1a (PG p.57)
Sequencer mode	SEQ 6.1-1a (PG p.103)
Song Play mode	S.PLAY 6.1-1a (PG p.122)

The display in Program mode



## GE Select

**[0000(PRE): Arp Model 01 Up/Dn...1190(U-A)...1509(U-J)]**

Selects the GE. You can choose from 1190 preset GEs and 320 rewritable user GEs.

GE data can be loaded into the user GE memories from an EXB-PCM 04/05 board (planned for release) containing GE data for the KARMA music workstation, or from KARMA MW (dedicated Mac/PC software for the KARMA music workstation).

Preset GEs and user GEs are organized as follows. The bank is shown in parentheses ( ) following the GE number.

0000(PRE)–1189(PRE)	1190 preset GEs
1190(U-A)–1221(U-A)	320 user GEs (32 x ten banks)
1222(U-B)–1253(U-B)	
1254(U-C)–1285(U-C)	
1286(U-D)–1317(U-D)	
1318(U-E)–1349(U-E)	
1350(U-F)–1381(U-F)	
1382(U-G)–1413(U-G)	
1414(U-H)–1445(U-H)	
1446(U-I)–1477(U-I)	
1478(U-J)–1509(U-J)	

## KARMA Time Sig. (KARMA Time Signature)

A “KARMA Time Sig. (KARMA Time Signature)” parameter has been added to each mode.

“KARMA Time Sig.” appears in the following pages.

Program mode	PROG 1.1-1a (PG p.2) PROG 6.1-1a (PG p.26)
Combination mode	COMBI 1.1-1a (PG p.43) COMBI 6.1-1a (PG p.57)
Sequencer mode	SEQ 6.1-1a (PG p.103)
Song Play mode	S.PLAY 6.1-1a (PG p.122)

The display in Program mode



## KARMA Time Sig. (KARMA Time Signature)

[GE/TS...16/16]

Specifies the time signature of the phrases or patterns generated by the KARMA modules. The initial time signature of the phrase or pattern is determined by the GE, but you can set this parameter to change the time signature.

**GE/TS:** The initial time signature specified by each KARMA module will be used.

**1/4...16/16:** Specify the desired time signature. In Combination, Sequencer, and Song Play modes, this will change the time signature for all four KARMA modules.

## Select by Category

System version 2.0 adds a GE category 16 [User] to the choices for “GE Select” in each mode (PG p.5) and when using the utility menu command “Select by Category: GE” that is available from the KARMA function edit page.

“Select by Category” appears in the utility menu for the following pages.

Program mode	PROG 1.1-3 (PG p.5) PROG 6.1-1–PROG 6.3-4 (PG p.26)
Combination mode	COMBI 1.1-4 (PG p.47) COMBI 6.1-1–COMBI 6.3-4 (PG p.57) COMBI 6.4-6/7
Sequencer mode	SEQ 6.1-1–SEQ6.3-4 (PG p.103) SEQ 6.4-6/7
Song Play mode	S.PLAY 6.1-1–S.PLAY6.3-4 (PG p.122) S.PLAY 6.4-6/7

## Select by Category

Lets you select a GE by category. The categories are **00 [Basic Arpeggio]** – **15 [Perc. Pattern]**, and **16 [User]**. For the 320 user GEs, a category of **16 [User]** is specified by default.

**note** If you have loaded GE data from an EXB-PCM 04/05 board (planned for release) or GE data that you created using KARMA MW (dedicated Mac/PC software for the KARMA music workstation), you can select GEs according to the GE category assigned to each one.

## K.RTC (KARMA RealTime Controls)

System version 2.0 adds a value display function to the K.RTC (KARMA Realtime Controls) page of each mode.

K.RTC (KARMA Realtime Controls) appears in the following pages.

Program mode	PROG 1.1-4	(☞PG p.6)
Combination mode	COMBI 1.1-5	(☞PG p.48)
Sequencer mode	SEQ 1.1-7	(☞PG p.77)
Song Play mode	S.PLAY 1.1-7	(☞PG p.118)

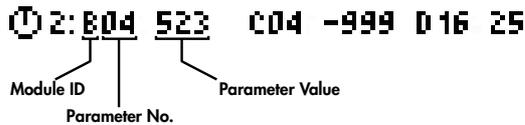
The display in Combination mode



### K.RTC (KARMA Realtime Controls) value display function

When you operate the KARMA REALTIME CONTROLS knobs or switches, the number and value of the GE parameter or RT parameter you are controlling will be displayed. This lets you see which parameter is being controlled by the knob or switch, and how. After two seconds, this display will revert to the KARMA RTC Name display.

#### Display example



#### Module ID [A...D, P]

Indicates which parameters what you are controlling from the KARMA REALTIME CONTROLS knob or switch.

**A, B, C, D:** Indicates the KARMA module that is being controlled. (In Program mode, this will always display A.) In this case, you are controlling a GE parameter.

**P:** Indicates that the knob or switch is controlling an RT parameter.

#### Parameter No. [01...16]

When "Module Name" is **A-D** (KARMA module), this area indicates the GE parameter number **01-16** that you are controlling (displayed in pages 6.3-1-4 ☞PG p.32). If "Module Name" is **P**, this area indicates the RT parameter number **01-08** (shown as 1-8 in pages 6.4-1-2) that you are controlling (displayed in pages 6.4-1-2 ☞PG p.34).

#### Parameter Value

This area indicates the value of the GE parameter or RT parameter you are controlling. The value will change as you turn the knob.

 A knob or switch can have multiple parameters assigned to it. A maximum of three assigned parameters can be displayed here in the available space. If there are more, they will not be displayed, although they will still function when the control is activated.

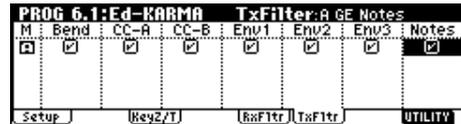
## TxFiltr (TxFilter)

System version 2.0 adds a "Notes" parameter to the KARMA TxFiltr (TxFilter) page in each mode.

The "Notes" parameter appears in the following pages.

Program mode	PROG 6.1-4a	(☞PG p.28)
Combination mode	COMBI 6.1-6a	(☞PG p.60)
Sequencer mode	SEQ 6.1-6a	(☞PG p.107)
Song Play mode	S.PLAY 6.1-6a	(☞PG p.125)

The display in Program mode



### Notes

[Off, On]

Specifies whether the MIDI note-on/note-off messages generated by the KARMA module will be transmitted.

**note** This setting lets you mute the note phrases generated by the KARMA module, and use only the control data generated from the KARMA module (e.g., pan, filter cutoff, resonance) to apply modulation to phrases or chords you yourself play on the keyboard.

Due to the addition of the "Notes" parameter, the other parameter names displayed in the screen have changed as follows. (Refer to the display above.)

GE Bend → Bend    GE CC-A → CC-A    GE CC-B → CC-B  
GE Env1 → Env1    GE Env2 → Env2    GE Env3 → Env3

## Freeze Randomize

System version 2.0 adds a 6.2-3: Parm3 (Parameter 3) page and Freeze Randomize function following the 6.2-2: Parm2 page of each mode.

The Parm3 (Parameter 3) page is displayed after the following pages.

Program mode	PROG 6.2-2	(☞PG p.31-32)
Combination mode	COMBI 6.2-2	(☞PG p.61-62)
Sequencer mode	SEQ 6.2-2	(☞PG p.108-109)
Song Play mode	S.PLAY 6.2-2	(☞PG p.126-127)

### 6.2-3: Parm3 (Parameter3)

You can freeze (capture) the endlessly varying phrases generated by KARMA's randomize function. By using the "Random Capture" (☞p.9), "Start Seed" (6.2-3a), and "Freeze Loop Length" (6.2-2a) parameters in conjunction with the "Random FF/REW" function, you can loop a randomly changing phrase, or play the same phrase each time you trigger it. These capabilities are collectively called **Freeze Randomize**. You can also store a Program or Combination with these settings, so that it will always play the same randomized phrase or pattern when you first call it up.

**note** Not all GEs have been programmed to utilize the KARMA function's randomization capabilities. If no randomization has been programmed as part of the GE, changing these new parameters will appear to have no effect.

The display in Combination mode



### 6.2-3a: Freeze Randomize

In modes where you can use more than one KARMA module (Combination, Sequencer, and Song Play modes), use the [M+] / [M+] keys to select the KARMA module for which you want to set the Freeze Randomize parameters.

#### Start Seed

**[-2147483648...0: Random...+2147483647]**

Specifies the seed that is used by the KARMA module to generate the random phrase.

**note** “Seed” is the source data from which the randomizations are created. “Start Seed” is the seed that will be used each time a trigger occurs.

**note** The 6.4-6(7): Random 1(2) settings in Combination, Sequencer, and Song Play modes are valid regardless of the “Start Seed” setting. If you select the same GE and specify the same “Start Seed” value for KARMA modules A, B, C, and D, the phrase after being triggered will be the same, but the way in which it changes for each repetition will depend on the Random 1 (2) settings.

**0: Random:** A different phrase will be generated each time the trigger occurs. Within the KARMA module, a different “Start Seed” value is specified randomly each time the trigger occurs. In system version 1.0, this is the setting that is always used.

**Any value other than Random:** The same phrase will be generated each time the trigger occurs. Different values for the Start Seed parameter will produce different phrases, but the same phrase will always be generated if the Start Seed value is the same.

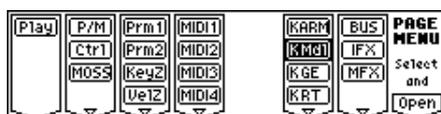
#### How the “Start Seed” value affects the phrase

As an example, we will use the combination E-67: Modern Jazz [JS] to see how different “Start Seed” settings will affect the phrase.

- In Combination mode, select **E067: Modern Jazz [JS]**.  
E067: Modern Jazz [JS] is a combination in which a sax solos over backing provided by drums, bass, and piano.



- Press the [MENU] key, and select the 6.2: Ed-KARMA Mdl page. (For details on how to select a page, see PG p.1)



- Press the [F3] key to select the Parm3 page.



- Use the [M+] / [M+] keys to select **Module A**, and make sure that “Start Seed” is set to 0: Random. If “Start Seed” is not set to **0: Random**, change the setting to **0: Random**. Module A will generate a phrase for the sax of timbre 2.
- Use the CHORD TRIGGER [1] key to trigger the GE several times at a regular interval (one or two seconds). Pay attention to the sax phrase that begins immediately after each trigger. The sax will begin playing a different phrase each time the trigger occurs.
- Change the “Start Seed” to **any value other than 0: Random**. For this example, set it to **+1**.
- In the same way as you did in step 5, use the CHORD TRIGGER [1] key to trigger the GE several times, and pay attention to the sax phrase that begins immediately after each trigger. The sax will begin playing the same phrase each time the trigger occurs.
- Change the “Start Seed” to **a value other than +1**, and perform the same actions as you did in step 5. The sax will begin playing the same phrase each time the trigger occurs, but it will be a different phrase than when “Start Seed” was set to **+1**.

**note** If you set “Start Seed” to **0: Random**, and execute “Random Capture” (see p.9) after triggering, the “Start Seed” value that was internally set within the module at the time of triggering will be specified here. While listening to the phrases that change randomly at each trigger, you can execute this when you hear a phrase that you want to reproduce. In conjunction with the “Freeze Loop Length” setting, you can also loop a phrase that you like. (see p.10 Checking the Freeze Randomize function, and performing “Random Capture” using the “Random FF/REW” function)

### Freeze Loop Length [Off, 1...32]

Specifies the number of measures in the phrases that are repeatedly generated by the KARMA module. After being triggered, the module will generate a phrase of the number of measures you specify here, and will then repeat that phrase. If you set this **Off**, the phrase will not be repeated.

The table below and the explanations that follow describe how various combinations of “Start Seed” and “Freeze Loop Length” settings will affect the phrase or control data that is randomly generated by the KARMA module each time triggering occurs, according to the GE settings you are using.

	“Start Seed”	“Freeze Loop Length”
(1)	<b>0: Random</b>	<b>Off</b>
(2)	<b>any value</b>	<b>Off</b>
(3)	<b>0: Random</b>	<b>1...32</b>
(4)	<b>any value</b>	<b>1...32</b>

**(1) “Start Seed”: 0: Random, “Freeze Loop Length”: Off**  
The phrase will change randomly each time triggering occurs. Each time the phrase repeats, it will change randomly. This is what happens in system version 1.0. For example, suppose there is a GE that, if you input **C-D-E-F**, will randomly vary the order of notes, and repeatedly play four notes in each measure. When you trigger this GE, it produces notes in a random order of (for example) **C-D-E-F**, **C-C-D-F**, **F-D-C-E**... When you trigger this GE again, it produces a different random phrase of (for example) **E-D-C-C**, **C-C-D-D**, **C-D-C-E**...

(2) “Start Seed”: **any value**, “Freeze Loop Length”: **Off**  
 Each time triggering occurs, the same phrase will be generated. Different “Start Seed” values cause different phrases to be generated. The phrase will change randomly each time it repeats, but the same phrase will always be generated each time you retrigger with a given “Start Seed” value. This lets you select any desired one of more than four billion (!) different phrase variations. For example, suppose there is a GE that, if you input **C-D-E-F**, will randomly vary the order of notes, and repeatedly play four notes in each measure. When you trigger this GE, it produces notes in a random order of (for example) **C-D-D-C, D-C-E-C, D-E-C-D...** Even if you trigger this GE again, it reproduces the same phrase of **C-D-D-C, D-C-E-C, D-E-C-D...** If you change the “Start Seed” value, a different phrase will be generated; for example, **E-E-C-D, D-C-C-C, E-E-E-E...**

(3) “Start Seed”: **0: Random**, “Freeze Loop Length”: **1...32**  
 The phrase will change randomly each time triggering occurs. However, that phrase will loop (repeat) for the number of measures you specified in “Freeze Loop Length.” The same phrase will continue looping until you trigger the GE again. When you trigger the GE again, a different phrase will loop. For example, suppose there is a GE that, if you input **C-D-E-F**, will randomly vary the order of notes, and repeatedly play four notes in each measure. If you set “Freeze Loop Length” to **1 (measure)** and trigger this GE, the same four notes will continue looping (e.g., **F-E-D-C, F-E-D-C, F-E-D-C, ...**). When you trigger it again, a different phrase will loop (e.g., **D-D-C-C, D-D-C-C, D-D-C-C,...**). (☞ “Retrigger Each Time”)

(4) “Start Seed”: **any value**, “Freeze Loop Length”: **1...32**  
 The same phrase will play each time you trigger the GE. That phrase will loop for the number of measures you specified in “Freeze Loop Length.” For example if you select a program or combination, and make these settings for a KARMA module that generates random changes each time it is triggered, the exact same phrase will loop every time. The phrase that is looped will be different if you change the “Start Seed” value. For example, suppose there is a GE that, if you input **C-D-E-F**, will randomly vary the order of notes, and repeatedly play four notes in each measure. If you set “Freeze Loop Length” to **1 (measure)** and trigger this GE, the same four notes will loop (e.g., **D-E-E-C, D-E-E-C, D-E-E-C, ...**). Even if you trigger the GE again, the same phrase (**D-E-E-C, D-E-E-C, D-E-E-C, ...**) will be reproduced. If you change the “Start Seed” value, a different phrase (e.g., **C-C-E-E, C-C-E-E, C-C-E-E, ...**) will loop. (☞ “Retrigger Each Time”)

### Retrigger Each Time [Off, On]

When set to “**On (checked)**,” every time the specified loop length is completed, the Phase Pattern, Envelopes, and Indexes will retrigger as if the keyboard itself was retriggered. This means that the notes in the phrase will be restarted according to the Note Trigger settings (6.2-2a ☞PG p.31, PG p.61, PG p.108, PG p.126) and the applicable internal settings of the GE, and any envelopes will be retriggered according to the Envelope Trigger/Latch settings (6.2-2a ☞PG p.31, PG p.62, PG p.108, PG p.127.) When “**Off (unchecked)**,” the overall length of the internal GE Phase Pattern controls when the loop will be retriggered. For example, if the Phase Pattern is 8 bars, and the “Freeze Loop Length” is set to **2 bars**, then the randomizations will reset every 2 bars (controlling the rhythm and movement of notes, for example), but the melody and envelopes may not trigger from the beginning until every 8 bars is completed. (☞p.10 Checking the Freeze Randomize function, and performing “Random Capture” using the “Random FF/REW” function)

⚠ Not available unless “Freeze Loop Length” is set to something other than **0: Off**.

**note** In some cases, the two settings may sound the same, depending on the internal settings of the GE.

### Link Start Seeds [Off, On]

You can view and set this parameter in modes where more than one KARMA module is available (Combination, Sequencer, and Song Play modes).

**On (checked):** When you specify a “Start Seed” value for one of the four KARMA modules (A, B, C, D), the “Start Seed” of the other three modules will be set to the same value. This is useful for quickly trying out new settings on all 4 modules at the same time.

**note** This setting is ignored while “Random Capture” is being executed.

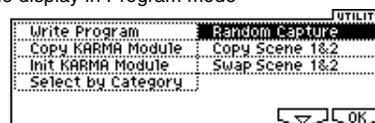
## Random Capture

System version 2.0 adds “Random Capture” to the utility menu commands of the KARMA function edit pages in each mode.

“Random Capture” will appear in the utility menu for the following pages.

Program mode	PROG 6.1-1–PROG 6.4-5 (☞PG p.26)
Combination mode	COMBI 6.1-1–COMBI 6.4-7 (☞PG p.57)
Sequencer mode	SEQ 6.1-1–SEQ 6.4-7 (☞PG p.104)
Song Play mode	S.PLAY 6.1-1–S.PLAY 6.4-7 (☞PG p.123)

The display in Program mode



### Random Capture

When you execute this command, the “Start Seed” (6.2-3 ☞p.8) setting (which is the source of the randomness of the phrase generated by the KARMA module) will automatically be set to the “Seed” value that is being internally used by the KARMA module at that moment. When you are listening to the randomly changing phrases generated each time a KARMA module is triggered, and you hear a phrase that you would like to reproduce consistently each time you trigger that GE, you can execute this command to capture the seed that resulted in that phrase. (☞p.10 Checking the Freeze Randomize function, and performing “Random Capture” using the “Random FF/REW” function)

- ① Select “Random Capture” to access the dialog box.

The display in Combination mode



- ② If you are in a mode that can use more than one KARMA module (Combination, Sequencer, or Song Play modes), use “Module:” to select the module for which you want to capture the seed value. If you select **A–D**, the seed value will be captured for that KARMA module. If you select **All**, the seed values will be captured for all four KARMA modules.
- ③ To execute the Random Capture, press the [F8] (“OK”) key. To cancel without executing, press the [F7] (“Cancel”) key.

⚡ If the “Start Seed” parameter (6.2-3a ¶p.8) of the KARMA module for which you execute random capture is assigned as an RT Parameter (¶p.11), a message of “Can’t execute random capture” will be displayed, and random capture will not be executed. (Press the [F8] (“OK”) key to close the message.)

If you set the “Module:” field of the dialog box to **ALL** (Combination, Sequencer, Song Play mode) to execute random capture for all KARMA modules, random capture will be executed only for the KARMA modules whose “Start Seed” parameter is not assigned as an RT Parameter. If the “Start Seed” parameter of each KARMA module is assigned as an RT Parameter, then a message of “Can’t execute random capture” will be displayed, and random capture will not be executed for any of the KARMA modules. (Press the [F8] (“OK”) key to close the message.)

## Random FF/REW

System version 2.0 adds a “Random FF/REW” function to Program, Combination, Sequencer, and Song Play modes.

The “Random FF/REW” function lets you move backward or forward in steps of a measure through the phrases that the KARMA module generates. By using this in conjunction with the “Random Capture,” “Start Seed” (6.2-3a), and “Freeze Loop Length” (6.2-3a) settings, you can loop a randomly changing phrase as desired, or generate the same phrase each time you trigger the GE.

### Procedure

The basic procedure is as follows: in one of the KARMA function edit pages P6.1–6.4 in each mode, hold down the [./HOLD] key and press the [◀◀ REW] key or [FF ▶▶] key. When you press the [◀◀ REW] key (or [FF ▶▶] key) once, the phrase generated by the KARMA module will go back (forward) one measure. If you press the key four times, the phrase will go back (forward) four measures.

## Checking the Freeze Randomize function, and performing “Random Capture” using the “Random FF/REW” function

An example of the procedure in Program mode is shown below.

As an example, here’s how to use this in Program mode.

- ① In Program mode, select **E096: Thin AnaLead**.



- ② Use a [CHORD TRIGGER] key or the keyboard to trigger GE “**0643(PRE): Improv Lead1/E96**” for the KARMA module. The phrase generated by this GE will always change randomly (each time you trigger it, or each time the phrase is repeated).

- ③ Select the **PROG 6.2: Ed-KARMA Mdl Parm3** page.

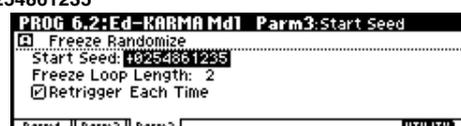


- ④ Set “Start Seed” to **1 (+0000000001)**. Retrigger the [CHORD TRIGGER]. Each time it will play the same randomized phrase; however, if you let it continue, it will always make new randomizations as it goes along.
- ⑤ Set “Freeze Loop Length” to **2 (2 bars)**. Now, every 2 bars, it will loop and repeat the exact same series of randomizations that is specified by “Start Seed” **1**. However, this particular GE has a Phase Pattern of 8 steps (bars), so it may not sound always as if it is restarting every 2 bars, because of the internal settings of the Phase Pattern. It will repeat the same randomizations, but not necessarily restart the riff from the beginning. However, this can also be useful for getting the same rhythm and note movements, with a longer evolving phrase.
- ⑥ Set “Retrigger Each Time” to **On (checked)**. Now, every 2 bars, the Phase Pattern is restarted also, in conjunction with the Freeze Loop length, and the phrase becomes a simple 2 bar loop.
- ⑦ Set “Start Seed” back to **0: Random**. Retrigger the phrase by pressing a [CHORD TRIGGER] or playing the keyboard. A completely new randomized phrase will be generated each time you trigger, but every 2 bars it will loop and repeat until you trigger it again.
- ⑧ Now set “Retrigger Each Time” back to **Off (unchecked)**. Once again, even though the randomizations are being repeated every 2 bars, the 8 step GE Phase Pattern allows longer evolving phrases to be created.
- ⑨ Set “Start Seed” back to **Off**.
- ⑩ In the same way as in step ②, use the [CHORD TRIGGER] keys or keyboard to trigger the KARMA module.
- ⑪ At the desired moment, hold down the [./HOLD] key and press the [◀◀ REW] key once. The phrase generated by the GE will go back one measure, and play back. If you hold down the [./HOLD] key and press the [◀◀ REW] key four times, the phrase will go back four measures. In this way, search for the phrase that you want to freeze.
- ⑫ Set the “Freeze Loop Length” parameter. If you set this to **1–32**, the phrase will loop for the specified number of measures. For this example, set this to **2** and set the “Retrigger Each Time” to **On (checked)**. With this setting, the random phrase will freeze to a two-measure phrase. You can use this to loop a phrase during a live performance.
- ⑬ If you want this phrase to be played each time you trigger the GE, execute “Random Capture.” Press the [F8] (“OK”) key and choose “Random Capture” from the utility menu.



- ⑭ When the dialog box appears, press the [F8] (“OK”) key. The “Start Seed” parameter will automatically be set the internal value needed to reproduce the phrase.

Example: Random Capture has set “Start Seed” to a value of **+0254861235**



**note** “Seed” is the source data from which the randomizations are created. The “Seed” of the phrase being looped is automatically set internally within the KARMA module as the “Start Seed.” The “Start Seed” is used each time the GE is triggered. This means that each time you trigger the GE, a specific “Seed” is always used to generate the phrase.

- ⑮ Press the KARMA [ON/OFF] key to temporarily turn off the KARMA function. Then press the KARMA [ON/OFF] key once again to turn the KARMA function back on.
- ⑯ In the same way as in step ②, use the [CHORD TRIGGER] keys or keyboard to trigger the KARMA module. The phrase that was looped in step ⑫ will be reproduced each time the module is triggered. You can now save the Program and recall this phrase at any time.

## RT Parameter (RealTime Parameter)

System version 2.0 adds Rand (Random) and PE (Performance) groups to “Grp (Parm Group)” in the KARMA RT Parameter page of each mode. These added parameter groups contain the new parameters Start Seed, Loop Length (Freeze Loop Length), and Time Sig. (Time Signature). This allows the parameters to be assigned to the KARMA REALTIME CONTROLS knobs and switches and varied in real-time.

The KARMA RT Parameter pages are the following.

Program mode	PROG 6.4-1(2)	(PG p.34)
Combination mode	COMBI 6.4-1(2)	(PG p.63)
Sequencer mode	SEQ 6.4-1(2)	(PG p.110)
Song Play mode	S.PLAY 6.4-1(2)	(PG p.128)

### Grp (Parm Group) [Off, Mix, Ctrl, Trig, Zone, Rand, PE]

#### Group: Rand (Random)

**Start Seed** [-8192...0...+8191]

Sets the “Start Seed” (6.2-3a) value.

0: Random

**Other than 0:** Any desired “Start Seed” value. However, you cannot select values outside the range of -8192 to +8191 when changing the value in this way.

**note** If the “Start Seed” value is set to a value outside of this range when you first assign it as a RT Parameter, it will be limited to either end of the range.

**Loop Length (Freeze Loop Length)** [0...32]

Sets the “Freeze Loop Length” (6.2-3a) value.

0: Off

1...32: Specifies the length (in measures) of the repeatedly generated phrase.

**Retrigger Each Time** [Off, On]

Assigns the function “Retrigger Each Time” (6.2-3a) parameter.

0: Off

1: Controls the “Freeze Loop Length” parameter will restart the phrase from the beginning each time the loop length is completed.

#### Group: PE (Performance)

**Time Sig. (Time Signature)** [0...48]

Assigns the function of the “KARMA Time Sig. (KARMA Time Signature)” parameter (PG p.6).

0: Off

1...48: Corresponds to 1/4–16/16.

**⚡** If you select **Time Sig.** as a parameter for assignment, you will not be able to set “A (Parm Module A)” or “A/B/C/D (Parm Module A/B/C/D)” (PG p.35, PG p.63, PG p.110, PG p.128).

**⚡** The parameters you assign in RT Parm 1...8 will become unavailable for editing in other pages.

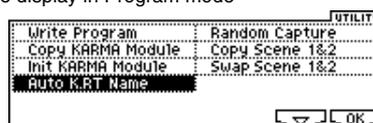
## Auto Assign KARMA RT Name

System version 2.0 adds a “Auto K.RT Name” command to the utility menu commands in the K.RTC (KARMA Realtime Controls) page and 6.4-4(5): Name 1 (2) pages of each mode.

“Auto K.RT Name” will appear in the utility menu of the following pages.

Program mode	PROG 1.1-4 PROG 6.4-4(5)b: UTILITY	(PG p.6) (PG p.36)
Combination mode	COMBI 1.1-5 COMBI 6.4-4(5)b: UTILITY	(PG p.48) (PG p.64)
Sequencer mode	SEQ 1.1-7 SEQ 6.4-4(5)b: UTILITY	(PG p.77) (PG p.111)
Song Play mode	S.PLAY 1.1-7 S.PLAY 6.4-4(5)b: UTILITY	(PG p.118) (PG p.129)

The display in Program mode



### Auto K.RT Name (Auto Assign KARMA RT Name)

Based on the GE parameters and RT parameters that are being controlled, appropriate names (out of the 407 names such as Rhythm Swing% and Rhythm Complexity) can be automatically assigned for the KARMA REALTIME CONTROLS knobs and switches. You can use this when creating new KARMA function assignments, or changing GE selections.

- ① Choose “Auto K.RT Name” to access the dialog box.



- ② To execute the command, press the [F8] (“OK”) key. To cancel without executing, press the [F7] (“Cancel”) key.

**⚡** Please be aware that even in the case of a preloaded program or combination for which you have not edited the KARMA function, executing this command may assign names that are different than the currently-specified names.

## AutoName w/GEchg

System version 2.0 adds “AutoName w/GEchg” to the utility menu commands in the Play KARMA and KARMA Setup pages of each mode.

“AutoName w/GEchg” (“AutoName GEchg” in Sequencer mode) will appear in the utility menu of the following pages.

Program mode	PROG 1.1-3b PROG 6.1-1c	(PG p.5) (PG p.26)
Combination mode	COMBI 1.1-4d COMBI 6.1-1d	(PG p.47) (PG p.57)
Sequencer mode	SEQ 6.1-1d	(PG p.104)
Song Play mode	S.PLAY 6.1-1d	(PG p.123)

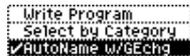
The display in Program mode



### AutoName w/GEchg (Auto Assign KARMA RT Name on GE change)

When you edit the GE assignment of a module, this command automatically changes the name of the KARMA REALTIME CONTROLS knobs and switches that are controlling that module.

- Choose “AutoName w/GEchg” from the utility menu, and press the [F8] (“OK”) key to execute the command. When you execute, a check mark will be added at the left of “AutoName w/GEchg” in the menu, and this function will be turned on. “AutoName w/GEchg” will be turned on/off each time you select it.



- When you modify the “GE Select” (PG p.6) setting in each mode while this function is on, “Auto Assign KARMA RT Name” will be executed automatically, renaming the K.RTC knobs and switches according to any assignments for them on the GE Parameter pages (6.3-1/2/3/4 PG p.32, PG p.62, PG p.109, PG p.127).

**note** In Combination, Sequencer, and Song Play mode, where you can use more than one KARMA module, names will be assigned automatically only for the KARMA REALTIME CONTROLS knobs and switches that are controlling the module whose GE assignment you modified.

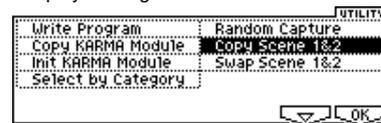
## Copy/Swap KARMA Scene

System version 2.0 adds “Copy KARMA Scene” and “Swap KARMA Scene” commands to the utility menu commands in the KARMA function edit pages of each mode.

“Copy/Swap KARMA Scene” will appear in the utility menu of the following pages.

Program mode	PROG 6.1-1–6.4-5	(PG p.26)
Combination mode	COMBI 6.1-1–6.4-7	(PG p.57)
Sequencer mode	SEQ 6.1-1–6.4-7	(PG p.104)
Song Play mode	S.PLAY 6.1-1–6.4-7	(PG p.123)

The display in Program mode



### Copy Scene 1&2 (Copy KARMA Scene)

This command copies settings between KARMA REALTIME CONTROLS Scene 1 and 2. You can use this command when you want to make settings for scene 2 based on the scene 1 settings you edited, or vice versa.

- Choose “Copy Scene 1&2” to access the dialog box.



- Select either **Scene 1 → Scene 2** or **Scene 2 → Scene 1** to specify the direction in which the data will be copied. **Scene 1 → Scene 2** copies the settings of scene 1 to scene 2. **Scene 2 → Scene 1** does the opposite.
- To execute the copy, press the [F8] (“OK”) key. To cancel without executing, press the [F7] (“Cancel”) key.

### Swap Scene 1&2 (Swap KARMA Scene 1&2)

This command swaps (exchanges) the settings of KARMA REALTIME CONTROLS Scene 1 and 2.

- Choose “Swap Scene 1&2” to access the dialog box.



- To execute the swap, press the [F8] (“OK”) key. To cancel without executing, press the [F7] (“Cancel”) key.

## GE Parameter

KARMA Music Workstation system version 2.0 adds several new GE parameters and GE parameter values. Planned future products in the EXB-PCM 04/05 are expected to include new programs, combinations, and GE data designed for the KARMA music workstation that will use these parameters.

## GE (Generated Effect) Group

### GE Type

Change the explanation for GE Global Parameters “GE Type” **1: Generated-Gated** as follows. (☞GE p.4)

#### 1: Generated-Gated

A Note Series is created as in **0: Generated – Riff** above, but only a portion of the Note Series is retriggered according to the parameters. Effects are generated based on the Rhythm Pattern as it relates to the clock source or tempo envelope. The notes themselves can be generated repetitively in several different ways, or as a sustained set of notes which is then “sliced and diced” by a selected controller value. This can be used to simulate several types of popular techno effects, such as gating a synth pad with a hi-hat track and an external audio gate/compressor. This GE Type can also be used to simulate the Korg Triton Arpeggiator, along with “Gate Type” = **Vel CP**, explained below.

### Gate Type

A new setting of **1: Vel CP** has been added to GE Global Parameters “Gate Type.”

In conjunction with this, the number and order of the settings has changed. Also, the explanation for **0: [Vel]-retrigger all notes with velocity** (☞GE p.4) has changed as follows.

### Gate Type [0...5]

- 0: Vel-retrigger all notes with Velocity**
- 1: Vel CP-retrigger Cluster Pattern notes with Velocity**
- 2: CC [T]-sustain notes; retrigger only if Phase Transpose is different**
- 3: CC [1]-sustain notes; retrigger when entering Phase1**
- 4: CC [2]-sustain notes; retrigger when entering Phase2**
- 5: CC [A]-sustain notes; retrigger when entering any Phase**

#### 0: Vel - retrigger all notes with Velocity

A portion of the Note Series corresponding to the number of notes played is generated repetitively as note-ons and note-offs according to the parameters. In other words, if you play 8 notes, the first 8 notes of the Note Series will be repeatedly generated at once, according to the Rhythm Pattern. This produces a “gated” effect where each cluster of notes possesses the attack portion of the program being used, as if someone was repeatedly striking a keyboard very quickly. A Velocity Pattern can be used to impart different velocities to the clusters of notes. The Cluster Pattern Grid is disabled and has no effect on how many notes are generated.

#### 1: Vel CP – retrigger Cluster Pattern notes with Velocity

The Cluster Pattern Grid is used to indicate which notes are to be generated from a portion of the Note Series corresponding to the number of input notes played. In other words, the 10 rows of the Value portion of the Cluster Pattern grid allow you to specify which of up to 10 notes you may have played are to be generated. If a step of the Cluster Pattern has rows 0, 2 and 4 selected, then the first, third, and fifth notes in the Note Series will be generated at that step. What these notes actually are will be influenced by the Note Series and Input Sort settings. This can be used to simulate the operation of the Korg Triton Arpeggiator, for example. Note that filling all 10 rows of each column is essentially the same as using **0: Vel** above.

## Phase Group

### Length Mode

In “Length Mode” **0: AC-Actual** (☞GE p.9), delete the phrase in parentheses “(depending on the setting of the “Cycle Mode” parameter (☞p10), described below)” that appears mid-way through the explanation.

### Cycle Mode

Change the explanation for the General Parameters “Cycle Mode” parameter (☞GE p.10) as follows.

### Cycle Mode [0...6]

- 0: S-replace with silence**
- 1: L-limit to top/bottom note**
- 2: R-restart at other end of Phase**
- 3: W-wrap at either end of Phase**
- 4: B-cycle back from beginning of Phase**
- 5: E-cycle back from end of Phase**
- 6: BE-cycle back from beginning & end of Phase**

Determines what will happen when either end of the playback portion of the Phase (specified by the “Phase Beginning/End Offsets” (☞GE p.11) and/or the length of the Note Series) is reached during note generation. This has a different effect depending on the setting of the Phase “Length Mode” (above).

⚠ Not available if “Phase Length Mode” (above) = **0: Actual**. Not available if “GE Type” = **1: Generated-Gated**, unless “Gate Type” (☞GE p.4) = **1: Vel CP**. If **2: Generated-Drum**, the Note Series can be applied as pitch bend, discussed elsewhere.

#### 0: S-replace with silence

If note generation would extend beyond either end of the playback portion of the Phase, those notes are skipped and replaced with silence. Once the specified number of events (including silent notes) or beats of a time signature are generated, a Phase Change occurs. This can be used to simulate the Triton Arpeggiator setting “Arpeggio Type”: **As Played**.

#### 1: L-limit to top/bottom note

If note generation would extend beyond either end of the playback portion of the Phase, those notes are limited and replaced with the bottom or top note of the Phase. Once the specified number of events or beats of a time signature are generated; a Phase Change occurs. Settings of the Index Pattern or Cluster Pattern which would cause movement beyond that point have no effect. This can be used to

simulate the Triton Arpeggiator setting “Arpeggio Type”: **As Played (Fill)**.

**2: R-restart at other end of Phase**

If note generation would extend beyond either end of the playback portion of the Phase, those notes are replaced by notes within the playback portion, as if the riff restarted at the other end. (For the more technically oriented, the index is kept within range using modulo division.) Once the specified number of events or beats of a time signature are generated, a Phase Change occurs. This can be used to simulate the Triton Arpeggiator setting “Arpeggio Type”: **Running Up**.

**3: W-wrap at either end of Phase**

If note generation would extend beyond either end of the playback portion of the Phase, those notes are replaced by notes within the playback portion, as if the riff is being “wrapped around” the end point. (For the more technically oriented, the index is kept within range by inverting it.) Once the specified number of events or beats of a time signature are generated, a Phase Change occurs. This can be used to simulate the Triton Arpeggiator setting “Arpeggio Type”: **Up&Down**.

**4: B-cycle back from beginning of Phase**

Allows “cycling” to occur at the beginning of the playback portion of the Phase. For example, if the movement specified by the Index Pattern causes the index to go backwards beyond the beginning of the playback portion, “cycling” will occur (the index will automatically be jumped back into the playback portion by a calculated amount). If the Phase “Length Mode” is **0: AC-Actual**, no cycling is performed and a Phase Change will immediately occur.

**5: E-cycle back from end of Phase**

Allows “cycling” to occur at the end of the playback portion of the Phase. For example, if the movement specified by the Index Pattern causes the index to go forwards beyond end of the playback portion, “cycling” will occur (the index will automatically be jumped back into the playback portion by a calculated amount). If the

Phase “Length Mode” is **0: AC-Actual**, no cycling is performed and a Phase Change will immediately occur.

**6: BE-cycle back from beginning & end of Phase**

Allows the behavior described above at both ends of the playback portion of the Phase.

**Beginning Offset %/End Offset %**

Add the following note to the explanation for Phase Specific Parameters “Beginning Offset%” and “End Offset%.” (GE p.11)

 Not available when “GE Type” (p.13) = **1: Generated-Gated**, unless “Gate Type” (p.4, p.13) = **1: Vel CP**. If **2: Generated-Drum**, the Note Series can be applied as pitch bend, discussed elsewhere.

**Pattern Parameters**

The following parameters have been added to Pattern Parameters (GE p.12).

**Step Transpose Value** **[-48...0...+48]**

Each step of the Phase Pattern may have its own transpose value (-48...+48), which affects all notes that are generated during that step. This is cumulative with the Phase Transpose Value discussed below. For example, if a Step Transpose Value is -12, and the Phase Transpose Value for the Phase in use during that step is +24, the overall transpose would be +12. While this value is not directly accessible as a GE Parameter, it may be set as part of a GE and varied by the following 2 parameters:

**Step Transpose On/Off** **[0, 1]**

**0: Off**                      **1: On**

Allows the effect of the Step Transpose Values in each Phase Pattern Step to be turned on or off for the entire Phase Pattern.

Template for emulating the operation of the TRITON series arpeggiator parameters “Octave” and “Octave Motion”

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Octave	Octave Motion*
0:	[0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	U D B
1:	[0 12]	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0	2	U B
2:	[12 0]	12	0	12	0	12	0	12	0	12	0	12	0	12	0	0	2	D
3:	[0 12 24]	0	12	24	0	12	24	0	12	24	0	12	24	0	0	0	3	U
4:	[24 12 0]	24	12	0	24	12	0	24	12	0	24	12	0	24	0	0	3	D
5:	[0 12 24 12]	0	12	24	12	0	12	24	12	0	12	24	12	0	0	0	3	B
6:	[0 12 24 36]	0	12	24	36	0	12	24	36	0	12	24	36	0	0	0	4	U
7:	[36 24 12 0]	36	24	12	0	36	24	12	0	36	24	12	0	0	0	0	4	D
8:	[0 12 24 36 24 12]	0	12	24	36	24	12	0	12	24	36	24	12	0	0	0	4	B
9:	[0]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	U D B (x2)
10:	[0 0 12 12]	0	0	12	12	0	0	12	12	0	0	12	12	0	0	0	2	U B (x2)
11:	[12 12 0 0]	12	12	0	0	12	12	0	0	12	12	0	0	0	0	0	2	D (x2)
12:	[0 0 12 12 24 24]	0	0	12	12	24	24	0	0	12	12	24	24	0	0	0	3	U (x2)
13:	[24 24 12 12 0 0]	24	24	12	12	0	0	24	24	12	12	0	0	0	0	0	3	D (x2)
14:	[0 0 12 12 24 24 12 12]	0	0	12	12	24	24	12	12	0	0	12	12	24	24	12	3	B (x2)
15:	[0 0 12 12 24 24 36 36]	0	0	12	12	24	24	36	36	0	0	12	12	24	24	36	4	U (x2)
16:	[36 36 24 24 12 12 0 0]	36	36	24	24	12	12	0	0	36	36	24	24	12	12	0	4	D (x2)
17:	[0 0 12 12 24 24 36 36 24 24 12 12]	0	0	12	12	24	24	36	36	24	24	12	12	0	0	0	4	B (x2)

\* U = Up, D = Down, B = Both

**Step Transp. Template** [0...17]

Allows one of 18 different templates for the 16 steps of a Phase Pattern to be chosen and applied to the current Phase Pattern. These 18 templates correspond to various settings of the Triton Arpeggiator "Octave" and "Octave Motion" parameters, and can be used to simulate Triton Arpeggio performances. (refer to the table at the bottom of the previous page)

**Rhythm Group****Swing%**

Change the explanation for Global Parameters "Swing%" (GE p.13) as follows.

**Swing %** [-200...200%]

Percentage of swing/hip-hop feeling to be applied. 0% = no swing, 50% = triplets, while 100% pushes the swung notes all the way to the next value of half the note length set by the "Swing Note Value" (GE p.13). For example, if swinging straight 1: 16th notes, 100% would push the swung notes to 32nds. 200% would push the swung notes all the way to the next 16th. **Negative values** push the swung notes the other direction. Note that triplet rhythm values may not be affected by swing, depending on internal settings of the GE.

**Duration Group****Duration Mode**

Change the explanation for Associated Parameters "Duration Mode" as follows.

**Duration Mode** [0...7]

<b>0: Poly Extend</b>	<b>4: Rhythm Overlap</b>
<b>1: Poly Extend/Damped</b>	<b>5: Rhythm %</b>
<b>2: Mono Extend</b>	<b>6: Pattern Overlap</b>
<b>3: Timed</b>	<b>7: Pattern %</b>

Selects one of several modes of operation for generating durations in the current Phase:

 Based on the current setting, Duration Pattern Grid, and Random Weighting Parameters may not be available.

**0: Poly Extend** [Duration Value: 1...800 %]

Each note will sustain until the next generation of the same note, or until that note is no longer a part of the Note Series (caused by playing a new chord, for example). For example, if the notes to a CMaj chord are sustaining and the chord is changed to a CMinor, only the Es will be damped. Especially useful for finger-picked and strummed guitar effects. Certain steps may be "damped" by using the Duration Pattern to indicate a duration value shorter than the current Rhythm Pattern value. The "Duration Value" parameter is used to specify a percentage of the Duration Pattern value, making it shorter or longer by a certain amount. For example, if the Rhythm Pattern is generating quarter notes, any step in the Duration Pattern (as modified by the Duration Value) that is shorter than a quarter note will cause the notes (and all sustaining notes at that time) to have the specified duration. This is useful for simulating the technique of strumming and damping certain chords within the progression. Any value in a Duration Pattern step (as modified by the Duration Value) that is longer than the current Rhythm Pattern value will be ignored, and the notes will sustain as described above.

**1: Poly Extend/Damped** [Duration Value: 1...800 %]

The same as above, except all sustaining notes will be damped when the chord changes, not just notes that are no longer in the Note Series.

**2: Mono Extend** [Duration Value: 1...800 %]

The same as above, except each note or cluster is sustained until the next note or cluster (of any pitch or pitches) is generated.

**3: Timed** [Duration Value: 001...+5000 ms]

The "Duration Value" parameter is used to specify in milliseconds the duration of the generated notes. All notes will therefore have the same length. Note that this is independent of the current tempo - if it is set to 50 ms, it will always be 50 ms, regardless of tempo.

**4: Rhythm Overlap** [Duration Value: -500...+500 ms]

The "Duration Value" parameter is used to specify in milliseconds an amount by which each note or cluster will overlap or be separated from the next note or cluster. Note that this relates to the Rhythm Pattern values. **Positive values** cause overlapping; **negative values** cause separation. For example, a setting of -20 ensures that all notes will extend and be separated from the next notes by 20 ms regardless of the actual rhythm the notes are generated with, or the current tempo. Note that while the Rhythm Pattern values themselves are relative to tempo, the value specified here is not. Using the example setting of -20, there will always be a gap of 20 ms between notes regardless of the tempo.

**5: Rhythm %** [Duration Value: 1...800 %]

The "Duration Value" parameter is used to specify a percentage of the rhythmic value a note is generated with to use as a duration. Note that this relates to the Rhythm Pattern values. The actual time is then calculated on the fly, taking into account the current tempo. For example, with a setting of 50%, if the Rhythm Pattern specifies a string of 8th notes, they will appear to be generated as a string of 16th notes separated by 16th note rests (each 8th note will have the duration of a 16th note, or 50%). Note that this value is therefore relative to tempo.

**6: Pattern Overlap** [Duration Value: -500...+500 ms]

The Duration Pattern is used to construct a Duration Pattern, in a similar fashion to the Rhythm Pattern. Each step in the pattern indicates the duration for notes that are currently to be generated. The "Duration Value" parameter is used to specify in milliseconds an amount by which to increase or decrease the pattern values. This can be used to set up a certain Duration Pattern, and then vary in real-time the "gate-time" of each note in the pattern simultaneously. For example, if the Duration Pattern is generating 16th - 8th at a tempo of 120 BPM, the notes would have the durations of 125 ms, 250 ms, etc. If the "Duration Value" parameter, is -20, they would be generated as 105 ms, 230 ms, etc. Note that while the Duration Pattern values themselves are relative to tempo, the value specified here is not. Using the example setting of -20, the notes will always be 20 ms shorter regardless of the tempo.

**7: Pattern %** [Duration Value: 1...800 %]

The Duration Pattern is used to construct a Duration Pattern, in a similar fashion to the Rhythm Pattern. Each step in the pattern indicates the duration for notes that are currently to be generated. The "Duration Value" parameter is used to specify a percentage by which to increase or decrease the pattern values. This can be also be used to set up a certain Duration Pattern, and then vary in real-time

the “gate-time” of each note in the pattern simultaneously, similar to the previous option. For example, if the Duration Pattern is generating 16th - 8th at a tempo of 120 BPM, the notes would have the durations of 125 ms, 250 ms, etc. If the “Duration Value” is 80%, they would be generated as 100 ms, 200 ms, etc. Note that this value is therefore relative to tempo.

## Duration Value

Delete the following text from the explanation of “Duration Value” in the GE guide (GE p.18)

⚠ Not available if “Duration Mode” = 0: Poly Extend, 1: Poly Extend/Damped, or 2: Mono Extend.

## Use Rhythm Multiplier

The “User Rhythm Multiplier” parameter has been added following Associated Parameters “Duration Value” (GE p.18).

**UseRhythmMultiplier** [0, 1]

0: Off 1: On

When 1: On, the durations of the generated notes will be affected by the current setting of the Rhythm Group “Rhythm Multiplier” (GE p.15). For example, if the Duration Pattern specifies a duration of a 16th note, and the “Rhythm Multiplier” is set to 200% in the current Phase, the actual resulting duration will be an 8th note.

## CCs Group

### Overview

In the GE guide, change the CCs Group “Overview” (GE p.26) as follows.

### Overview

The CCs Group allows the editing of parameters that control generation of CC (Control Change) messages. For example, this can control the panning (CC #10) of the notes in the Generated Effect (stereo placement left to right). Any other CC data may also be generated to control any MIDI controllable characteristic of your synthesizer, such as resonance, filter frequency, vibrato, etc. You may also use the CC Pattern to generate stepped Pitch Bend messages, technically not a “CC.” Depending on internal settings of the GE, the CC Pattern may also be used to specify “Pitch Offsets” that will be applied as Transpose Values to each note as it is generated. This can be used to simulate the Triton Arpeggiator Pitch Offset value for each step.

## About CC Patterns

At the beginning of “About CC patterns” (GE p.26), change the sentence “A value derived from a CC Pattern is a MIDI Control Change value from 0–127 (or Pitch Bend, if selected).” to the following.

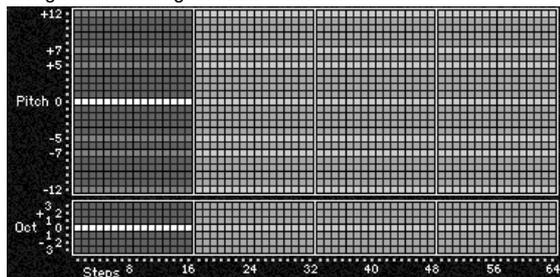
“A value derived from a CC Pattern is a MIDI Control Change value from 0–127 (or Pitch Bend, or Pitch Offsets, if selected).”

## CC Pattern

In “Pattern Grid & Associated Parameters” (GE p.26), add the following to the text for “CC Pattern” as follows:

Depending on internal settings of the GE, the Phase 2 CC Pattern may be used to specify “Pitch Offsets” for notes as they are generated. In this case, the grid is split into two portions: the top portion (Pitches) contains 25 rows, corresponding to a Transpose value of -12 to +12 semitones. The bottom portion (Octaves) contains 7 rows, corresponding to a Transpose value of -3 to +3 octaves. By combining the two Transpose values, any offset from -48 to +48 can be achieved. This can be used to simulate the Triton Arpeggiator Pitch Offset value for each step.

CC grid when being used for Pitch Offsets



⚠ Pattern grids cannot be viewed and edited in the KARMA Music Workstation.

## Fixed/On

Add the following note to the explanation for “Fixed/On” (GE p.26).

⚠ Not available in Phase 2 when Pitch Offsets are being used.

## Pattern Type

Add the following note to the explanation for “Pattern Type” (GE p.26).

⚠ Not available in Phase 2 when Pitch Offsets are being used.

## Random Weighting Parameters

Add the following parameters to Random Weighting Parameters (GE p.27). The added parameters are valid only if the GE settings make the Phase 2 CC pattern specify Pitch Offset values.

**Pitches-Random Factor** [-99...+99]

Controls the shape of the weighting curve being applied to the top part of the CC Pattern Grid (Pitches).

GE p.14 Rhythm Group: Random Weighting Parameters - Pools”

⚠ This is valid only if the GE settings make the Phase 2 CC pattern specify Pitch Offset values.

**Pitches-Weighting Curve** [0...3]

**0: Exponential**      **2: Exp-S**  
**1: Logarithmic**     **3: Log-S**

Chooses a weighting curve shape for the top part of the CC Pattern Grid (Pitches).

☞ GE p.14 Rhythm Group: "Pools-WeightingCurve"  
 GE p.50 Appendices: "Random Weighting Curves"

⚠ This is valid only if the GE settings make the Phase 2 CC pattern specify Pitch Offset values.

**Octaves-Random Factor** [-99...+99]

Controls the shape of the weighting curve being applied to the bottom part of the CC Pattern Grid (Octaves).

☞ GE p.14 Rhythm Group: Random Weighting Parameters - Pools"

⚠ This is valid only if the GE settings make the Phase 2 CC pattern specify Pitch Offset values.

**Octaves-Weighting Curve** [0...3]

**0: Exponential**      **2: Exp-S**  
**1: Logarithmic**     **3: Log-S**

Chooses a weighting curve shape for the bottom part of the CC Pattern Grid (Octaves).

☞ GE p.14 Rhythm Group: "Pools-WeightingCurve"  
 GE p.50 Appendices: "Random Weighting Curves"

⚠ This is valid only if the GE settings make the Phase 2 CC pattern specify Pitch Offset values.

**Associated Parameters**

Add the following parameters after Associated Parameters "Cluster Mode" (☞GE p.27).

**Use Pitch Offsets** [0, 1]

**0: Off 1: On**

When **On: 1**, the Pitch Offset pattern specified by the Phase 2 CC Pattern grid is applied as transpose values to notes as they are generated. This allows the effect of the pattern to be switched on and off in realtime. This will not have any effect unless internal settings of the GE specify that Pitch Offsets are being used.

**P.Offset Chord Shift** [0...2]

**0: Off**    **1: Scalic1**    **2: Scalic2**

**0: Off**

The Pitch Offsets are applied with no further modification from this setting.

**1: Scalic1**

Chord analysis is performed on the input source material, and as the Pitch Offset values are applied to transpose the generated notes, notes that may be "atonal" based on the analyzed chord are shifted to tonal notes. Useful for creating complex chromatic Pitch Offset Patterns and ensuring that the results stay in a certain key or chord. The note tables used to shift the notes are the same as the ones used in Note Series Group "Note Type" (☞GE p.6) : **1: Scalic**.

**2: Scalic2**

Same as 1: Scalic (above), except that the note tables used to shift the notes are the same as the ones used in "Note Series Group "Note Type": **2: Scalic2**. Scalic2 is more modal in nature and has more passing tones than **1: Scalic**.

⚠ Will not have any effect unless internal settings of the GE specify that Pitch Offsets are being used.

**Drum Group**

Add the following parameter after Drum Group Associated Parameter "Link To Next" (☞GE p.43).

**Notes Played = Rows** [0, 1]

**0: Off**                    **1: On**

When **1: On**, the number of keys pressed on the keyboard determines which rows of the 3 Drum Patterns are played. If only one key is pressed, then only the notes indicated by the first row of the Drum Pattern (lowest row of the 7 rows specifying drum notes) are generated. If 3 keys are pressed, then only the notes specified by the lowest three rows are generated. This can be used to simulate the Triton Arpeggiator setting "Fixed Tone Mode": **Trigger As Played**.

# Sequencer mode

## SEQ 5.3: Tone Adjust

System version 2.0 adds a SEQ 5.3: Tone Adjust page following the 5.3: Track Edit page (PG p.102) of Sequencer mode.

### 5.3-1: TA1..8 (Tone Adjust1 T01-08)

### 5.3-2: TA1..16 (Tone Adjust1 T09-16)

### 5.3-3: TA2..8 (Tone Adjust2 T01-08)

### 5.3-4: TA2..16 (Tone Adjust2 T09-16)

### 5.3-5: TA3..8 (Tone Adjust3 T01-08)

### 5.3-6: TA3..16 (Tone Adjust3 T09-16)

These pages let you make temporary adjustments to the sound of the program used by each track. While you are creating a song, you can make adjustments such as making the bass more mellow or giving the strings a sharper attack without having to go back to Program mode and edit the programs. For each track in a song, you can select and adjust up to six parameters such as filter cutoff, resonance, filter EQ, and amp EG.



### 5.3-1(2)(3)(4)(5)(6)a: Destination 1-6, Value 1-6

**Destination 1-6** [LPF Fc...Reverse]  
Selects the parameter that you want to adjust.

**Value 1-6** [-99...+99, -12.00...+12.00, -1200...+1200, Off...On]  
Specifies the value for the parameter you selected in "Destination 1-6." If you set this to +00 or PRG, the setting of the program will be used.

**note** Normally, you should not select the same parameter for more than one "Destination" in the same track. However if you do so, the parameters will operate as follows.

#### If you select other than Hold or Reverse

The "Value" of each "Destination" set to the same parameter will be summed for each track. However, the "Value" of the parameter being controlled by the "Destination" will not exceed the allowable range of settings. For example if you have assigned three Detune1 settings for the same track, and their "Value" settings are set to +1000, +1000, and +1000 respectively, then the result will be +1200. (The sum is +3000, but the value is limited at the maximum of +1200 for the Detune1 parameter.) Settings of +1000, +1000, and -1000 would produce a result of +1000.

#### Hold, Reverse

The last of the multiple "Destination" settings will be valid.

### "Destination 1-6" and "Value 1-6"

The parameters that can be controlled and their range of values are as follows.

**LPF Fc (Low Pass Filter Cutoff Frequency)** [-99...+00...+99]

Adjusts the low pass filter cutoff frequency of program OSC 1/2. This will affect the brightness of the sound. The parameter will be controlled in the same way as when CC#74 is received. (PG p.243, Bank F: p.273)

**Reso.HP (Resonance/High Pass Filter Cutoff Frequency)** [-99...+00...+99]

Adjusts the resonance level of the low pass filter or the cutoff frequency of the high pass filter for program OSC 1/2. The parameter that is controlled will depend on the filter type specified for the program. The parameter will be controlled in the same way as when CC#71 is received. (PG p.243, Bank F: p.273)

**F EG Int (Filter EG Intensity)** [-99...+00...+99]  
Adjusts the filter EG intensity (the depth of the filter EG) for program OSC1/2. The parameter will be controlled in the same way as when CC#79 is received. (PG p.244, Bank F: p.274)

**A Vel I. (Amp Velocity Intensity)** [-99...+00...+99]  
Adjusts the amp velocity intensity (the degree to which velocity will affect the amp) for program OSC 1/2. This controls the Amp Modulation "Velocity Intensity" parameter (5.1-2b PG p.21).

**note** For bank F programs, this controls the Amp EG Level Modulation "Velocity Control" parameter (PG p.285).

**F.A EG A (Filter/Amp EG Attack Time)** [-99...+00...+99]  
Adjusts the EG attack times of the program OSC 1/2 filter and amp. To maximize the result of this adjustment, the Amp EG sustain level, attack level, start level modulation, and attack time modulation will also be adjusted at the same time. The parameter will be controlled in the same way as when CC#73 is received. (PG p.243, Bank F: p.273)

**F.A EG D (Filter/Amp EG Decay Time)** [-99...+00...+99]  
Adjusts the EG decay time and slope time of the program OSC 1/2 filter and amp. The parameter will be controlled in the same way as when CC#75 is received. (PG p.243, Bank F: p.273)

**F.A EG S (Filter/Amp EG Sustain Level)** [-99...+00...+99]  
Adjusts the EG sustain level of the program OSC 1/2 filter and amp. The parameter will be controlled in the same way as when CC#70 is received. (PG p.243, Bank F: p.273)

**F.A EG R (Filter/Amp EG Release Time)** [-99...+00...+99]  
Adjusts the EG release time of the program OSC 1/2 filter and amp. The parameter will be controlled in the same way as when CC#72 is received. (PG p.243, Bank F: p.273)

**F EG A (Filter EG Attack Time)** [-99...+00...+99]  
**F EG D (Filter EG Decay Time)** [-99...+00...+99]  
**F EG S (Filter EG Sustain Level)** [-99...+00...+99]  
**F EG R (Filter EG Release Time)** [-99...+00...+99]

These adjust only the filter parameter as in "F.A EG A," "F.A EG D," "F.A EG S," or "F.A EG R" respectively.

**A EG A (Amp EG Attack Time)** [-99...+00...+99]  
**A EG D (Amp EG Decay Time)** [-99...+00...+99]  
**A EG S (Amp EG Sustain Level)** [-99...+00...+99]  
**A EG R (Amp EG Release Time)** [-99...+00...+99]

These adjust only the amp parameter as in "F.A EG A," "F.A EG D," "F.A EG S," or "F.A EG R" respectively.

**LFO1 Sp (LFO1 Speed)** [-199...+00...+199]

Adjusts the LFO1 speed of program OSC 1/2. The parameter will be controlled in the same way as when CC#76 is received. (PG p.244, Bank F: p.273)

**PLFO1 I. (Pitch LFO1 Intensity)** [-12.00...+00.00...+12.00]

Adjusts the program OSC 1/2 pitch LFO1 intensity (the depth of pitch modulation produced by LFO1). The parameter will be controlled in the same way as when CC#77 is received. (PG p.244, Bank F: p.274)

**note** For bank F programs, this parameter has a range of -99...+00...+99, unlike other programs. Your setting of -12.00...+00.00...+12.00 will be valid, but due to the difference in resolution, the pitch may not be precisely as you specify.

**LFO1 Fd (LFO1 Fade)** [-99...+00...+99]

Adjusts the program OSC 1/2 LFO1 "Fade" parameter (the time from when the LFO begins to take effect until it reaches the maximum level; 5.3-1a PG p.24).

**note** For bank F programs, this controls the "LFO 1/2, 3, 4 Fade." This will correspond to the LFO 1-4 that is selected in Pitch AMS1, AMS2 (PROG 3.1: Ed-Pitch, OSC1/2 page) or Common Pitch Mod. AMS (PROG 3.1: Ed-Pitch, Common page).

**LFO1 DI (LFO1 Delay)** [-99...+00...+99]

Adjusts the program OSC 1/2 pitch LFO1 delay (the time from note-on until the LFO begins to take effect). The parameter will be controlled in the same way as when CC#78 is received. (PG p.244, Bank F: p.274)

**P.Strch (Pitch Stretch)** [-12...+00...+12]

Simultaneously adjusts the program OSC 1/2 Transpose and Tune parameters. This lets you create a rich variety of tonal changes without impairing the character of the original sound. This controls the same parameters as Performance Editor - "Stretch (Pitch Stretch)" (1.1-2b). (PG p.4)

**▲** This has no effect on bank F programs.

**Dtune 1 (Detune 1)** [-1200...+0000...+1200]

Adjusts the tuning of program OSC 1. This controls the OSC1 Multisample "Tune" parameter (2.1-2c PG p.9).

**note** For bank F programs, this controls the OSC "Transpose" and "Tune" parameters (PG p.276).

**Dtune 2 (Detune 2)** [-1200...+0000...+1200]

Adjusts the tuning of program OSC 2. This controls the OSC2 Multisample "Tune" parameter (2.1-2c PG p.9).

**note** For bank F programs, this controls the OSC "Transpose" and "Tune" parameters (PG p.276).

**▲** This is valid only if the program's "Oscillator Mode" (2.1-1a PG p.7) is set to **Double**.

**Hold** [Off, On]

Controls the program's Voice Assign - "Hold" parameter (2.1-1b PG p.7). If you turn this **Off**, the OSC1/2 Amp EG Release Time parameter will be set to 0 in order to make full use of the effect.

**note** For bank F programs, the EG Release Time parameter used by the Amp will be set to 0.

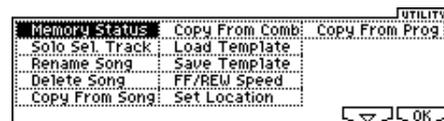
Normally you can make effective use of this with a drum program. When you turn this **Off**, the key-off timing will be valid, letting you use the key-on/off timing to control the gate time. Sometimes you can obtain an interesting effect by turning this **Off** for a previously-created drum track.

**Reverse** [Off, PRG, ON]

Controls the "Rev (Reverse)" parameter (2.1-1b PG p.9, 5.1-1b PG p.143) for each Multisample or Drumsample of program OSC1/2. If you turn this **On**, all multisamples and drum samples will play backward. If you turn this **Off**, all multisamples and drum samples will play normally. If you set this to **PRG**, the settings of the program (or the drum kit used by the program) will be used. Normally you can make effective use of this with a drum program.

**▲** This has no effect on bank F programs.

## 5.3-1b: UTILITY



"Memory Status", "Solo Sel. Track", "Rename Song", "Delete Song", "Copy From Song" (PG p.71)  
 "Copy From Comb" (PG p.72, p.20)  
 "Load Template" (PG p.72)  
 "Save Template", "FF/REW Speed", "Set Location" (PG p.73)  
 "Copy From Prog" (p.20)

## Copy From Comb (Copy from Combination)

As described below, system version 2.0 enhances the utility menu command “Copy From Comb” (PG p.72) found in the SEQ 1.1-1 page. Also, a “Multi REC Standby” check box has been added to the “Copy From Comb” dialog box.

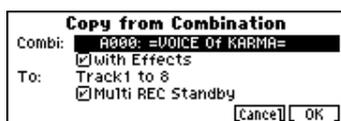
### Enhancements

Only the timbres used by the combination will be copied. The settings of timbres in the combination whose “Status” (3.1-1(2)a PG p.82) is **Off** will not be copied. However, if none of the timbres used in the combination are set to a MIDI channel (3.1-1(2)a “MIDI Channel”) setting of **Gch**, one of the tracks will automatically be set to a MIDI channel of **Gch**. Then, “Track Select” will automatically be set to that track. This means that after you execute the copy, you can immediately play in the same state as the combination.

### “Multi REC Standby” check box

#### Multi REC Standby

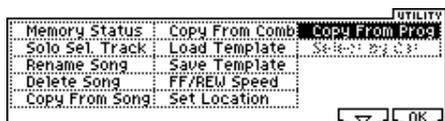
[Off, On]



**On (checked):** “Status” will automatically be set to **REC** for tracks that correspond to valid timbres in the copy-source destination. Also, the Preference page “Multi REC” setting will automatically be turned **On (checked)**, and “Recording Mode” will automatically be set to **Over Write**. This is valid when the “To:” setting is **Track 1 to 8**.

## Copy From Prog (Copy from Program)

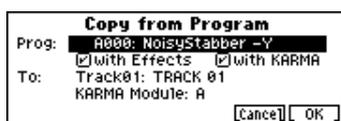
System version 2.0 adds “Copy from Program” to the utility menu commands of the SEQ 1.1-1 page (PG p.71 1.1-1c).



### Copy From Program

Copies the settings of the specified program to a track or effect of the currently selected song.

- Choose “Copy From Program” to access the dialog box.



- Use “Prog” to select the copy-source program.
- Use “with Effects” to specify whether the insert effect, master, effect, and master EQ settings will also be copied. The “Control Channel” of each effect will be set to the MIDI channel of the copy-destination track.

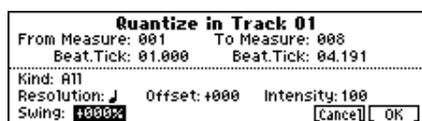
### About the “BUS Select” (7.1-1(2)a) setting

- Regardless of the “with Effects” setting, “BUS Select” will be set to **DKit** if the copy-source program’s “Use DKit Setting” is **On (checked)**. At the same time, the “DKit IFX Patch” (PG p.65) setting will be reset to the default state.
  - If “with Effects” is **On (checked)**, the “BUS Select” setting of the copy-source program will be copied. If the “BUS Select” of a track other than the copy-destination track is set to **IFX1-IFX5**, it will automatically be set to **L/R**.
  - If “with Effects” is **Off (unchecked)**, the “BUS Select” of the copy-source program and copy-destination track will automatically be set to **L/R** if it had been **IFX1-IFX5**.
- Use “with KARMA” to specify whether KARMA module settings will also be copied. If this is **On (checked)**, the KARMA module settings of the copy-source program will be copied to the “KARMA Module” you specify in specify ⑥. The “Input Channel” and “Output Channel” of the KARMA module will be set to the MIDI channel of the “Track” you specify in step ⑤, and “Track Thru” will be set to **On (checked)**.
  - Use “To” to specify the copy-destination track. The parameters for that track will be initialized. “Program Select” (1.1-2(3)e) will be set to the copy-source program.
    - “MIDI Channel” (3.1-1(2)a) and “Bank (EX2) MSB/LSB” (3.1-1(2)a) settings will not change.
    - The “Status” (3.1-1(2)a) setting will automatically be set to **INT**.
    - If the copy-source is a bank F program, the “Voice Reserve” (2.3 PG p.272) setting of the copy-destination track will be set to **6**, and the “Voice Reserve” setting of the other tracks will automatically be set to **0**. Also, the “BUS Reference” (2.3 PG p.272) setting will automatically be set to the copy-destination track.
    - The 2.2: Ed-Ctrl page (PG p.10) settings of the copy-source program will be copied.
  - Use “KARMA Module” to specify the copy-destination KARMA module.
  - Press the [F8] (“OK”) key to execute the copy, or press [F7] (“Cancel”) to cancel without executing.

## Quantize - Swing Parameter

System version 2.0 adds a “Swing” parameter to the dialog box for the “Quantize” utility menu command (⌘PG p.101) of the SEQ 5.2-1: Track Edit page.

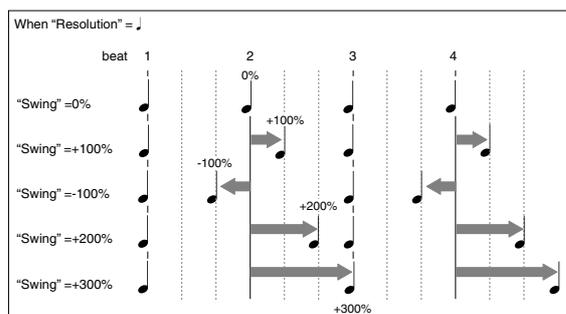
### Quantize



### Swing [-300%...+300%]

Adds a sense of swing to the rhythm. For example, this can be used to add a slight shuffle feel to a “square” 16-beat.

With a setting of other than 0%, the position of notes that are at even-numbered beats (relative to the “Resolution” you specify) will be adjusted to add a sense of swing to the rhythm. With a setting of +100%, these notes will be moved 1/3rd of the way toward the next beat of the “Resolution” you specified. With a setting of +300%, the notes at even-numbered beats will be moved all the way to the location of the next odd-numbered beat.



## Auto Song Setup function

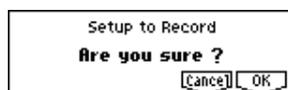
This function automatically sets up a song with the settings of a program or combination, so that ideas and inspirations for songs that occur to you while playing the KARMA workstation can be immediately developed into a song.

### Example procedure (Combination mode)

- ① Enter Combination mode.
- ② In 1.1: Play, select the desired combination and edit the KARMA RTC etc. as desired.

**note** If you want to save the edited state of the combination, execute “Update Combination” or “Write Combination.”

- ③ Hold down the [ENTER] key and press the [REC/ WRITE] key. The “Setup to Record” dialog box will appear.



- ④ Press the [F8] (“OK”) key to execute the Auto Song Setup function, or press the [F7] (“Cancel”) key if you decide to cancel without executing. You will automati-

cally move to Sequencer mode, and the settings of the combination will be copied to the song. The first unused song will be the copy-destination song.

### Contents that are copied from a combination

The copied contents will be the same as when you execute the Copy From Combi (1.1-1c) dialog box with the following settings: “with Effects” **On (checked)**, “To:” set as **Track1 to 8**, and “Multi REC Standby” (⌘p.20) **On (checked)**.

### Contents that are copied from a program

The copied contents will be the same as when you execute the “Copy From Prog” (1.1-1c ⌘p.20) dialog box with the following settings: “with Effects” **On (checked)**, “To:” set as **Track01**, “with KARMA” **On (checked)**, and “To:” set as **KARMA Module A**.

- ⑤ The KARMA music workstation will automatically enter record-ready mode, and the metronome will sound according to the Metronome setting (Sequencer mode 1.1-6a).
- ⑥ Press the [START/STOP] key to begin realtime recording. To stop recording, press the [START/STOP] key once again. (⌘BG p.62 “Realtime recording on a track”)

## Other enhancements

### Utility menu

The name of the utility menu commands displayed in the Sequencer mode utility menu have changed as follows.

Example: SEQ 6.1-1d: UTILITY



- |                       |   |                 |
|-----------------------|---|-----------------|
| • Solo Selected Track | → | Solo Sel. Track |
| • Copy From Combi     | → | Copy From Comb  |
| • Load Template Song  | → | Load Template   |
| • Save Template Song  | → | Save Template   |
| • Select by Category  | → | Select by Cat.  |
| • Copy KARMA Module   | → | Copy KARMA Mdl  |
| • Init KARMA Module   | → | Init KARMA Mdl  |

### Improvements

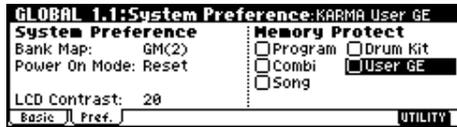
The following operations have been improved in Sequencer mode.

- The performance data that has already been recorded will be preserved even if the remaining amount of sequencer memory reaches zero during recording.
- When MIDI data from a KARMA module passes through multiple tracks of the same MIDI channel whose “Status” is set to **BTH** and is output via MIDI, the duplicate events will not be output (only one stream of events will be output).
- The “Multi REC” **On (checked)** setting is no longer reset to off when you temporarily move to another mode.

# Global mode

## User GE Memory Protect

A protect setting for user GE memory has been added to Memory Protect (1.1-2b [PG p.136](#)) in the GLOBAL 1.1-2: Pref. (System Preference) page.



### User GE (KARMA User GE) [Off, On]

Protects the user GE memory in internal memory.

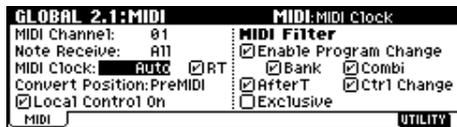
**On (checked):** The internal user GE memory will be protected, and the following writing operations will not be permitted.

- Receiving user GE data via MIDI data dump
- Loading user GE data from disk

**Off (unchecked):** You will be able to write to internal user GE memory.

## MIDI Clock

The GLOBAL 2.1-1a: MIDI Setup ([PG p.137](#)) “MIDI Clock” parameter now has an additional setting of **Auto**.



### MIDI Clock [Internal, External, Auto]

**Auto:** Operation will normally be the same as **Internal**. With the Auto setting, operation will automatically switch to the equivalent of the **External** setting when MIDI clock messages are received from an external MIDI device connected to the MIDI IN connector.

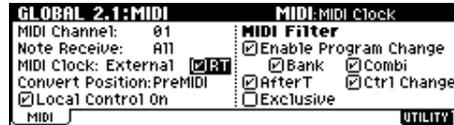
For details on the **Internal** and **External** settings, refer to [PG p.137](#).

**note** You can use this to keep the KARMA in external sync mode while working with an external sequencer, yet still be able to start and play the KARMA function while the external sequencer is not running or sending MIDI clock.

**note** If no further MIDI clock message is received within 500 ms after receiving a MIDI clock, start, or continue message from MIDI IN, or if you start the KARMA music workstation by operating the front panel, operation will switch to the equivalent of **Internal**.

## RT (Realtime Command)

An “RT (Realtime Command)” check box has been added to GLOBAL 2.1-1a: MIDI Setup ([PG p.137](#)).



### RT (RealTime Command) [Off, On]

**Off (unchecked):** MIDI common messages and realtime messages (song position pointer, start, continue, stop) will not be received from the MIDI IN connector when “MIDI Clock” is set to **External** or **Auto**. (Song select messages will be received.)

**note** Turn this Off if the song settings of KARMA music workstation are being unintentionally reset by messages from an external MIDI sequencer. You can use this so that the KARMA music workstation ignores the MIDI Start and Stop commands of an external sequencer, yet still responds to MIDI Clock while in external sync mode.

## S/S Out P/C (Start/Stop Out P/C)

A new parameter “S/S Out P/C (Start/Stop Out P/C)” has been added to GLOBAL 2.1-1b: MIDI Filter ([PG p.138](#)).



### S/S Out P/C (Start/Stop Out P/C) [Off, On]

In Program and Combination modes, this function transmits a MIDI start message when you trigger the KARMA function, and a MIDI stop message when you turn it off. This lets you make an external MIDI sequencer or rhythm/groove machine start playing at the moment that the KARMA function begins playing.

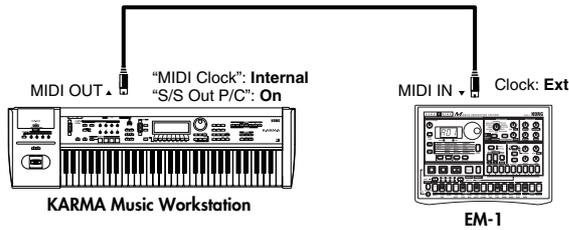
**Off (unchecked):** MIDI “Start” and “Stop” messages will not be sent in Program and Combination mode. Normally you will leave this **Off (unchecked)** when not slaving external devices.

**On (checked):** MIDI system realtime messages “Start” and “Stop” will be transmitted in Program and Combination mode. If “MIDI Clock” ([PG 2.1-1a PG p.137, PG p.22](#)) is set to **Internal** or **Auto** (and operating as Internal), the start and stop messages will be transmitted under the conditions described below. This can be used to simultaneously start an external MIDI sequencer or rhythm/groove machine at the moment the KARMA function begins playing.

**Start:** If the [KARMA ON/OFF] key is on, the MIDI system realtime message “Start” will be transmitted at the moment you use the keyboard or CHORD TRIGGER 1-4 keys to trigger the GE selected for a KARMA module.

**note** “Start” will be transmitted at the moment that the GE phrase or pattern is triggered according to the “KARMA Key Zone” (Program, Combination 6.1-2a) setting for that KARMA module.

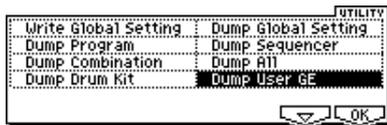
**Stop:** If “Start” has been previously transmitted, the MIDI system realtime message “Stop” will be transmitted at the moment you turn off the [KARMA ON/OFF] key.



PG p.245 “Connecting MIDI devices/computers (MIDI connectors),” PG p.253 “Synchronizing the playback of the KARMA function or sequencer,” BG p.88 “Synchronizing the KARMA function”

## Dump User GE

In conjunction with the newly added 320 rewritable user GEs, the KARMA music workstation now supports MIDI dumps of user GE data. A “Dump User GE” command has been added to the utility menu commands of the GLOBAL 2.1-1 page. (PG p.139)



### Dump User GE



**User GE** [Bank, Single, User Template]  
Selects the user GE(s) that you want to dump.

**Bank:** One bank of GEs (32) will be dumped. Move the cursor to the field below, and select the bank that you want to dump, from the range of Bank U-A to Bank U-J.

**Single:** One GE will be dumped. Move the cursor to the field below, and select the GE that you want to dump, from the range of GE numbers 1190 (U-A)–1509 (U-J).

**User Template:** Dump the User Template data used by the User GEs.

#### Time required for dumping user GE data

Type of data dumped	Data size (kbytes)		Time required (seconds)	
	KARMA music workstation	EXB -MOSS installed	KARMA music workstation	EXB -MOSS installed
GE single (a)	2.4	←	0.7	←
GE bank (a)	77.9	←	24.2	←
Template	68.0	←	21.2	←

#### Time required for writing to user GE dump memory

Type of data dumped	Processing time to memory
GE single (a)	approx. 1 second
GE bank (a)	approx. 1 second
Template	approx. 1 second

User GE data is not included in Dump All.

## Foot SW Assign

The following settings have been added to “Foot SW Assign” in the GLOBAL 6.1-1: Foot page (PG p.145).

### Foot SW Assign [Off...KARMA Chord Trigger 4]

If you select a function that includes a CC#, that MIDI control message will be transmitted each time the foot switch is turned on or off. (Off: 0, On: 127)

**Tap Tempo:** In Program, Combination, Sequencer, or Song Play modes, you can use a foot switch to control tap tempo for the KARMA function, sequencer, or SMF playback. Control the tempo in realtime by pressing the connected foot switch in time with the beat at the desired tempo.

You can use tap tempo control whenever the [TEMPO] knob can be operated. For example if a song is playing in Sequencer mode with “Tempo Mode” (PG p.70) set to **Auto**, it will not be possible to use tap tempo control.

**JS+Y (CC#01), JS-Y (CC#02):** The foot switch will control the effect of the KARMA music workstation’s joystick. Turning the foot switch on will have the same result as moving the joystick all the way in the +Y or -Y direction, and turning the foot switch off will have the same result as returning the joystick to the center.

**Slider (CC#18):** The foot switch will control the effect of the KARMA music workstation’s [VALUE] slider. Turning the foot switch on will have the same result as moving the [VALUE] slider to the maximum, and turning it off, to the minimum position.

**Knob 1...4, SW1, SW2:** The foot switch will control the effect of the KARMA music workstation’s Knob 1–4 or SW 1/2. The MIDI control message assigned to “Knob 1...4 B-Assign” or “SW 1/2 Assign” in each mode will be transmitted when you turn the foot switch on/off.

**KARMA RTC Knob 1...8, KARMA RTC SW 1/2, KARMA Scene, KARMA Chord Trigger 1...4:** The foot switch will control the effect of the knob or switch that controls the KARMA function. The MIDI control message you assigned in Global mode 6.1-2: KARMA 1.6.1-3: KARMA2 (PG p.146) will be transmitted when you turn the foot switch on/off.

## Foot Pedal Assign

The following settings have been added to “Foot Pedal Assign” in the GLOBAL 6.1-1: Foot page (PG p.145).

If you select a function that includes a CC#, that MIDI control message (1–127) will be transmitted when the foot pedal is operated.

**JS+Y (CC#01), JS-Y (CC#02):** The foot pedal will control the effect of the KARMA music workstation’s joystick.

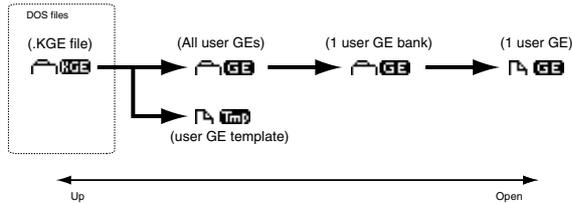
**Slider (CC#18):** The foot pedal will control the effect of the KARMA music workstation’s [VALUE] slider.

**Knob 1...4:** The foot pedal will control the effect of the KARMA music workstation’s Knob 1–4. The MIDI control message assigned to “Knob 1...4 B-Assign” in each mode will be transmitted when you operate the foot pedal.

**KARMA RTC Knob 1...8:** The foot pedal will control the effect assigned to the KARMA RTC Knob 1–8. The MIDI control message you assigned in “KARMA Realtime Controls” of Global mode 6.1-2: KARMA 1 (PG p.146) will be transmitted when you operate the foot pedal.

# Disk mode

KARMA Music Workstation system version 2.0 lets you load or save the GE data used by the KARMA function. GE data from an EXB-PCM 04/05 (planned for release) that supports the KARMA music workstation can be loaded into internal user GE memory, or GE data from the internal user GE memory can be saved to a floppy disk. You can also load/save Template data such as rhythm patterns and CC patterns for use with user GE data. This data consists of GE data and Template data, and the .KGE files (extension: .KGE) that contain these two types of data. (See diagram below.)



## 1.1-1: Load

### Load .PCG

The following item has been added to 1) Load .PCG in PG p.151.

#### Load .PCG

If you want the identically-named .KGE file to be loaded along with the .PCG file, check the "Load \*\*\*\*\*.KGE too" check box. If this is checked, the .KGE file with the same name as the .PCG file will be loaded as well.



### Load .SNG

The following item has been added to 12) Load .SNG in PG p.152.

#### Load .SNG

If you want the identically-named .KGE file to be loaded along with the .SNG file, check the "Load \*\*\*\*\*.KGE too" check box. If this is checked, the .KGE file with the same name as the .SNG file will be loaded as well.



## Additional Load functions

The following functions have been added to PG p.150 "Load Selected."

### Load .KGE

select icon

All data from the .KGE file will be loaded.



- ① If you want the identically-named .PCG and .SNG files to be loaded along with the .KGE file, check the "Load \*\*\*\*\*.PCG too" and "Load \*\*\*\*\*.SNG too" check boxes.
- ② Press the [F8] ("OK") key to load the data, or press the [F7] ("Cancel") key to cancel without loading.

### Load GEs

select icon

All GE data from a .KGE file will be loaded.

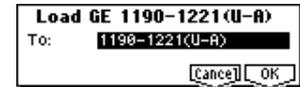


- ① To load the data, press the [F8] ("OK") key. To cancel without loading, press the [F7] ("Cancel") key.

### Load GE Bank

select icon

All GE data of the selected bank will be loaded into the load-destination bank you specify.



- ① Use "To" to specify the load-destination bank.
- ② Press the [F8] ("OK") key to load the data, or press the [F7] ("Cancel") key to cancel without loading.

### Load a GE

select icon

The selected GE data will be loaded into the GE number you specify as the load-destination.



- ① Use "To" to specify the load-destination bank and GE number.
- ② Press the [F8] ("OK") key to load the data, or press the [F7] ("Cancel") key to cancel without loading.

### Load User Template

select icon

Template data such as the rhythm patterns and CC patterns used by the user GEs will be loaded.

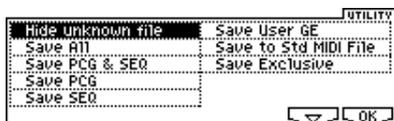


- ① Press the [F8] ("OK") key to load the data, or press the [F7] ("Cancel") key to cancel without loading.

## 1.1-2: Save

### Utility menu

“Save PCG & SEQ” and “Save User GE” have been added to the utility menu commands. (☞PG p.153)



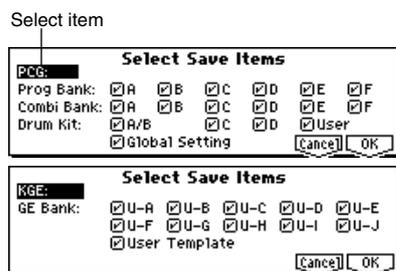
### Changes and additions to the Save function

The following functionality has been changed or added.

#### Save All

In addition to saving .PCG files and .SNG files, you can now save User GE data as a .KGE file. Also, the “Select Save Items” dialog box has changed as follows. (☞PG p.154 Save All: ③)

- Press the [F6] (“S.Item”) key to access the “Select Save Items” dialog box. Use “Select Items” to select **KGE** or **PCG**, and check the check boxes for the banks and items that you want to save. Unchecked banks will not be saved.



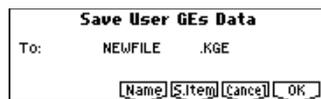
#### Save PCG & SEQ

All programs, combinations, drum kits, and global settings in internal memory will be saved to disk as a .PCG file, and the songs will be saved to disk as a .SNG file. The contents are the same as the “Save All” function in system version 1.0. (☞PG p.153)

#### Save User GE

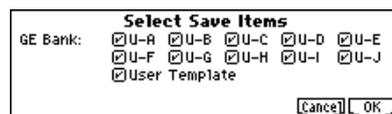
All user GE data in internal memory will be saved as a .KGE file.

- Select “Save User GE” to access the dialog box.



- Press the [F5] (“Name”) key to access the text dialog box, and specify the desired file name. (☞BG p.39)
- Press the [F6] (“S.Item”) key to access the “Select Save Items” dialog box, and select the data that you want to save. **Check** the check box for each bank that you want to save. Unchecked banks will not be saved. If you **check** “User Template,” template data such as the

rhythm patterns and CC patterns used by the user GEs will also be saved.



- Press the [F8] (“OK”) key to save the data, or press the [F7] (“Cancel”) key to cancel without saving.

## Other enhancements

The following operation has been improved in Disk mode.

- When you use the **OPEN** key to move to a lower directory or file, and then press the **UF** key to move back to the higher level, the original directory or file will be selected.

## Data compatibility

KARMA Music Workstation system version 2.0 (subsequently referred to as version 2.0) maintains data compatibility in all data formats with the previous KARMA Music Workstation system version 1.0 (subsequently referred to as version 1.0). Data can be loaded/saved via floppy disk. However, you must use caution in the following cases.

#### MIDI exclusive data dump

Data is not compatible for MIDI exclusive data dumps between KARMA music workstations of differing system versions (1.0 and 2.0). We recommend that you update both KARMA music workstations to system version 2.0.

#### MIDI exclusive parameter changes

If you are transmitting this data from version 1.0 and receiving it in version 2.0, parameters that existed in version 1.0 are compatible, and can be transmitted and received. If you are transmitting this data from version 2.0 and receiving it in version 1.0, parameters that existed in version 1.0 are compatible, and can be transmitted and received. Parameters that were added in version 2.0 do not exist in version 1.0, and will not sound or operate correctly. Some parameters may cause the operation to become unstable. In this case, we recommend that you update both the transmitting and receiving KARMA music workstation to system version 2.0.

**note** The PRELOAD.PCG and PRELOAD.SNG files on the included KMFD-00P floppy disk are in system version 1.0 format. These files can be loaded correctly by KARMA Music Workstation system version 2.0, but if you attempt to save the same PCG and SNG files that were loaded, you will no longer be able to save them on a single floppy disk. This is because system version 2.0 had added various parameters so that the file size has increased, and is not a malfunction. Please use two floppy disks to save the data. (☞PG p.154 “If the data does not fit on a single disk”)

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## Parameters that can be loaded/saved to disk in version 2.0, but not in version 1.0

### 1. Program, Combination, Sequencer, Song Play parameters

- Each mode 6.1-1 (1.1-1): “KARMA Time Signature”
- Each mode 6.2-3: “Start Seed”
- Each mode 6.2-3: “Freeze Loop Length”
- Each mode 6.4-1(2): RT Parameter - “Start Seed” / “Rand Group”
- Each mode 6.4-1(2): RT Parameter - “Loop Length (Freeze Loop Length)” / “Rand Group”
- Each mode 6.4-1(2): RT Parameter “Time Sig. (Time Signature)” / “PE Group”

- **Version 2.0 → Version 1.0**

If the above parameters are loaded in version 1.0, the settings will be ignored since these parameters do not exist.

- **Version 1.0 → Version 2.0**

In version 2.0, the above parameters will be set to their default values.

### 2. Sequencer mode “Tone Adjust” parameters (5.3-1–6)

- **Version 2.0 → Version 1.0**

These will be ignored since version 1.0 does not have the “Tone Adjust” parameters.

- **Version 1.0 → Version 2.0**

In version 2.0, the “Tone Adjust” parameter settings will be set to their default values.

### 3. Program, Combination, Sequencer, Song Play modes TxFltr “Notes” parameter (Program mode: 6.1-4, Other modes: 6.1-6)

- **Version 2.0 → Version 1.0**

Version 1.0 will maintain this as internal data, but will ignore it. However, if you save this state as a .PCG file, the setting will be saved to disk.

- **Version 1.0 → Version 2.0**

In version 2.0, the TxFltr “Notes” parameter will be turned **On (checked)**.

### 4. Global mode RT (Realtime Command) parameter (2.1-1), “S/S Out P/C (Start/Stop Out P/C)”

- **Version 2.0 → Version 1.0**

Version 1.0 will maintain this as internal data, but will ignore it. However, if you save this state as a .PCG file, the setting will be saved to disk.

- **Version 1.0 → Version 2.0**

In version 2.0, this parameter will be turned **Off (unchecked)**.

### 5. Global mode settings that were added in version 2.0

- “Foot Switch Assign” (6.1-1) Tap Tempo...KARMA Chord Trigger setting
- “Foot Pedal Assign” (6.1-1) JS+Y (CC#01)...KARMA RTC Knob 8 setting
- “MIDI Clock” (2.1-1) Auto setting

- **Version 2.0 → Version 1.0**

The version 1.0 “Foot Switch Assign” parameter will be set to **Cue Repeat Control**, “Foot Pedal Assign” will be set to **MFX Send2 (CC#91)**, and “MIDI Clock” will be set to **External**.

### 6. Program, Combination, Sequencer, and Song Play mode GE Select: 1190 (U-A)...1509 (U-J) settings that were added in version 2.0

- **Version 2.0 → Version 1.0**

Since version 1.0 does not have these GE numbers, it will not play or operate correctly.

### 7. GE parameters and GE parameter values that were added in version 2.0 (6.3-1–4)

- **Version 2.0 → Version 1.0**

Since version 1.0 does not have these GE parameters, it will not play or operate correctly.

- **Version 1.0 → Version 2.0**

When this data is loaded into version 2.0, the values of the added parameters will be set so that the data will sound and operate correctly. The added GE parameters will be set to their default values.



However for some version 1.0 GEs and GE parameter settings, the parameters may be automatically re-set in version 2.0.

# Other functions

## Tap Tempo Control

A tap tempo control function has been added in Program, Combination, Sequencer, and Song Play modes.

While the KARMA function, the sequencer, or SMF data is playing in these modes, you can control the tempo in realtime by lightly tapping the [TIMBRE/TRACK] in time with the beat at the desired tempo.

This function is convenient when you want to adjust the tempo of the KARMA function or the sequencer in realtime to match some other beat.

### Example procedure

- ① In Program mode, select **A004: ! (Tricky) Kit !**.



- ② Lightly tap the [TIMBRE/TRACK] key several times at a desired tempo. Then play the keyboard or press one of the Chord Trigger buttons to start the beat at that Tempo.
- ③ Lightly tap the [TIMBRE/TRACK] key at the timing of the beats. Then, speed up your tapping slightly. The tempo of the drum pattern will become a bit faster. The tempo "♩=" indication in the upper right of the LCD screen will change along with the tempo.

Tap tempo control can be used if it is possible to operate the [TEMPO] knob. For example if a song is playing in Sequencer mode with "Tempo Mode" (see PG p.70) set to **Auto**, you will not be able to use tap tempo control.

**note** Tap tempo can also be controlled from a connected foot switch. (see p.23 Global mode "Foot Sw Assign")

## Copy From Program (Combination mode - Copy from Program)

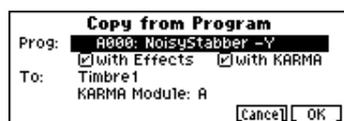
"Copy from Program" has been added to the utility menu commands that appear in Combination mode pages such as COMBI 1.1-1. (see PG p.44)



### Copy from Program

Copies the settings of the specified program to the timbres and effects of the currently selected combination.

- ① Choose "Copy From Program" to access the dialog box.



- ② Use "Prog" to select the copy-source program.
- ③ Use "with Effects" to specify whether insert effect, master effect, and master EQ settings will also be copied. The "Control Channel" of each effect will be set to the MIDI channel of the copy-destination timbre.

#### About the "BUS SELECT" (7.1-1(2)a) setting

- If the copy-source program's "Use DKit Setting" is **On (checked)**, "BUS Select" will be set to **DKit** regardless of the "with Effects" setting. Also, the "DKit IFX Patch" (see PG p.65) setting will be reset to the default state.
- If "with Effects" is **On (checked)**, the "BUS Select" setting of the copy-source program will be copied. Also, if "BUS Select" is set to **IFX1-IFX5** for a timbre other than the copy-destination timbre, it will be automatically set to **L/R**.
- If "with Effects" is **Off (unchecked)** and the "BUS Select" setting of the copy-source program and copy-destination timbre are set to **IFX1-IFX5**, it will automatically be set to **L/R**.

- ④ Use "with KARMA" to specify whether KARMA module settings will also be copied. If this is **on (checked)**, the KARMA module settings of the copy-source program will be copied to the KARMA module you specify in step ⑥. The KARMA module's "Input Channel" will be set to **Gch**, the "Output Channel" will be set to the MIDI channel of the timbre you specify in step ⑤, and "Timbre Thru" will be turned **On (checked)**.
- ⑤ Use "To" to specify the copy-destination timbre. The parameters for that timbre will be initialized. The copy-source program will be specified for "Program Select" (1.1-2c).
  - The "MIDI Ch" (3.1-1a) setting will not change if "with KARMA" is **On (checked)**, but will automatically be set to **Gch** if "with KARMA" is **Off (unchecked)**.
  - The "Bank (EX2) MSB/LSB" (3.1-1a) setting will not change.
  - If the copy-source is a bank F program, the "Voice Reserve (2.3 see PG p.272) of the copy-destination timbre will be automatically set to **6**, and the "Voice Reserve" of the remaining timbres will be automatically set to **0**. Also, the "BUS Reference" (2.3 see PG p.272) setting will be automatically set to the copy-destination timbre.
  - The 2.2: Ed-Ctrl page (see PG p.10) settings of the copy-source program will be copied.

- ⑥ Use "KARMA Module" to specify the copy-destination KARMA module.
- ⑦ Press the [F8] ("OK") key to execute the copy, or press the [F7] ("Cancel") to cancel without executing.

## MIDI

### About system exclusive messages

KARMA music workstation system version 2.0 adds support for the following system exclusive messages.

- SMF Data Dump Request reception
- SMF Data Dump transmission
- GE Data Dump Request reception
- GE Data Dump transmission/reception
- Parameter change transmission/reception in Sequencer mode

In system version 2.0, the contents of the following system exclusive messages have changed.

- The PROGRAM PARAMETER DUMP transmission/reception Function ID **0x4C** has changed to **0x72**.
- The COMBINATION PARAMETER DUMP transmission/reception Function ID **0x4D** has changed to **0x73**.
- The SEQUENCE DATA (In Memory) DUMP transmission/reception Function ID **0x48** has changed to **0x74**.
- The ALL DATA (PROG, COMBI, GLOBAL, DRUMS, SEQ) DUMP transmission/reception Function ID **0x50** has changed to **0x75**.

\* If you would like to obtain the MIDI Implementation, which includes a complete listing of the MIDI exclusive format, please contact the Korg distributor for your country.

### About SMF Data Dump Request reception, SMF Data Dump transmission, and GE Data Dump transmission/reception

By using KARMA MW\* (dedicated Mac/PC software for the KARMA music workstation), you can use your computer to edit and create GEs. You can create your own original user GEs by editing all of the more than 400 parameters that make up a GE. The GE data you create can be saved/loaded either via floppy disk or as a MIDI GE data dump, and used in the KARMA music workstation.

The KARMA MW software is also able to **convert SMF (Standard MIDI File) data into a GE**. You can use this capability to create a user GE from any MIDI performance data, and then edit the GE parameters to freely modify the phrase. So that you can make efficient use of this, KARMA Music Workstation system version 2.0 can **receive an SMF data dump request (song, track, measure region)** from the KARMA MW software, and respond by converting sequence data from Sequencer mode into SMF and **transmitting it as an SMF data dump**. Then the KARMA MW software can convert this data into a user GE, and **dump the GE data** back into the KARMA music workstation, so that you can use the KARMA function to modify the phrase.

\* Produced by Karma Lab (<http://www.karma-lab.com>). Macintosh and Windows versions are available. English version only.

### About parameter change transmission/reception in Sequencer mode

In Sequencer mode, the following parameters can be edited individually by transmitting and receiving system exclusive parameter change messages.

- SEQ 1.1: Play/REC parameters other than "Location," "Meter," "Resolution," "♪ (Tempo)," "Tempo Mode," Song name, "RPPR On/Off," "Track Select," "PLAY/MUTE/REC," "SOLO On/Off," and Preference page parameters.
- The parameters of the following pages:

SEQ 1.2: Loop	SEQ 2.2: Controller
SEQ 2.3: MOSS	SEQ 3.1: Param1
SEQ 3.2: Param2	SEQ 3.3: Key Zone
SEQ 3.4: Vel Zone	SEQ 4.1-4: MIDI Filter 1-4
SEQ 5.3: Tone Adjust	SEQ 6.1: KARMA
SEQ 6.2: KARMA Mdl	SEQ 6.3: KARMA GE
SEQ 6.4: KARMA RT	SEQ 7.1: BUS
SEQ 7.2: Insert FX	SEQ 7.3: Master FX

## Program mode

Operation when the Program mode PROG 2.1-1b "Mode (Voice Assign Mode)" (ⓂPG p.7) is **Mono** has changed as follows.

In system version 1.0, notes were remembered internally for up to three note-ons.

C on → D on → E on → F on → F off → E off → D off  
C sounds D sounds E sounds F sounds E sounds D sounds No sounds

In system version 2.0, the number of note-ons remembered has been expanded to ten. This is effective when performing in mono mode.

C on → D on → E on → F on → F off → E off → D off  
C sounds D sounds E sounds F sounds E sounds D sounds C sounds

**IMPORTANT NOTICE TO CONSUMERS**

This product has been manufactured according to strict specifications and voltage requirements that are applicable in the country in which it is intended that this product should be used. If you have purchased this product via the internet, through mail order, and/or via a telephone sale, you must verify that this product is intended to be used in the country in which you reside.

**WARNING:** Use of this product in any country other than that for which it is intended could be dangerous and could invalidate the manufacturer's or distributor's warranty.

Please also retain your receipt as proof of purchase otherwise your product may be disqualified from the manufacturer's or distributor's warranty.