



# An Overview of SOUND Canvas VA

SOUND Canvas VA brings back SOUND Canvas, the de-facto standard desktop sound module, as a software synthesizer for today.

In addition to music production using GS sounds, SOUND Canvas VA provides system effects such as reverb and EQ as well as 64 different insertion effects; you can use it to create new songs, and also to play back songs that were produced on an SC-88Pro or later SOUND Canvas unit.

The summation of the SOUND Canvas series, fusing nostalgia with today's taste: that's SOUND Canvas VA.

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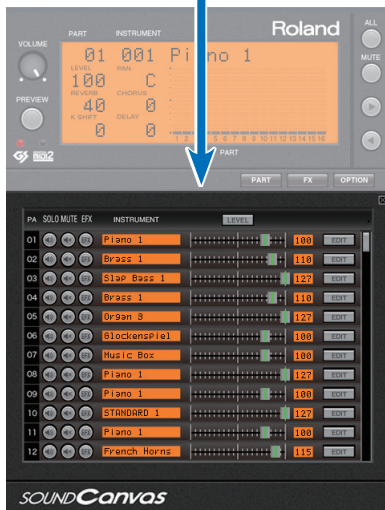
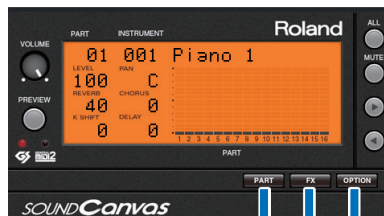
# Panel Descriptions

The various screens of SOUND Canvas VA provide a user interface that is reminiscent of classic “Sound Canvas” DTM sound modules.

## Moving Between Screens

In SOUND Canvas VA, you can move from the main view to other setting screens such as the part view and effect view.

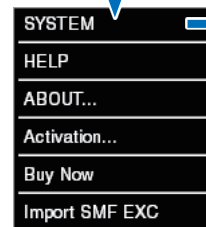
Main View



Part View



Effect View



Option Menu



System Menu

## Main View

Here you can set the sound module's overall volume and part parameters, and access other views.

**Main display area**  
Shows the sound name and level of the selected part, settings such as pan, and the level of all parts. You can click a sound name to edit the sound, or click a parameter's numeric value to edit the value.

**[VOLUME] knob**  
Adjusts the volume of the entire sound module.

**[PREVIEW] button**  
Previews the sound of the selected part.

**[PART] button**  
Displays the part view.

**[FX] button**  
Displays the effect view.

**[OPTION] button**  
Displays a menu from which you can access system settings, activation, and help (this document).

**[ALL] button**  
Lets you edit parameters that are common to all parts.

**[MUTE] button**  
Mutes the sound of the part that is shown in the main display area.

**Cursor buttons**  
Switches the part that is shown in the main display area.

**Sound module mode indicator**  
Indicates the current sound module mode.

Status	Mode
Lit GS	GS Mode
Lit GENERAL MIDI2	GM2 Mode
Both unlit	GM Mode

Menu	Explanation
SYSTEM	Displays the system menu (p. 7). In the system menu you can make settings for SOUND Canvas VA such as the sound module mode and the sound map.
HELP	Displays this document.
ABOUT	Displays version information for SOUND Canvas VA.
Activation	Activates SOUND Canvas VA and removes the functionality limitation. Functionality limitation: Sound is no longer produced ten minutes after startup.
Buy Now	Displays a site where you can purchase the product version of SOUND Canvas VA.
Import SMF EXC	If you're using a DAW that cannot handle system exclusive messages, this loads MIDI data and applies the system parameters to SOUND Canvas VA.

## Part View

In the part view you can adjust the level of each part and turn the system effects on/off. By pressing the [EDIT] button you can access the "TONE EDITOR" which lets you edit the tone in detail.

**PA (PART No.)**  
This is the part number (01-16).

**[SOLO] [MUTE] buttons**  
A part whose button is on is soloed or muted.  
\* These buttons are not linked with the solo buttons or mute buttons of your DAW.

**[EFX] button**  
The insertion effect applies to parts whose button is lit.

**Change button and slider**  
By pressing the change button, you can switch the displayed parameter (LEVEL/PAN/REVERB/CHORUS/DELAY). You can edit the value by using the slider or by entering a numeric value.

**[EDIT] button**  
Displays the "TONE EDITOR."

**INSTRUMENT**  
Shows the tone (sound) for each part. When you click a tone name, "TONE LIST" appears.

### TONE EDITOR [GENERAL]

In TONE EDITOR [GENERAL] you can make settings for the principal tone parameters. Press the [ADVANCE] button to make detailed settings.

PREVIEW PART Part1 Piano 1

TONE EDITOR [GENERAL] [ADVANCED]

REVERB 40 CHORUS 0  
DELAY 0 PAN 0  
ON/OFF EQ

FILTER CUTOFF RESONANCE  
ENVELOPE ATTACK DECAY RELEASE  
TUNING OFFSET FINE  
VIBRATO RATE DEPTH DELAY  
PORTAMENTO ON/OFF TIME  
PITCH KEY BEND RANGE LEVEL

### TONE EDITOR [ADVANCED]

In TONE EDITOR [ADVANCED] you can make detailed settings for the tone parameters.

Instrument Part  
PREVIEW PART Part1 Piano 1

TONE EDITOR [ADVANCED] [GENERAL]

PARAMETER	VALUE
MOD TVF Cutoff Control	0
MOD Amplitude Control	0
MOD LFO1 Rate	0.0
MOD LFO1 Pitch Depth	50
MOD LFO1 TVF Depth	0
MOD LFO1 TVA Depth	0.0
MOD LFO2 Rate	0.0
MOD LFO2 Pitch Control	0
MOD LFO2 TVF Depth	0
MOD LFO2 TVA Depth	0.0
Bend Pitch Control	2
Bend TVF Cutoff Controller	0

### Drum Part

PREVIEW PART Part10 STANDARD 1

TONE EDITOR [ADVANCED] [GENERAL]

0:Std.1 Kick1

REVERB 0 CHORUS 0 PITCH 0 ASSIGN GROUP Non  
DELAY 0 PAN C RX.NOTE ON ON/OFF RX.NOTE OFF ON/OFF  
LEVEL 92

The TONE EDITOR screen for a drum part appears when you press the [EDIT] button of a part that's assigned as "Rhythm Part" in the system menu (p. 7).



## Effect View

Here you can make settings for the insertion effect (EFX) which can be turned on/off for each part, and the system effects (REVERB/ CHORUS/DELAY/EQ) which are applied to all parts.

To switch between the setting screens of each effect, click the tab at the top.

### Insertion Effect

EFX (64 types)



### System Effect

REVERB (8 types)



CHORUS (8 types)



DELAY (10 types)



EQ



## System Menu

Here you can make settings for SOUND Canvas VA, such as switching the mode of the sound module, switching the tone map, and setting the master key shift (transposition) and master tuning.

### Sound Module Mode

Switches the sound module mode (GS, GM2, GM).

### Master Key Shift (-24–+24)

Transposes the pitch of instrumental parts (i.e., parts that are not drum parts) in semitone steps.

### Master Tune (415.3–466.2Hz)

Specifies the reference pitch.

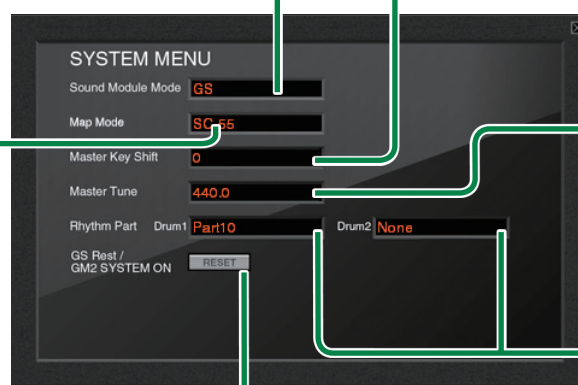
### Rhythm Part

Specifies which parts are used as drum parts. You can specify up to two parts as drum parts.

### GS Reset/GM2 SYSTEM ON

Initializes the settings of SOUND Canvas VA. If there are tones or EFX settings that you want to keep, save them before you do this.

→ “Saving and Loading a Tone (p. 9)”  
“Saving and Loading EFX (p. 11)”



### Map Mode

When you select a tone map mode “SELECTED”(CC#32 : Bank number LSB=00), you can limit the selection to the sound map that’s specified by the Map Mode setting.

Map	Explanation
SC-55	SC-55 tones are shown in the tone list.
SC-88	SC-88 tones are shown in the tone list.
SC-88Pro	SC-88Pro tones are shown in the tone list.
SC-8820 (Default)	SC-8820 tones are shown in the tone list.

\* Even if GS RESET is received, the sound map specified by Map Mode has priority.

# Operation

Here's how to operate SOUND Canvas VA.

## Editing a Parameter

In SOUND Canvas VA, you use knobs, buttons, switches, and sliders to edit the parameters.

### Knobs

Drag up or down on the knob.  
Double-clicking a knob returns it to the default value.



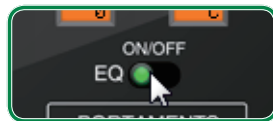
### Buttons

Click on the button.



### Switches

Click on the switch.

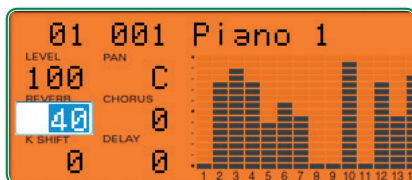


### Sliders

Drag the slider's knob.  
Double-clicking the slider's knob resets it to the default value.



You can click the numeric value of a parameter, and enter a numeric value from your computer keyboard.  
The value you enter is confirmed when you press the [ENTER] key.



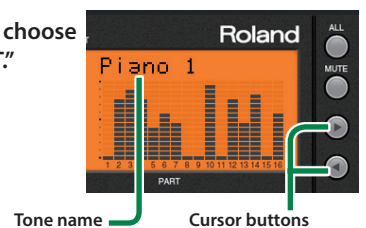
## Selecting a Tone

You can select tones in the main view or in the part view.

1. Choose [OPTION]-[SYSTEM].  
"SYSTEM MENU (p. 7)" opens.
2. In Sound Module Mode, specify the sound module mode.  
As necessary, specify the Rhythm Part(s).
3. Select a tone in any of the following ways.

### In the main view

1. Press the cursor buttons to select a part.
2. Click a tone name, and choose a tone from "TONE LIST."



### In the part view

1. Press the [PART] button to access the part view.
2. Click the tone name of the desired part, and choose a tone from "TONE LIST."



## Previewing a Tone

You can press the [PREVIEW] button to preview the sound of a tone.

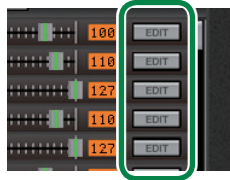




## Tone Edit

In TONE EDITOR, you can edit tones.

1. Press the [PART] button to access the part view.
2. Press the [EDIT] button of the part to which the tone you want to edit is assigned; TONE EDITOR (GENERAL) opens.
3. Edit the values of the parameters.



Parameter	Explanation
REVERB	Specifies the reverb send level.
CHORUS	Specifies the chorus send level.
DELAY	Specifies the delay send level.
PAN	Specifies the pan.
EQ	Turns EQ on/off.
PORTAMENTO	Turns portamento on/off and specifies the portamento time.
FILTER	Specifies the low pass filter's cutoff frequency and resonance.
ENVELOPE	Specifies the attack, decay, and release times.
TUNING	Specifies the coarse tuning and fine tuning.
VIBRATO	Specifies the vibrato rate, depth, and delay.
PITCH KEY	Specifies the key shift (transposition).
BEND RANGE	Specifies the range of change controlled by pitch bend messages.
LEVEL	Specifies the output level.

4. If necessary, press the [ADVANCE] button and edit the values of the advanced parameters.



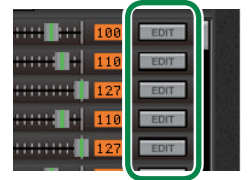
\* The content of the advanced parameters differs between instrumental parts and drum parts.

## Saving and Loading a Tone

A tone that you edit can be saved in a file. By loading a saved file, you can reuse that tone in another DAW or project.

### Saving a tone

1. Press the [PART] button to access the part view.
2. Press the [EDIT] button of the part to which the desired tone is assigned; TONE EDITOR (GENERAL) opens.



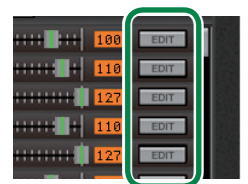
3. Right-click on the TONE EDITOR screen, and choose "Save ToneData." You can also choose this from TONE EDITOR (ADVANCED).



4. Specify a file name and save-destination, and save the file. The saved file contains the settings of both TONE EDITOR (GENERAL) and TONE EDITOR (ADVANCED).

### Loading a tone

1. Press the [PART] button to access the part view.
2. Press the [EDIT] button of the part to which the desired tone is assigned; TONE EDITOR (GENERAL) opens.



3. Right-click on the TONE EDITOR screen, and choose "Load ToneData." You can also choose this from TONE EDITOR (ADVANCED).



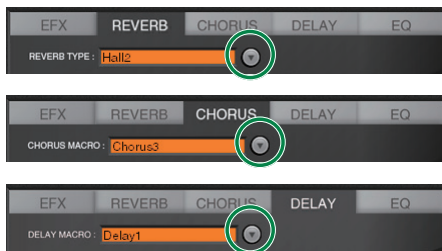
4. Specify a file, and load it.

## Using the System Effects

For reverb, chorus, and delay, you can adjust the send level to specify how much of each part's sound is sent to the effect. EQ can be turned on/off to specify whether the part's sound is sent through the equalizer to modify the tonal character.

### How to use reverb, chorus, and delay

1. Press the [FX] button to access the effect view.
2. Click the tab for the system effect (REVERB, CHORUS, DELAY) that you want to edit.
3. Use REVERB TYPE, CHORUS MACRO, or DELAY MACRO to select the effect type.



4. Edit the parameter values.

#### REVERB parameters

Parameter	Explanation
LEVEL	Adjusts the volume of the reverb sound.
CHARACTER	Specifies the type of reverb. The settings 0-5 are reverb types, and 6 and 7 are delay types.
PRE-LOWPASS	Applies a low-pass filter to the input of the reverb, attenuating the high-frequency range.
TIME	Specifies the duration of the reverb.
DELAY FEEDBACK	Specifies the amount of delay repeats. This parameter is available when CHARACTER is set to 6 or 7, and reverb type is set to Delay or Panning Delay.
PRE DELAY TIME	Specifies the delay time until the reverberation is heard.

#### CHORUS parameters

Parameter	Explanation
LEVEL	Adjusts the volume of the chorus sound.
PRE-LOWPASS	Applies a low-pass filter to the input of the chorus, attenuating the high-frequency range.
FEEDBACK	Specifies the level at which the chorus sound is returned to the chorus input (feedback).
DELAY	Specifies the delay time for the chorus effect.
RATE	Specifies the modulation speed (frequency) of the chorus.
DEPTH	Specifies the modulation depth of the chorus. Higher values produce deeper modulation.
SEND LEVEL TO REVERB	Specifies the amount of chorus sound that is sent to the reverb.
SEND LEVEL TO DELAY	Specifies the amount of chorus sound that is sent to the delay.

#### DELAY parameters

Parameter	Explanation
LEVEL	Adjusts the volume of the delay sound.
PRE-LOWPASS	Applies a low-pass filter to the input of the delay, attenuating the high-frequency range.
TIME CENTER	Specifies the delay time of the delay sound that is panned to the center.
TIME RATIO LEFT	Specifies the delay time of the delay sound that is panned to the left, as a ratio relative to the delay time center setting.
TIME RATIO RIGHT	Specifies the delay time of the delay sound that is panned to the right, as a ratio relative to the delay time center setting.
LEVEL CENTER	Adjusts the volume of the delay sound that is panned to the center.
LEVEL LEFT	Adjusts the volume of the delay sound that is panned to the left.
LEVEL RIGHT	Adjusts the volume of the delay sound that is panned to the right.
FEEDBACK	Specifies the amount of delay repeats.
SEND LEVEL TO REVERB	Specifies the amount of delay sound that is sent to the reverb.

5. Set the send level as follows.

#### In the main view

1. In the main view, click the REVERB/CHORUS/DELAY value.
2. Use your computer keyboard to enter a numeric value.

#### In the part view

1. Press the [PART] button to access the part view.
2. Choose REVERB/CHORUS/DELAY by clicking the button that you want to edit.
3. Drag the slider of the desired part.

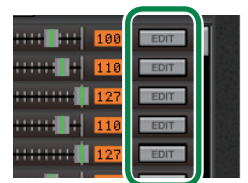
### Using EQ

1. Press the [FX] button to access the effect view.
2. Click the [EQ] tab.
3. Edit the parameter values.

#### EQ parameters

Parameter	Explanation
LOW FREQ	Specifies the cutoff frequency of the low-frequency range.
LOW GAIN	Boosts/cuts the sound of the low-frequency range.
HIGH FREQ	Specifies the cutoff frequency of the high-frequency range.
HIGH GAIN	Boosts/cuts the sound of the high-frequency range.

4. Press the [PART] button to access the part view.
5. Press the [EDIT] button of the part for which you want to use EQ; TONE EDITOR (GENERAL) opens.



6. Turn on the EQ ON/OFF switch.



## Using the Insertion Effect

The insertion effect (EFX) applies an effect directly to the part, potentially giving it a completely different character. Together with the explanation that follows, you should also read “Appendix: Using the Insertion Effect” (p. 12).

### Using EFX

1. Press the [FX] button to access the effect view.
2. Click the [EFX] tab.
3. In EFX TYPE, select the type of effect.  
The structure of the selected effect type is displayed.
4. Use EFX ON/OFF to turn on the part(s) that will use the insertion effect.

EFX ON/OFF is linked with the EFX parameter “EFX Send EQ Switch.”

\* In the case of the parts for which you turn on the insertion effect, the system effects are applied at the send levels you specify for the insert effect (see following table); the send level settings of each part are ignored.

Parameter	Value	Explanation
Send Level to Reverb	0–127	Adjusts the level at which the sound processed by EFX is sent to reverb.
Send Level to Chorus	0–127	Adjusts the level at which the sound processed by EFX is sent to chorus.
Send Level to Delay	0–127	Adjusts the level at which the sound processed by EFX is sent to delay.

5. Edit the parameter values.

## Saving and Loading EFX

EFX settings that you edit can be saved in a file. By loading a saved file, you can reproduce those EFX settings in a different DAW or project.

### Saving EFX

1. Press the [FX] button to access the effect view.
2. Right-click on the EFX screen, and choose “Save EFXData.”



3. Specify a file name and save-destination, and save the file.

\* The saved file contains only EFX settings; it does not contain the settings of the other tabs (system effects).

### Loading EFX

1. Press the [FX] button to access the effect view.
2. Right-click on the EFX screen, and choose “Load EFXData.”



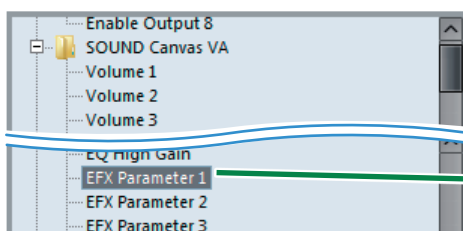
3. Specify a file and load it.

## Control using automation

You can use the automation functionality of your DAW to control the insertion effect parameters. An EFX Parameter No. is assigned to each parameter of the insertion effect; select the appropriate number in your DAW, and draw the automation curve.

For details on the parameters and their corresponding EFX Parameter No., refer to “Insertion Effect (EFX) List” (p. 13).

### Example: Controlling the compressor’s Attack parameter



\* If you want to control Sustain, select EFX Parameter No. 2 in your DAW.

Compressor parameters

EFX Parameter No.	Parameter	Value	Explanation
1	Attack	0–127 1 (40 03 03)]	Adjusts the attack time of an input sound.
2	Sustain	0–127 2 (40 03 04)]	Adjusts the time over which low level sounds are boosted until they reach the specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Post Gain	0/+6/+12/+18 3 (40 03 05)]	Adjusts the output gain.

## About the Insertion Effect

The insertion effect (EFX) provides 64 effect types. Each effect type provides appropriate parameters which you can edit to shape the sound as you like.

## Insertion Effect Types

The effect types are broadly categorized as follows.

Effect	Category	EFX No.
Effects that modify the tone color	Filter type	01–04
Effects that distort the sound	Distortion type	05–06
Effects that modulate the sound	Modulation type	07–13
Effects that affect the level	Compressor type	14–15
Effects that broaden the sound	Chorus type	16–20
Effects that reverberate the sound	Delay/reverb type	21–28
Effects that modify the pitch	Pitch shift type	29–30
Others	Others	31–34
Effects that connect two types of effect in series	Series 2	35–46
Effects that connect three or more types of effect in series	Series 3/ Series 4/ Series 5	47–55
Effects that connect two types of effect in parallel	Parallel 2	56–64

## Using the Insertion Effect

When using the insertion effect, be aware of the following points.

### Pan setting when using the insertion effect

The part pan and master pan settings are enabled or disabled depending on whether the insertion effect is a mono type or a stereo type.

If you're using a mono type insertion effect, the part pan and master pan settings are ignored.

The illustration for each effect type indicates whether it is a mono type or stereo type.

Types in which L/R are independently connected from input to output are stereo, and types in which they are not independently connected are mono.

#### Examples of stereo types

01: Stereo-EQ, 16: Hexa Chorus, etc.

#### Examples of mono types

02: Spectrum, 35: OD → Chorus, etc.

## System effect settings when using the insertion effect

When using the insertion effect, you choose one insertion effect type, and specify for each part whether that part is or is not sent (on/off) through the insertion effect.

In the case of parts for which the insertion effect is on, the system effect send levels are not the send levels specified for each part, but the send levels that are specified for the insertion effect.

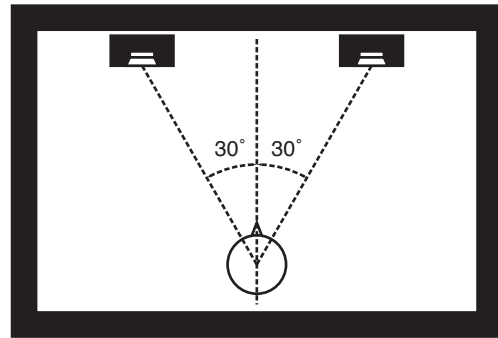
Send Level to Reverb	0–127	Adjusts the level at which the sound processed by EFX is sent to reverb.
Send Level to Chorus	0–127	Adjusts the level at which the sound processed by EFX is sent to chorus.
Send Level to Delay	0–127	Adjusts the level at which the sound processed by EFX is sent to delay.

## About 3D effects

The following four 3D effects generate a spaciousness that cannot be created by delay, reverb, or chorus.

- 20: 3D Chorus
- 28: 3D Delay
- 31: 3D Auto
- 32: 3D Manual

When using these insertion effects, we recommend that you place your speakers as shown below. Make sure that the speakers are at a sufficient distance from the wall behind them.



The 3D effect might not be satisfactory if the left and right speakers are too far apart, or if the room has too much reverberation.

These effects also have an "Out (output mode)" parameter. For the optimal 3D effect, choose the Speaker setting when you're listening through speakers.

## Insertion Effect (EFX) List

### 00: Thru [00H, 00H]

No effect will be applied. When a GM1 System On, GM2 System On or GS Reset messages is received, 00 Thru will be selected for Insertion Effect.



### Effects that modify the tone color (filter type)

#### 01: Stereo-EQ [01H, 00H]

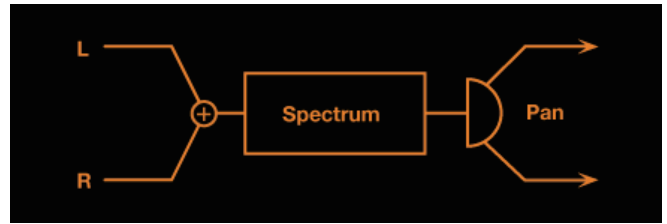
This is a four-band stereo equalizer (low, mid x 2, high).



EFX Parameter No.	Parameter	Value	Explanation
1	Low Freq	200/400 [1 (40 03 03)]	Selects the frequency of the low range (200 Hz/400 Hz).
2	Low Gain	-12--+12 [2 (40 03 04)]	Adjusts the gain of the low frequency.
3	High Freq	4/8 [3 (40 03 05)]	Selects the frequency of the high range (4 kHz/8 kHz).
4	High Gain	-12--+12 [4 (40 03 06)]	Adjusts the gain of the high frequency.
5	Mid1 Freq	200-6300 [5 (40 03 07)]	Adjusts the frequency of Mid 1 (mid range1).
6	Mid1 Q	0.5/1.0/2.0/ 4.0/9.0 [6 (40 03 08)]	This parameter adjusts the width of the area around the Mid1 Freq parameter that will be affected by the Gain setting. Higher values of Q will result in a narrower area being affected.
7	Mid1 Gain	-12--+12 [7 (40 03 09)]	Adjusts the gain for the area specified by the Mid1 Freq parameter and Mid1 Q parameter settings.
8	Mid2 Freq	200-6300 [8 (40 03 0A)]	Adjusts the frequency of Mid 2 (midrange2).
9	Mid2 Q	0.5/1.0/2.0/ 4.0/9.0 [9 (40 03 0B)]	This parameter adjusts the width of the area around the Mid2 Freq parameter that will be affected by the Gain setting. Higher values of Q will result in a narrower area being affected.
10	Mid2 Gain	-12--+12 [10 (40 03 0C)]	Adjusts the gain for the area specified by the Mid2 Freq parameter and Mid2 Q parameter settings.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

#### 02: Spectrum [01H, 01H]

Spectrum is a type of filter which modifies the timbre by boosting or cutting the level at specific frequencies. It is similar to an equalizer, but has 8 frequency points fixed at locations most suitable for adding character to the sound.

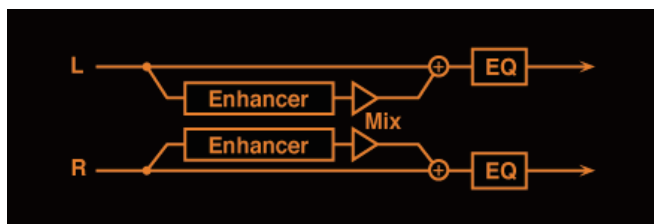


EFX Parameter No.	Parameter	Value	Explanation
1	Band1 (250Hz) Gain	-12--+12 [1 (40 03 03)]	Adjusts the 250 Hz level.
2	Band2 (500Hz) Gain	-12--+12 [2 (40 03 04)]	Adjusts the 500 Hz level.
3	Band3 (1000Hz) Gain	-12--+12 [3 (40 03 05)]	Adjusts the 100 Hz level.
4	Band4 (1250Hz) Gain	-12--+12 [4 (40 03 06)]	Adjusts the 1250 Hz level.
5	Band5 (2000Hz) Gain	-12--+12 [5 (40 03 07)]	Adjusts the 2000 Hz level.
6	Band6 (3150Hz) Gain	-12--+12 [6 (40 03 08)]	Adjusts the 3150 Hz level.
7	Band7 (4000Hz) Gain	-12--+12 [7 (40 03 09)]	Adjusts the 4000 Hz level.
8	Band8 (8000Hz) Gain	-12--+12 [8 (40 03 0A)]	Adjusts the 8000 Hz level.
9	Width	0.5/1.0/2.0/ 4.0/9.0 [9 (40 03 0B)]	Adjusts the width of the frequency bands whose gain is being modified (common to all bands). Higher settings will make the frequency band narrower.
19	Pan	L63-Center-R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.



### 03: Enhancer [01H, 02H]

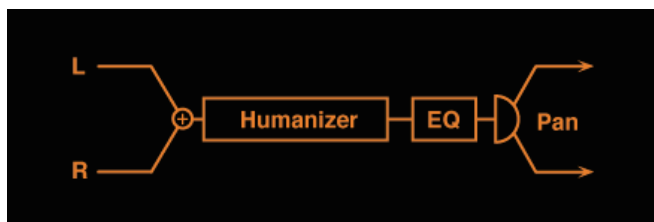
The Enhancer controls the overtone structure of the high frequencies, adding sparkle and tightness to the sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Sens	0–127 [1 (40 03 03)]	Adjusts the sensitivity of the enhancer.
2	Mix	0–127 [2 (40 03 04)]	Adjusts the proportion by which the overtones generated by the enhancer are combined with the direct sound.
11	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 04: Humanizer [01H, 03H]

This adds a vowel character to the sound, making it similar to a human voice.

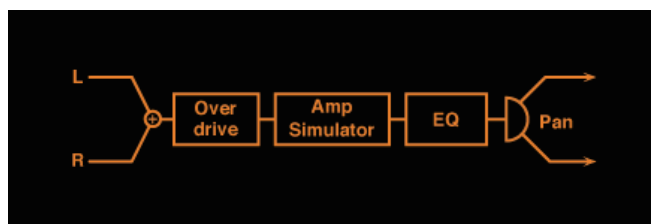


EFX Parameter No.	Parameter	Value	Explanation
1	Drive	0–127 [1 (40 03 03)]	Adjusts the depth of distortion.
2	DriveSwitch	Off/On [2 (40 03 04)]	Turns Drive on/off.
3	Vowel	a/i/u/e/o [3 (40 03 05)]	Selects the vowel.
4	Accel	0–15 [4 (40 03 06)]	Adjusts the time over which the sound will move to the specified Vowel. Smaller values will require more time.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### Effects that distort the sound (distortion type)

#### 05: Overdrive [01H, 10H]

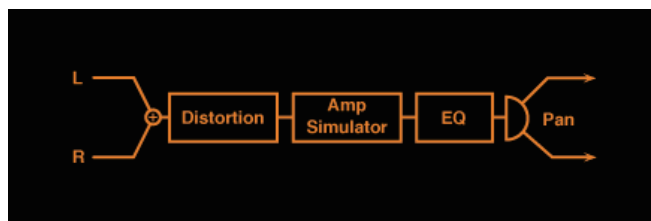
This effect creates a soft distortion similar to that produced by tube amplifiers.



EFX Parameter No.	Parameter	Value	Explanation
1	Drive	0–127 [1 (40 03 03)]	Adjusts the degree of distortion.
2	Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [2 (40 03 04)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
3	Amp Switch	Off/On [3 (40 03 05)]	Turns the Amp Type on/off.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

#### 06: Distortion [01H, 11H]

This effect produces a more intense distortion than Overdrive.

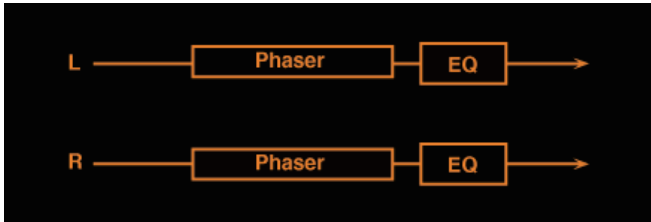


EFX Parameter No.	Parameter	Value	Explanation
1	Drive	0–127 [1 (40 03 03)]	Adjusts the degree of distortion.
2	Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [2 (40 03 04)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
3	Amp Switch	Off/On [3 (40 03 05)]	Turns the Amp Type on/off.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effects that modulate the sound (modulation type)

### 07: Phaser [01H, 20H]

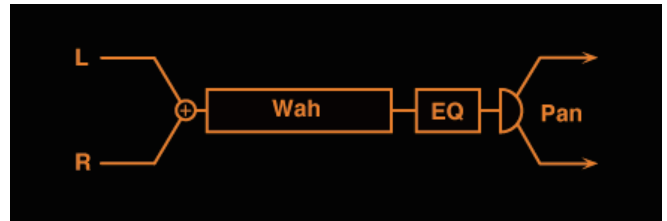
A phaser adds a phase-shifted sound to the original sound, producing a twisting modulation that creates spaciousness and depth.



EFX Parameter No.	Parameter	Value	Explanation
1	Manual	100–8000 [1 (40 03 03)]	Adjusts the basic frequency from which the sound will be modulated.
2	Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the frequency (period) of modulation.
3	Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
4	Resonance	0–127 [4 (40 03 06)]	Adjusts the amount of emphasis added to the frequency range surrounding the basic frequency determined by the Manual parameter setting.
5	Mix	0–127 [5 (40 03 07)]	Adjusts the proportion by which the phase-shifted sound is combined with the direct sound.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 08: Auto Wah [01H, 21H]

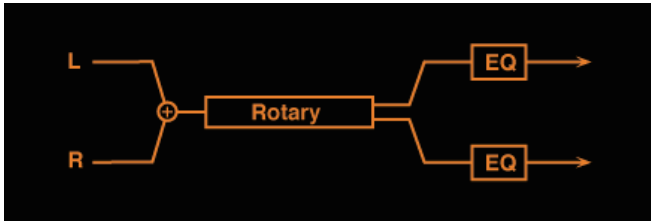
The Auto Wah cyclically controls a filter to create cyclic change in timbre.



EFX Parameter No.	Parameter	Value	Explanation
1	Filter Type	LowPass/ BandPass [1 (40 03 03)]	Selects the type of filter. LowPass: The wah effect will be applied over a wide frequency range. BandPass: The wah effect will be applied over a narrow frequency range.
2	Sens	0–127 [2 (40 03 04)]	Adjusts the sensitivity with which the filter is controlled. If this value is increased, the filter frequency will change more readily in response to the input level.
3	Manual	0–127 [3 (40 03 05)]	Adjusts the center frequency from which the effect is applied.
4	Peak	0–127 [4 (40 03 06)]	Adjusts the amount of the wah effect that will occur in the area of the center frequency. Lower settings will cause the effect to be applied in a broad area around the center frequency. Higher settings will cause the effect to be applied in a more narrow range. In the case of LowPass, decreasing the value will cause the wah effect to change less.
5	Rate	0.05–10.0 [5 (40 03 07)]	Adjusts the speed of the modulation.
6	Depth	0–127 [6 (40 03 08)]	Adjusts the depth of the modulation.
7	Polarity	Down/Up [7 (40 03 09)]	Sets the direction in which the frequency will change when the filter is modulated. With a setting of Up, the filter will change toward a higher frequency. With a setting of Down it will change toward a lower frequency.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range for EQ.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range for EQ.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound. L63 is far left, and R63 is far right.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 09: Rotary [01H, 22H]

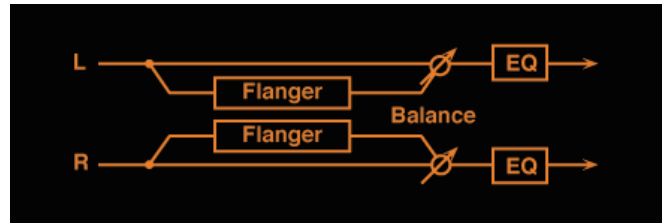
The Rotary effect simulates the sound of classic rotary speakers. Since the movement of the high range and low range rotors can be set independently, the unique modulation characteristics of these speakers can be simulated quite reliably. This effect is most suitable for electric organ.



EFX Parameter No.	Parameter	Value	Explanation
1	Low Rate Slow	0.05–10.0 [1 (40 03 03)]	Adjusts the slow speed of the low frequency rotor.
2	Low Rate Fast	0.05–10.0 [2 (40 03 04)]	Adjusts the fast speed of the low frequency rotor.
3	Low Accl	0–15 [3 (40 03 05)]	Adjusts the time it takes for the low frequency rotor to reach the newly selected speed when switching from fast to slow (or slow to fast) speed. Lower values will require longer times.
4	Low Level	0–127 [4 (40 03 06)]	Adjusts the volume of the low frequency rotor.
5	High Rate-Slow	0.05–10.0 [5 (40 03 07)]	Adjusts the slow speed of the high frequency rotor.
6	High Rate-Fast	0.05–10.0 [6 (40 03 08)]	Adjusts the fast speed of the high frequency rotor.
7	High Accl	0–15 [7 (40 03 09)]	Adjusts the time it takes for the high frequency rotor to reach the newly selected speed when switching from fast to slow (or slow to fast) speed. Lower values will require longer times.
8	High Level	0–127 [8 (40 03 0A)]	Adjusts the volume of the high frequency rotor.
9	Sepectration	0–127 [9 (40 03 0B)]	Adjusts the spatial dispersion of the sound.
11	Speed	Slow/Fast [11 (40 03 0D)]	Simultaneously switches the rotational speed of the low frequency rotor and high frequency rotor. Slow: Slows down the rotation to the specified speed (the Low Slow parameter/Hi Slow parameter values). Fast: Speeds up the rotation to the specified speed (the Low Fast parameter/Hi Fast parameter values).
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range for EQ.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range for EQ.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 10: Stereo Flanger [01H, 23H]

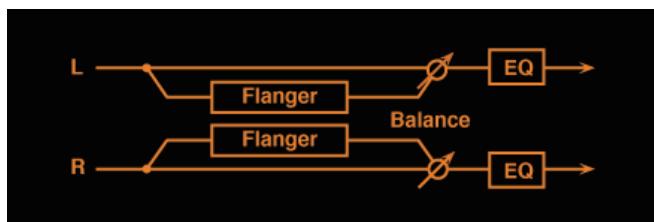
This is a stereo flanger. It produces a metallic resonance that rises and falls like a jet airplane taking off or landing. A filter is provided so that you can adjust the timbre of the flanged sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Pre Filter	Off/ LowPass/ HighPass [1 (40 03 03)]	Selects the type of filter. Off: A filter will not be used. LowPass: Cut the frequency range above the Cutoff Freq parameter. HighPass: Cut the frequency range below the Cutoff Freq parameter.
2	Cutoff Freq	250–8000 [2 (40 03 04)]	Adjusts the basic frequency of the filter.
3	Pre Delay	0–100ms [3 (40 03 05)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
4	Rate	0.05–10.0 [4 (40 03 06)]	Adjusts the rate of modulation.
5	Depth	0–127 [5 (40 03 07)]	Adjusts the depth of modulation.
6	Feedback	-98%–+98% [6 (40 03 08)]	Adjusts the amount (%) of the processed sound that is returned (fed back) into the input. Negative (-) settings will invert the phase.
7	Phase	0–180 [7 (40 03 09)]	Adjusts the spatial spread of the sound.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 11: Step Flanger [01H, 24H]

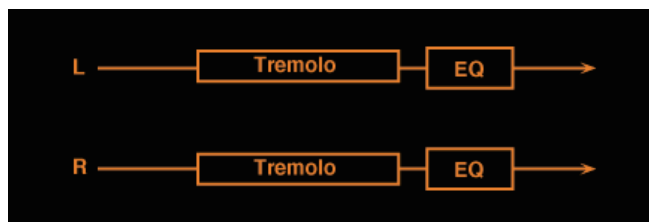
The Step Flanger is an effect in which the flanger pitch changes in steps.



EFX Parameter No.	Parameter	Value	Explanation
1	Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
2	Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the rate of modulation.
3	Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
4	Feedback	-98%–+98% [4 (40 03 06)]	Adjusts the amount (%) of the processed sound that is returned (fed back) into the input. Negative (-) settings will invert the phase.
5	Phase	0–180 [5 (40 03 07)]	Adjusts the spatial spread of the sound.
6	Step Rate	0.05–10.0 [6 (40 03 08)]	Adjusts the rate (period) of pitch change.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 12: Tremolo [01H, 25H]

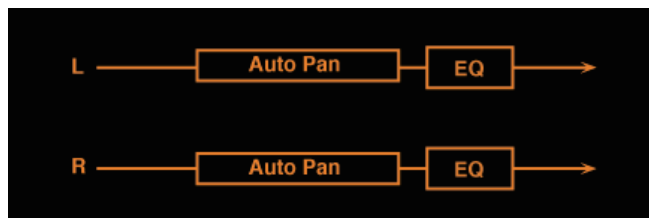
Tremolo cyclically modulates the volume to add tremolo effect to the sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Mod Wave	Tri/Sqr/Sin/ Saw1/Saw2 [1 (40 03 03)]	Selects the type of modulation. Tri: Triangle wave Sqr: Square wave Sin: Sine wave Saw1: Sawtooth wave Saw2: Inverted saw wave
2	Mod Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the frequency of modulation.
3	Mod Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 13: Auto Pan [01H, 26H]

The Auto Pan effect cyclically modulates the stereo location of the sound.

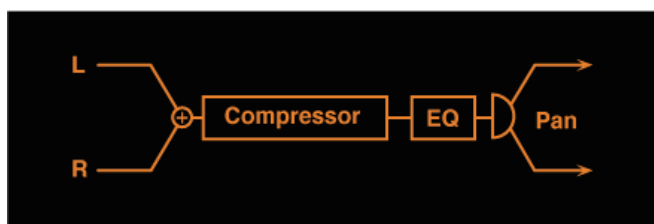


EFX Parameter No.	Parameter	Value	Explanation
1	Mod Wave	Tri/Sqr/Sin/ Saw1/Saw2 [1 (40 03 03)]	Selects the type of modulation. Tri: Triangle wave Sqr: Square wave Sin: Sine wave Saw1: Sawtooth wave Saw2: Inverted saw wave
2	Mod Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the frequency of modulation.
3	Mod Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effects that affect the level (compressor type)

### 14: Compressor [01H, 30H]

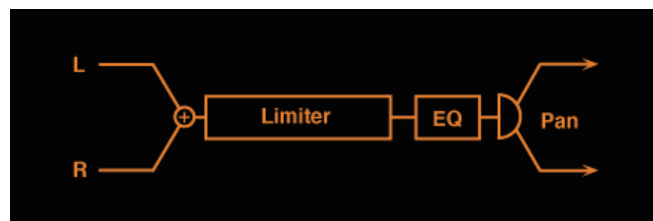
The Compressor flattens out high levels and boosts low levels, smoothing out unevenness in volume.



EFX Parameter No.	Parameter	Value	Explanation
1	Attack	0–127 [1 (40 03 03)]	Adjusts the attack time of an input sound.
2	Sustain	0–127 [2 (40 03 04)]	Adjusts the time over which low level sounds are boosted until they reach the specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Post Gain	0/+6/+12/+18 [3 (40 03 05)]	Adjusts the output gain.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the low frequency gain.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the high frequency gain.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound. L63 is far left, and R63 is far right.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 15: Limiter [01H, 31H]

The Limiter compresses signals that exceed a specified volume level, preventing distortion from occurring.



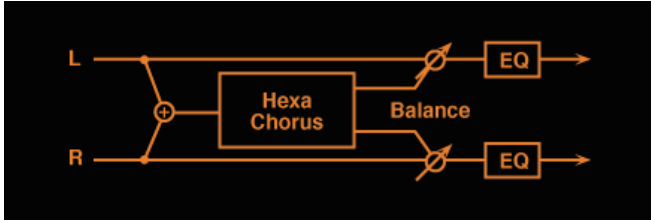
EFX Parameter No.	Parameter	Value	Explanation
1	Threshold	0–127 [1 (40 03 03)]	Adjusts the volume at which compression will begin.
2	Ratio	1/1.5, 1/2, 1/4, 1/100 [2 (40 03 04)]	This adjusts the compression ratio for signals that are louder than the Threshold Level. 1/100 is the highest compression ratio, and the output level will decrease.
3	Release	0–127 [3 (40 03 05)]	Adjusts the time from when the volume falls below the Threshold Level until compression is no longer applied.
4	Post Gain	0/+6/+12/+18 [4 (40 03 06)]	Adjusts the output gain.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.



Effects that broaden the sound (chorus type)

16: Hexa Chorus [01H, 40H]

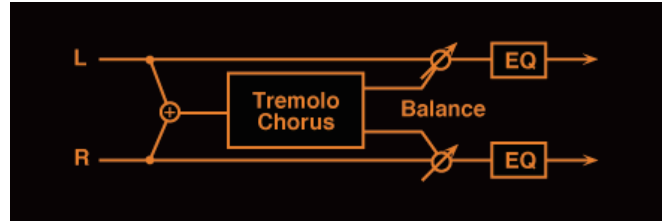
Hexa-chorus uses a six-phase chorus (six layers of chorused sound) to give richness and spatial spread to the sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
2	Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the rate of modulation.
3	Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
4	Pre Delay Dev	0–20 [4 (40 03 06)]	The Pre Delay is the time from when the original sound begins until when the chorus sound is heard. This adjusts the difference in Pre Delay between each of the six phases of chorus sound.
5	Depth Dev	-20–+20 [5 (40 03 07)]	Adjusts the difference in modulation depth between each of the six phases of chorus sound.
6	Pan Dev	0–20 [6 (40 03 08)]	Adjusts the difference in stereo position between each of the six phases of chorus sound. With a setting of 0, all the chorus sound will be located in the center. With a setting of 20, each chorus sound will be placed in 30 degree intervals relative to the center position.
16	Balance	$D > 0E - D0 < E$ [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

17: Tremolo Chorus [01H, 41H]

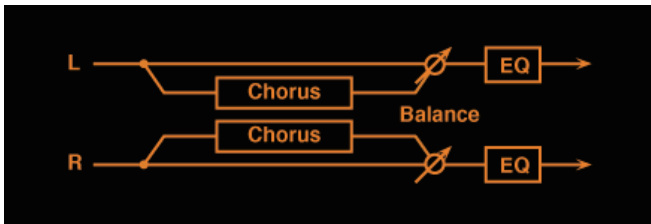
Tremolo Chorus is a chorus effect with added Tremolo (cyclic modulation of volume).



EFX Parameter No.	Parameter	Value	Explanation
1	Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
2	Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus effect.
3	Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus effect.
4	Trem.Phase	0–180 [4 (40 03 06)]	Adjusts the width of the tremolo sound.
5	Trem.Rate	0.05–10.0 [5 (40 03 07)]	Adjusts the modulation speed of the tremolo effect.
6	Trem.Sep	0–127 [6 (40 03 08)]	Adjusts the spatial spread of the tremolo effect.
16	Balance	$D > 0E - D0 < E$ [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 18: Stereo Chorus [01H, 42H]

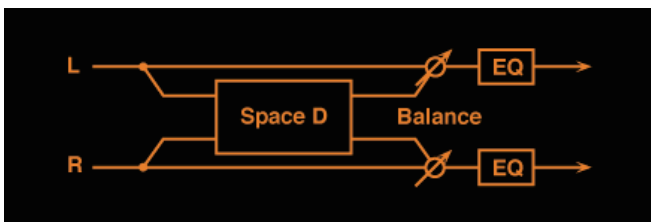
This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Pre Filter	Off/ LowPass/ HighPass [1 (40 03 03)]	Selects the type of filter. Off: a filter will not be used. LowPass: Cut the frequency range above the Cutoff Freq parameter. HighPass: Cut the frequency range below the Cutoff Freq parameter.
2	Cutoff Freq	250–8000 [2 (40 03 04)]	Adjusts the center frequency of the filter for the chorus sound.
3	Pre Delay	0–100ms [3 (40 03 05)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
4	Rate	0.05–10.0 [4 (40 03 06)]	Adjusts the rate of modulation.
5	Depth	0–127 [5 (40 03 07)]	Adjusts the depth of modulation.
7	Phase	0–180 [7 (40 03 09)]	Adjusts the spatial spread of the sound.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 19: Space D [01H, 43H]

Space-D is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect.

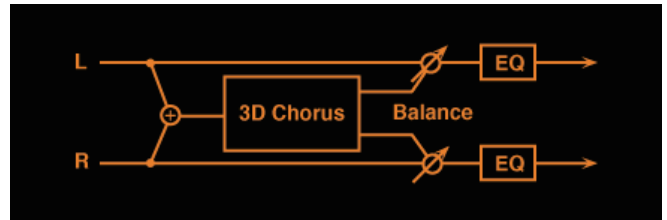


EFX Parameter No.	Parameter	Value	Explanation
1	Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
2	Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the rate of modulation.
3	Depth	0–127 [3 (40 03 05)]	Adjusts the depth of modulation.
4	Phase	0–180 [4 (40 03 06)]	Adjusts the spatial spread of the sound.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.

EFX Parameter No.	Parameter	Value	Explanation
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 20: 3D Chorus [01H, 44H]

This applies a 3D effect to the chorus sound. The chorus sound will be positioned 90 degrees left and 90 degrees right.



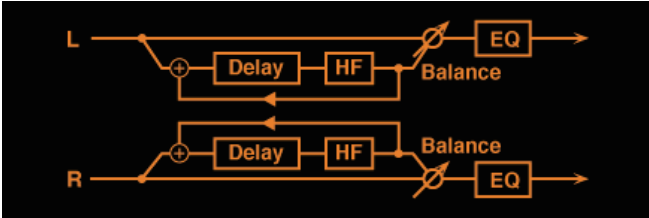
EFX Parameter No.	Parameter	Value	Explanation
1	Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
2	Cho Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus sound.
3	Cho Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus sound.
15	Output Mode	Speaker/ Headphone [15 (40 03 11)]	Specifies the method by which you’re listening to the sound. For the optimal 3D effect, choose Speaker when listening through speakers, or Headphone when listening through headphones.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effects that reverberate the sound (delay/reverb type)

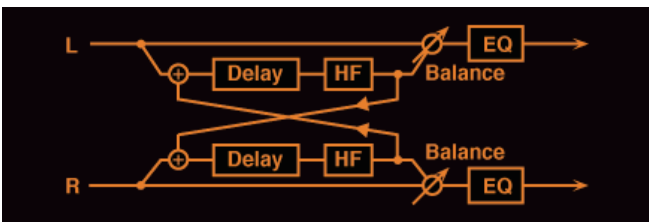
### 21: Stereo Delay [01H, 50H]

This is a stereo delay.

Feedback Mode is Normal:



Feedback Mode is Cross:

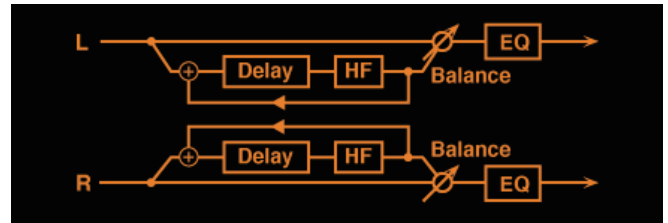


EFX Parameter No.	Parameter	Value	Explanation
1	Delay Left	0–500ms [1 (40 03 03)]	Adjusts the time from the original sound until when the left delay sound is heard.
2	Delay Right	0–500ms [2 (40 03 04)]	Adjusts the time from the original sound until when the right delay sound is heard.
3	Feedback	-98%–+98% [3 (40 03 05)]	Adjusts the proportion (%) of the processed sound that is fed back into the effect. Negative (-) settings will invert the phase.
4	Feedback Mode	Normal/Cross [4 (40 03 06)]	Selects the way in which processed sound is fed back into the effect. Normal: The left delay sound will be fed back into the left delay, and the right delay sound into the right delay. Cross: The left delay sound will be fed back into the right delay, and the right delay sound into the left delay.
5	Phase Left	Normal/Invert [5 (40 03 07)]	Selects the phase of the left delay sound. Normal: Phase will not be changed. Invert: Phase will be inverted.
6	Phase Right	Normal/Invert [6 (40 03 08)]	Selects the phase of the right delay sound. Normal: Phase will not be changed. Invert: Phase will be inverted.
8	HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feedback, set this parameter to Bypass.
16	Balance	D> 0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

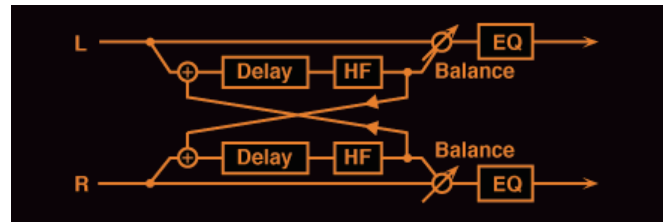
### 22: Modulation Delay [01H, 51H]

This effect adds modulation to the delayed sound, producing an effect similar to a flanger.

Feedback Mode is Normal:



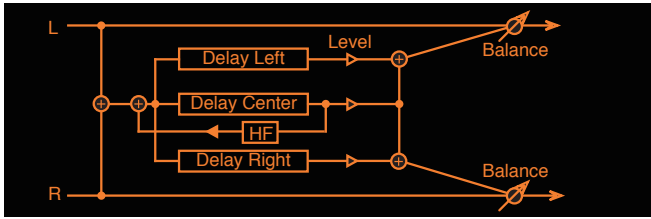
Feedback Mode is Cross:



EFX Parameter No.	Parameter	Value	Explanation
1	Delay Left	0–500ms [1 (40 03 03)]	Adjusts the time from the original sound until when the left delay sound is heard.
2	Delay Right	0–500ms [2 (40 03 04)]	Adjusts the time from the original sound until when the right delay sound is heard.
3	Feedback	-98%–+98% [3 (40 03 05)]	Adjusts the proportion (%) of the processed sound that is fed back into the effect. Negative (-) settings will invert the phase.
4	Feedback Mode	Normal/Cross [4 (40 03 06)]	Selects the way in which processed sound is fed back into the effect. Normal: The left delay sound will be fed back into the left delay, and the right delay sound into the right delay. Cross: The left delay sound will be fed back into the right delay, and the right delay sound into the left delay.
5	Mod Rate	0.05–10.0 [5 (40 03 07)]	Adjusts the speed of the modulation.
6	Mod Depth	0–127 [6 (40 03 08)]	Adjusts the depth of the modulation.
7	Mod Phase	0–180 [7 (40 03 09)]	Adjusts the spatial spread of the sound.
8	HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 23: Triple Tap Delay [01H, 52H]

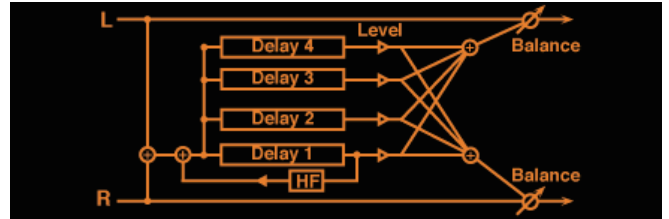
The Triple Tap Delay produces three delay sounds; center, left and right.



EFX Parameter No.	Parameter	Value	Explanation
1	Delay Center	200–1000ms [1 (40 03 03)]	Adjusts the time delay from the direct sound until when the center delay sound is heard.
2	Delay Left	200–1000ms [2 (40 03 04)]	Adjusts the time delay from the direct sound until when the left delay sound is heard.
3	Delay Right	200–1000ms [3 (40 03 05)]	Adjusts the time delay from the direct sound until when the right delay sound is heard.
4	Feedback	-98%–+98% [4 (40 03 06)]	Adjusts the proportion (%) of the Center Delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
5	Center Level	0–127 [5 (40 03 07)]	Adjusts the volume of Center Delay sound.
6	Left Level	0–127 [6 (40 03 08)]	Adjusts the volume of Left Delay sound.
7	Right Level	0–127 [7 (40 03 09)]	Adjusts the volume of Right Delay sound.
8	HF Damp	315–8000/Bypass [8 (40 03 0A)]	This adjusts the frequency at which the high range is cut when the Center Delay sound is returned to the input. If you do not wish to cut the high range, set this to Bypass.
16	Balance	D> 0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 24: Quadruple Tap Delay [01H, 53H]

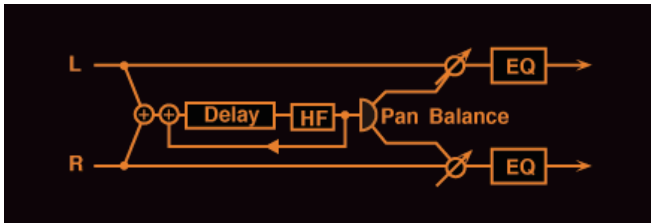
The Quadruple Tap Delay has four delays.



EFX Parameter No.	Parameter	Value	Explanation
1	Delay1	200–1000ms [1 (40 03 03)]	Adjusts the time delay from the direct sound until when the Delay 1 sound is heard.
2	Delay2	200–1000ms [2 (40 03 04)]	Adjusts the time delay from the direct sound until when the Delay 2 sound is heard.
3	Delay3	200–1000ms [3 (40 03 05)]	Adjusts the time delay from the direct sound until when the Delay 3 sound is heard.
4	Delay4	200–1000ms [4 (40 03 06)]	Adjusts the time delay from the direct sound until when the Delay 4 sound is heard.
5	Level1	0–127 [5 (40 03 07)]	Adjusts the volume of the Delay 1 sound.
6	Level2	0–127 [6 (40 03 08)]	Adjusts the volume of the Delay 2 sound.
7	Level3	0–127 [7 (40 03 09)]	Adjusts the volume of the Delay 3 sound.
8	Level4	0–127 [8 (40 03 0A)]	Adjusts the volume of the Delay 4 sound.
9	Feedback	-98%–+98% [9 (40 03 0B)]	Adjusts the proportion (%) of the Delay 1 sound that is fed back into the effect. Negative (-) settings will invert the phase.
10	HF Damp	315–8000/Bypass [10 (40 03 0C)]	This adjusts the frequency at which the high range is cut when the Delay 1 sound is returned to the input. If you do not wish to cut the high range, set this to Bypass.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 25: Time Controllable Delay [01H, 54H]

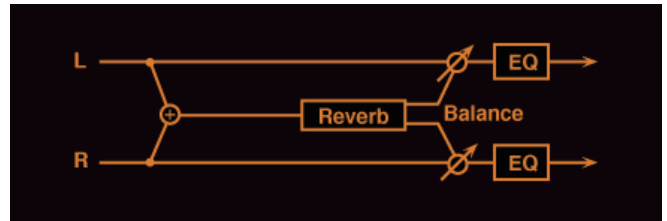
This effect allows you to use a specified controller (the controller selected in EFX C.Src to control the delay time and pitch in real time. Lengthening the delay time will lower the pitch, and shortening it will raise the pitch.



EFX Parameter No.	Parameter	Value	Explanation
1	Delay	200–1000ms [1 (40 03 03)]	Adjusts the time delay from the direct sound until when each delay sound is heard.
2	Acceleration	0–15 [2 (40 03 04)]	This parameter adjusts the speed over which the Delay Time will change from the current setting to a newly specified setting. The rate of change for the Delay Time directly affects the rate of pitch change.
3	Feedback	-98%–+98% [3 (40 03 05)]	Adjusts the proportion (%) of the processed sound that is fed back into the effect. Negative (-) settings will invert the phase.
4	HF Damp	315–8000/ Bypass [4 (40 03 06)]	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
5	Effect Pan	L63–Center–R63 [5 (40 03 07)]	Adjusts the stereo location of the processed sound. L63 is far left, and R63 is far right.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 26: Reverb [01H, 55H]

The Reverb effect adds reverberation to the sound, simulating an acoustic space.

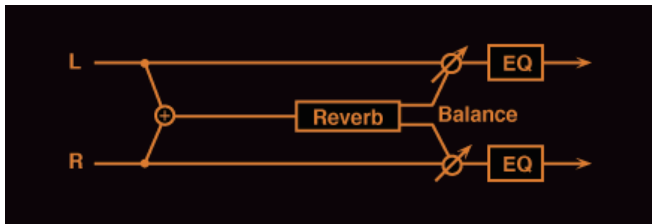


EFX Parameter No.	Parameter	Value	Explanation
1	Type	Room1/ Room2/ Stage1/ Stage2/ Hall1/ Hall2/ [1 (40 03 03)]	Selects the type of Reverb effect. Room1: Dense reverb with short decay. Room2: Sparse reverb with short decay. Stage1: Reverb with greater late reverberation. Stage2: Reverb with strong early reflections. Hall1: Reverb with clear reverberance. Hall2: Reverb with rich reverberance.
2	Pre Delay	0–100ms [2 (40 03 04)]	Adjusts the time delay from when the direct sound begins until the reverb sound is heard.
3	Time	0–127 [3 (40 03 05)]	Adjusts the time length of reverberation.
4	HF Damp	315–8000/ Bypass [4 (40 03 06)]	Adjusts the frequency above which the reverberant sound will be cut. As the frequency is set lower, more of the high frequencies will be cut, resulting in a softer and more muted reverberance. If you do not want the high frequencies to be cut, set this parameter to Bypass.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.



### 27: Gate Reverb [01H, 56H]

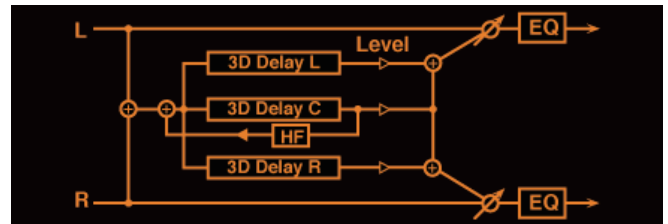
Gate Reverb is a special type of reverb in which the reverberant sound is cut off before its natural length.



EFX Parameter No.	Parameter	Value	Explanation
1	Type	Normal/ Reverse/ Sweep1/ Sweep2 [1 (40 03 03)]	Selects the type of reverb. Normal: Conventional gate reverb. Reverse: The reverberation sound plays backward. Sweep1: The reverberant sound moves from right to left. Sweep2: The reverberant sound moves from left to right.
2	Pre Delay	0–100ms [2 (40 03 04)]	Adjusts the time delay from when the direct sound begins until the reverb sound is heard.
3	Gate Time	5–500ms [3 (40 03 05)]	Adjusts the time from when the reverb is heard until when it disappears.
16	Balance	D>0E–D0<E [16 (4003 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 28: 3D Delay [01H, 57H]

This applies a 3D effect to the delay sound. The delay sound will be positioned 90 degrees left and 90 degrees right.

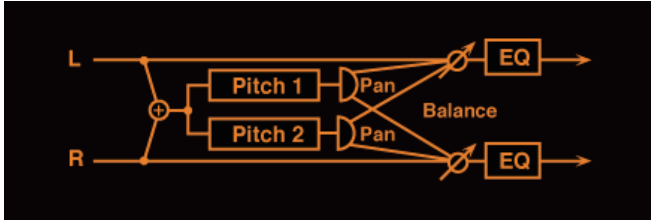


EFX Parameter No.	Parameter	Value	Explanation
1	Delay Time C	0–500ms [1 (40 03 03)]	Adjusts the time from the original sound until when the center delay sound begins.
2	Delay Time L	0–500ms [2 (40 03 04)]	Adjusts the time from the original sound until when the left delay sound begins.
3	Delay Time R	0–500ms [3 (40 03 05)]	Adjusts the time from the original sound until when the right delay sound begins.
4	Feedback	-98%–+98% [4 (40 03 06)]	Adjusts the amount (%) of the center delay sound that will be returned to the input. With negative (-) settings, the phase will be inverted.
5	Delay Level C	0–127 [5 (40 03 07)]	Adjusts the volume of the Center Delay sound.
6	Delay Level L	0–127 [6 (40 03 08)]	Adjusts the volume of the Left Delay sound.
7	Delay Level R	0–127 [7 (40 03 09)]	Adjusts the volume of the Right Delay sound.
8	HF Damp	315–8000/ Bypass [8 (40 03 0A)]	This adjusts the frequency at which the high range is cut when the Center Delay sound is returned to the input. If you do not wish to cut the high range, set this to Bypass.
15	Output Mode	Speaker/ Headphone [15 (40 03 11)]	Specifies the method by which you’re listening to the sound. For the optimal 3D effect, choose Speaker when listening through speakers, or Headphone when listening through headphones.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effects that modify the pitch (pitch shift type)

### 29: 2-Voice Pitch Shifter [01H, 60H]

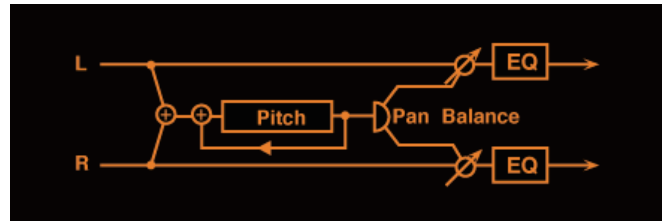
A Pitch Shifter shifts the pitch of the original sound. This 2-voice pitch shifter has two pitch shifters, and can add two pitch shifted sounds to the original sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Pitch Coarse	-24-0+12 [1 (40 03 03)]	Adjusts the pitch of Pitch Shift 1 in semitone steps (-2+1 octaves).
2	Pitch Fine1	-100-0+100 [2 (40 03 04)]	Make fine adjustments to the pitch of Pitch Shift 1 in 2-cent steps (-100+100 cents).
3	Pre Delay1	0-100ms [3 (40 03 05)]	Adjusts the time delay from when the direct sound begins until the Pitch Shift 1 sound is heard.
4	Effect Pan1	L63-Center-R63 [4 (40 03 06)]	Adjusts the stereo location of the Pitch Shift 1 sound. L63 is far left, and R63 is far right.
5	Pitch Coarse	-24-0+12 [5 (40 03 07)]	Adjusts the pitch of Pitch Shift 2 in semitone steps (-2+1 octaves).
6	Pitch Fine2	-100-0+100 [6 (40 03 08)]	Make fine adjustments to the pitch of Pitch Shift 2 in 2-cent steps (-100+100 cents).
7	Pre Delay2	0-100ms [7 (40 03 09)]	Adjusts the time delay from when the direct sound begins until the Pitch Shift 2 sound is heard.
8	Effect Pan2	L63-Center-R63 [8 (40 03 0A)]	Adjusts the stereo location of the Pitch Shift 2 sound. L63 is far left, and R63 is far right.
9	Mode	Mode1-5 [9 (40 03 0B)]	Higher settings of this parameter will result in slower response, but steadier pitch.
10	Level Balance	A>0B-A0<B [10 (40 03 0C)]	Adjusts the volume balance between the Pitch Shift 1 and the Pitch Shift 2 sounds.
16	Balance	D>0E-D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 30: Feedback Pitch Shifter [01H, 61H]

This pitch shifter allows the pitch shifted sound to be returned into the effect.

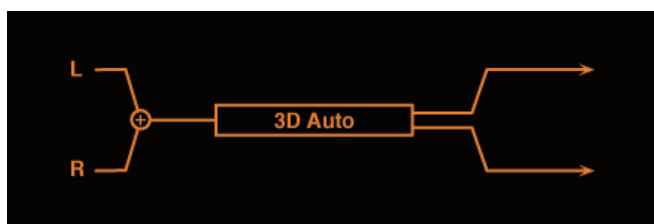


EFX Parameter No.	Parameter	Value	Explanation
1	Pitch Coarse	-24-0+12 [1 (40 03 03)]	Adjusts the pitch of the pitch shifted sound in semitone steps (-2+1 octaves).
2	PitchFine1	-100-0+100 [2 (40 03 04)]	Make fine adjustments to the pitch of the pitch shifted sound in 2-cent steps (-100+100 cents).
3	Feedback	-98%+98% [3 (40 03 05)]	Adjusts the proportion (%) of the processed sound that is fed back into the effect. Negative (-) settings will invert the phase.
4	Pre Delay	0-100ms [4 (40 03 06)]	Adjusts the time delay from when the direct sound begins until the pitch shifted sound is heard.
5	Mode	Mode1-5 [5 (40 03 07)]	Higher settings for this parameter will result in slower response, but steadier pitch.
6	Effect Pan	L63-Center-R63 [6 (40 03 08)]	Adjusts the stereo location of the pitch shifted sound. L63 is far left, and R63 is far right.
16	Balance	D>0E-D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

## Others

## 31: 3D Auto [01H, 70H]

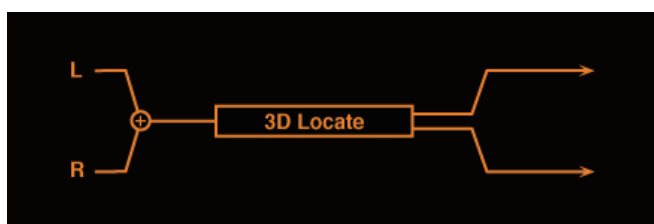
The 3D Auto effect rotates the location of the sound.



EFX Parameter No.	Parameter	Value	Explanation
1	Azimuth	180/ L168–0–R168 [1 (40 03 03)]	Sets the location at which the sound will stop when rotation is stopped. A setting of 0 positions the sound in the center.
2	Speed	0.05–10.0 [2 (40 03 04)]	Sets the speed of rotation.
3	Clockwise	-/+ [3 (40 03 05)]	Sets the direction of rotation. A setting of - is counterclockwise, and + is clockwise.
4	Turn	Off/On [4 (40 03 06)]	This stops or starts the rotation. When this is turned On, the sound will rotate. When turned Off, rotation will stop at the location specified by Azimuth.
15	Output Mode	Speaker/ Headphone [15 (40 03 11)]	Specifies the method by which you're listening to the sound. For the optimal 3D effect, choose Speaker when listening through speakers, or Headphone when listening through headphones.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 32: 3D Manual [01H, 71H]

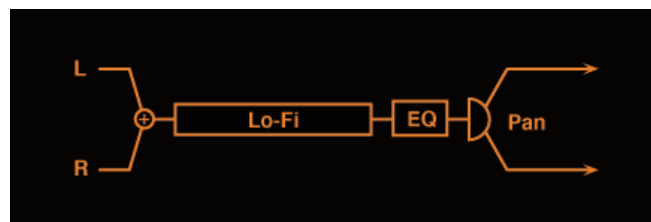
This places the 3D effect at a desired location.



EFX Parameter No.	Parameter	Value	Explanation
1	Azimuth	180/ L168–0–R168 [1 (40 03 03)]	Specifies the location. A setting of 0 positions the sound in the center.
15	Output Mode	Speaker/ Headphone [15 (40 03 11)]	Specifies the method by which you're listening to the sound. For the optimal 3D effect, choose Speaker when listening through speakers, or Headphone when listening through headphones.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 33: Lo-Fi 1 [01H, 72H]

Lo-Fi 1 is an effect that intentionally degrades the sound.

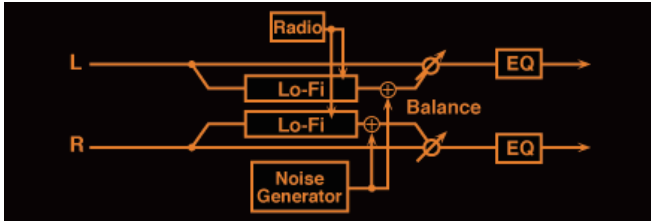


EFX Parameter No.	Parameter	Value	Explanation
1	Pre Filter	Filter1–6 [1 (40 03 03)]	Specifies the type of filter that will be applied before the sound passes through the Lo-Fi effect.
2	Lo-Fi Type	Type1–9 [2 (40 03 04)]	Degrades the sound quality. The sound quality will become poorer as this value is increased.
3	Post Filter	Filter1–6 [3 (40 03 05)]	Specifies the type of filter that will be applied after the sound passes through the Lo-Fi effect.
16	Balance	D>0E–D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the processed sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan	L63–Center–R63 [19 (40 03 15)]	Adjusts the stereo location of the output sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 34: Lo-Fi 2 [01H,73H]

Lo-Fi 2 is an effect that intentionally degrades the sound quality and allows a variety of noise to be added.

\* If the R.Detune (Radio Detune), W/P Level (White/Pink Noise Level), Disc Nz Lev (Disc Noise Level), or Hum Level settings are raised, there will be noise even when the input sound is silent.

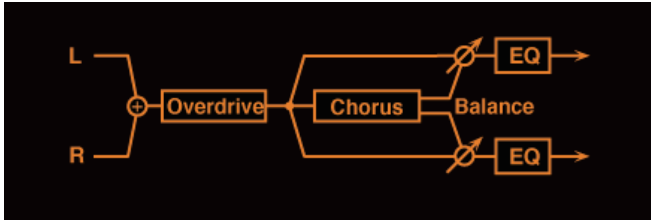


EFX Parameter No.	Parameter	Value	Explanation
1	Lo-Fi Type	Type1-6 [1 (40 03 03)]	Degrades the sound quality. The sound quality will become poorer as this value is increased.
2	Filter Type	Off/ LowPass/ HighPass [2 (40 03 04)]	Specifies the type of filter that is applied after the sound passes through the Lo-Fi effect.
3	Cutoff	250-8000 [3 (40 03 05)]	Specifies the cutoff frequency of the filter that is applied after the sound passes through the Lo-Fi effect.
4	Radio Detune	0-127 [4 (40 03 06)]	This simulates the tuning noise of a radio. As this value is raised, the tuning will drift further.
5	RadioNz Level	0-127 [5 (40 03 07)]	Adjusts the volume of the radio noise.
6	W/P Noise Sel	White/Pink [6 (40 03 08)]	Selects either white noise or pink noise.
7	W/P Noise Fil	250-6300/ Bypass [7 (40 03 09)]	Specifies the cutoff frequency of the low pass filter that is applied to the white noise or pink noise.
8	W/P Noise Level	0-127 [8 (40 03 0A)]	Specifies the volume of the white noise or pink noise.
9	DiscNz Type	LP/EP/SP/RND [9 (40 03 0B)]	Selects the type of record noise. The frequency at which the noise is heard will depend on the selected type.
10	DiscNz Filter	250-6300/ Bypass [10 (40 03 0C)]	Specifies the cutoff frequency of the low pass filter that is applied to the record noise.
11	DiscNz Level	0-127 [11 (40 03 0D)]	Specifies the volume of the record noise.
12	Hum Type	50/60Hz [12 (40 03 0E)]	Selects the type of hum noise.
13	Hum LP Filter	250-6300/ Bypass [13 (40 03 0F)]	Specifies the cutoff frequency of the low pass filter that is applied to the hum noise.
14	Hum Level	0-127 [14 (40 03 10)]	Specifies the volume of the hum noise.
15	Mono/Stereo	Mono/Stereo [15 (40 03 11)]	Selects whether the effect sound will be mono or stereo.
16	Balance	D>0E-D0<E [16 (40 03 12)]	Adjusts the volume balance between the direct and the effect sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12-+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12-+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
19	Pan(Mono)	L63-Center-R63 [19 (40 03 15)]	When Mono mode is used, adjust the stereo location of the output sound. L63 is far left, and R63 is far right.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

## Effects that connect two types of effect in series (series 2)

### 35: Overdrive → Chorus [02H, 00H]

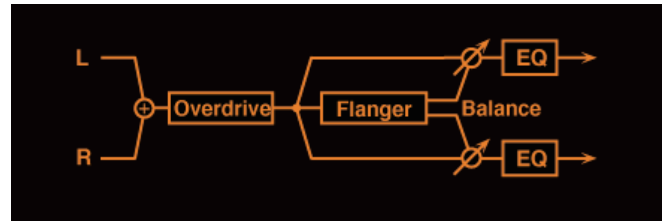
This effect connects an overdrive and a chorus in series.



EFX Parameter No.	Parameter	Value	Explanation
1	OD:Drive	0–127 [1 (40 03 03)]	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
2	OD:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the overdrive sound. L63 is far left, and R63 is far right.
3	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Sw	Off/On [4 (40 03 06)]	Turns OD Amp on/off.
6	Cho:Pre Delay	0–100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
7	Cho:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed of the chorus effect.
8	Cho:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth of the chorus effect.
10	Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the chorus and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 36: Overdrive → Flanger [02H, 01H]

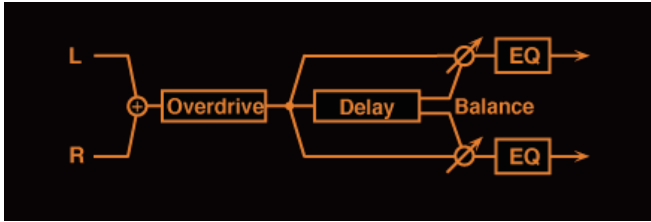
This effect connects an overdrive and a flanger in series.



EFX Parameter No.	Parameter	Value	Explanation
1	OD:Drive	0–127 [1 (40 03 03)]	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
2	OD:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the overdrive sound. L63 is far left, and R63 is far right.
3	OD:Amp	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Bltn: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Sw	Off/On [4 (40 03 06)]	Turns OD Amp on/off.
6	Flg:Pre Delay	0–100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
7	Flg:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed of the flanger effect.
8	Flg:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth of the flanger effect.
9	Flg:Feedback	-98%–+98% [9 (40 03 0B)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
10	Flg:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the flanger and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 37: Overdrive → Delay [02H, 02H]

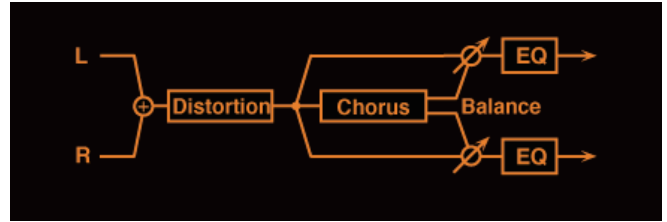
This effect connects an overdrive and a delay in series.



EFX Parameter No.	Parameter	Value	Explanation
1	OD:Drive	0–127 [1 (40 03 03)]	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
2	OD:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the overdrive sound. L63 is far left, and R63 is far right.
3	OD:Amp	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Sw	Off/On [4 (40 03 06)]	Turns OD Amp on/off.
6	Delay	0–500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%–+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the effect will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the delay and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 38: Distortion → Chorus [02H, 03H]

This effect connects a distortion and a chorus in series.

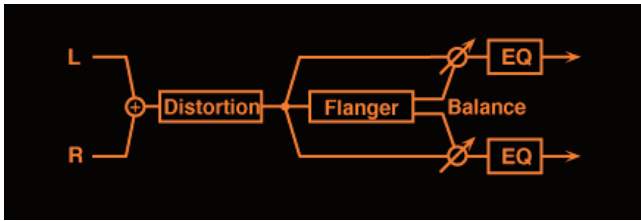


EFX Parameter No.	Parameter	Value	Explanation
1	DS:Drive	0–127 [1 (40 03 03)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
2	DS:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the distortion sound. L63 is far left, and R63 is far right.
3	DS:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2-Stack: Large double stack amp 3 Stack: Large triple stack amp
4	DS:Amp Sw	Off/On [4 (40 03 06)]	Turns DS Amp on/off.
6	Cho:Pre Delay	0–100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
7	Cho:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed of the chorus effect.
8	Cho:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth of the chorus effect.
10	Cho:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the chorus and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.



### 39: Distortion → Flanger [02H, 04H]

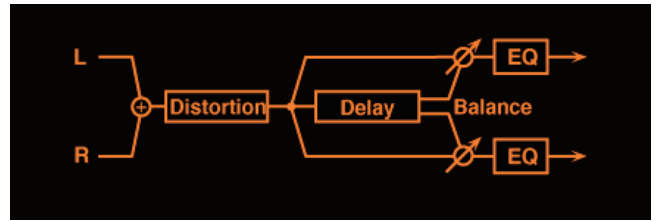
This effect connects a distortion and a flanger in series.



EFX Parameter No.	Parameter	Value	Explanation
1	DS:Drive	0– 127 [1 (40 03 03)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
2	DS:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the distortion sound. L63 is far left, and R63 is far right.
3	DS:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	DS:Amp Sw	Off/On [4 (40 03 06)]	Turns DS Amp on/off.
6	Flg:Delay	0– 100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
7	Flg:Rate	0.05– 10.0 [7 (40 03 09)]	Adjusts the modulation speed of the flanger effect.
8	Flg:Depth	0– 127 [8 (40 03 0A)]	Adjusts the modulation depth of the flanger effect.
9	Flg:Feedback	-98%– +98% [9 (40 03 0B)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase
10	Flg:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the flanger and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12– +12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12– +12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0– 127 [20 (40 03 16)]	Adjusts the output level.

### 40: Distortion → Delay [02H, 05H]

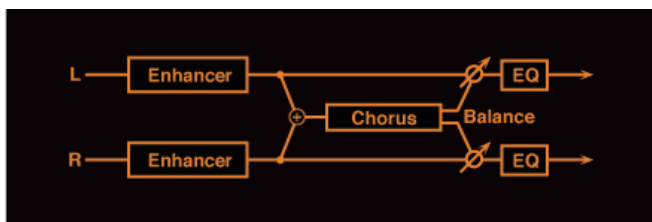
This effect connects a distortion and a delay in series.



EFX Parameter No.	Parameter	Value	Explanation
1	DS:Drive	0– 127 [1 (40 03 03)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
2	DS:Pan	L63–Center–R63 [2 (40 03 04)]	Adjusts the stereo location of the distortion sound. L63 is far left, and R63 is far right.
3	DS:Amp Type	Small/Built-In/2 Stack/3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	DS:Amp Sw	Off/On [4 (40 03 06)]	Turns DS Amp on/off.
6	Dly:Delay	0– 500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%– +98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315– 8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the effect will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the delay and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12– +12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12– +12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0– 127 [20 (40 03 16)]	Adjusts the output level.

## 41: Enhancer → Chorus [02H, 06H]

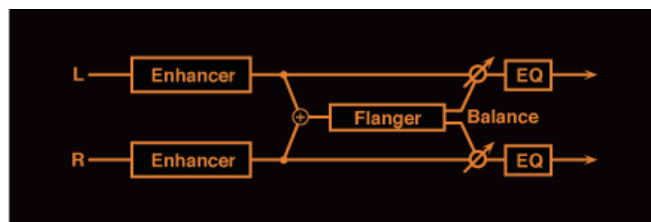
This effect connects an enhancer and a chorus in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Enh:Sens	0-127 [1 (40 03 03)]	Adjusts the sensitivity of the enhancer.
2	Enh:Mix	0-127 [2 (40 03 04)]	Adjusts the proportion by which the overtones generated by the enhancer are combined with the direct sound.
6	Cho:Pre Delay	0-100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
7	Cho:Rate	0.05-10.0 [7 (40 03 09)]	Adjusts the modulation speed of the chorus effect.
8	Cho:Depth	0-127 [8 (40 03 0A)]	Adjusts the modulation depth of the chorus effect.
10	Cho:Balance	D>0E-D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the chorus and the sound that does not. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12-+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12-+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

## 42: Enhancer → Flanger [02H, 07H]

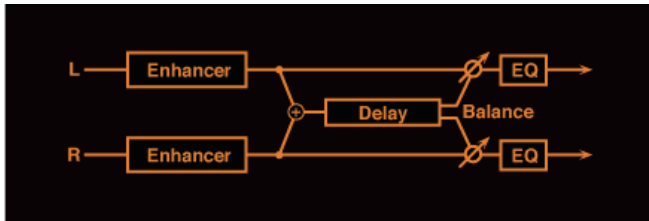
This effect connects an enhancer and a flanger in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Enh:Sens	0-127 [1 (40 03 03)]	Adjusts the sensitivity of the enhancer.
2	Enh:Mix	0-127 [2 (40 03 04)]	Adjusts the proportion by which the overtones generated by the enhancer are combined with the direct sound.
6	Flg:Pre Delay	0-100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
7	Flg:Rate	0.05-10.0 [7 (40 03 09)]	Adjusts the modulation speed of the flanger effect.
8	Flg:Depth	0-127 [8 (40 03 0A)]	Adjusts the modulation depth of the flanger effect.
9	Flg:Feedback	-98%-+98% [9 (40 03 0B)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
10	Flg:Balance	D>0E-D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the flanger and the sound that does not. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12-+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12-+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

## 43: Enhancer → Delay [02H, 08H]

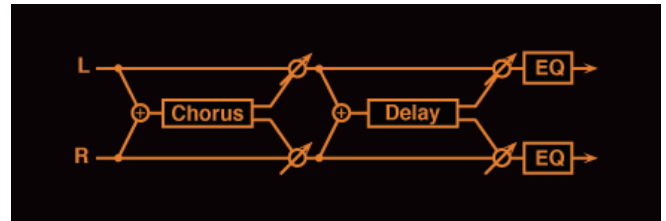
This effect connects an enhancer and a delay in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Enh:Sens	0–127 [1 (40 03 03)]	Adjusts the sensitivity of the enhancer.
2	Enh:Mix	0–127 [2 (40 03 04)]	Adjusts the proportion by which the overtones generated by the enhancer are combined with the direct sound.
6	Dly:Delay	0–500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%–+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not wish to cut the high frequencies of the delay feedback, set this parameter to Bypass.
10	Flg:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the delay and the sound that does not. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 44: Chorus → Delay [02H, 09H]

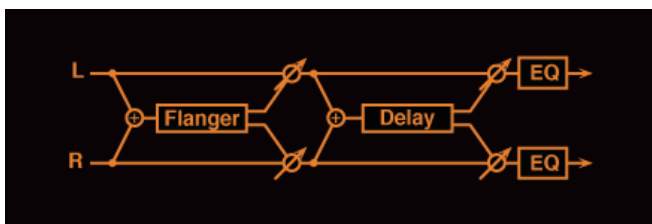
This effect connects a chorus and a delay unit in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cho:Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
2	Cho:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus effect.
3	Cho:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus effect.
5	Cho:Balance	D>0E–D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct sound and the chorus sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
6	Dly:Delay	0–500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%–+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the delay and the sound that does not. "D" and "E" stand for "direct sound" and "effect sound" respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 45: Flanger → Delay [02H, 0AH]

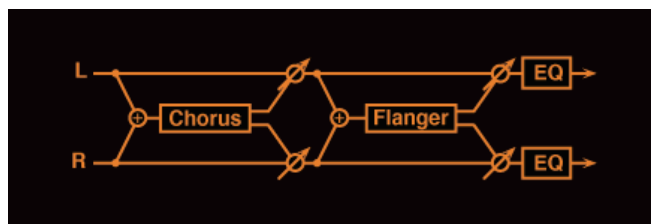
This effect connects a flanger and a delay in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Flg:Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
2	Flg:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the flanger effect.
3	Flg:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the flanger effect.
4	Flg:Feedback	-98%–+98% [4 (40 03 06)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
5	Flg:Balance	D>0E–D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct sound and the flanger sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
6	Dly:Delay	0–500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%–+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not wish to cut the high frequencies of the delay feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the delay and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 46: Chorus → Flanger [02H, 0BH]

This effect connects a chorus and a flanger in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cho:Pre Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
2	Cho:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus effect.
3	Cho:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus effect.
5	Cho:Balance	D>0E–D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct sound and the chorus sound. “D” and “E” stand for “direct sound” and “effect sound” respectively.
6	Flg:Pre Delay	0–100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
7	Flg:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed of the flanger effect.
8	Flg:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth of the flanger effect.
9	Flg:Feedback	-98%–+98% [9 (40 03 0B)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
10	Flg:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the sound that passes through the flanger and the sound that does not. “D” and “E” stand for “direct sound” and “effect sound” respectively.
17	EQ Low (200Hz) Gain	-12–+12 [17 (40 03 13)]	Adjusts the gain of the low frequency range.
18	EQ High (4kHz) Gain	-12–+12 [18 (40 03 14)]	Adjusts the gain of the high frequency range.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effects that connect three or more types of effect in series (series 3/series 4/series 5)

### 47: Rotary Multi (OD-EQ-RT) [03H, 00H]

This connects Overdrive (OD), 3-band equalizer (EQ), and Rotary (RT) effects in series.



EFX Parameter No.	Parameter	Value	Explanation
1	OD:Drive	0-127 [1 (40 03 03)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
2	OD:Switch	Off/On [2 (40 03 04)]	Turns the Overdrive effect on/off.
3	EQ:Low Gain	-12--+12 [3 (40 03 05)]	Adjusts the low range gain of the equalizer.
4	EQ:Mid Freq	200-6300 [4 (40 03 06)]	Sets the center frequency for the equalizer mid-range.
5	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [5 (40 03 07)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
6	EQ:Mid Gain	-12--+12 [6 (40 03 08)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
7	EQ:High Gain	-12--+12 [7 (40 03 09)]	Adjusts the high-range gain of the equalizer.
8	RT:LowSlowRate	0.05-10.0 [8 (40 03 0A)]	Adjusts the speed of the low-range rotor for the slow-speed setting.
9	RT:LowFastRate	0.05-10.0 [9 (40 03 0B)]	Adjusts the speed of the low-range rotor for the fast-speed setting.
10	RT:LowAccl	0-15 [10 (40 03 0C)]	Adjusts the time over which the rotation speed of the low-range rotor will change from slow-speed to fast-speed (or fast-speed to slow-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
11	RT:LowLevel	0-127 [11 (40 03 0D)]	Adjusts the volume of the low-range rotor.
12	RT:HighSlowRate	0.05-10.0 [12 (40 03 0E)]	Adjusts the speed of the high-range rotor for the slow-speed setting.
13	RT:HighFastRate	0.05-10.0 [13 (40 03 0F)]	Adjusts the speed of the high-range rotor for the fast-speed setting.
14	RT:HighAccl	0-15 [14 (40 03 10)]	Adjusts the time over which the rotation speed of the high-range rotor will change from slow-speed to fast-speed (or fast-speed to slow-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
15	RT:HighLevel	0-127 [15 (40 03 11)]	Adjusts the volume of the high-range rotor.
16	RT:Separation	0-127 [16 (40 03 12)]	Adjusts the spatial spread of the rotary sound.
17	RT:Speed	Slow/Fast [17 (40 03 13)]	Simultaneously switch the rotational speed of both the low-range and the high-range rotors. Slow: Slow down the rotation to the specified speeds (RT L Slow parameter/RT H Slow parameter values). Fast: Speed up the rotation to the specified speeds (RT L Fast parameter/RT H Fast parameter values).
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 48: Guitar Multi 1 (Comp-OD-CF-Dly) [04H, 00H]

Guitar Multi 1 connects Compressor (Cmp), Overdrive or Distortion (OD), Chorus or Flanger (CF), and Delay (Dly) effects in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cmp:Attack	0-127 [1 (40 03 03)]	Adjusts the time over which the sound will rise after input.
2	Cmp:Sustain	0-127 [2 (40 03 04)]	Adjusts the time over which low-level sounds are boosted until they reach a specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Cmp:Level	0-127 [3 (40 03 05)]	Adjusts the volume of the compressor sound.
4	Cmp:Switch	Off/On [4 (40 03 06)]	Turns the compressor on/off.
5	OD:ODrv/ DistSel	Overdrive/ Distortion [5 (40 03 07)]	Selects either Overdrive or Distortion.
6	OD:Drive	0-127 [6 (40 03 08)]	Adjusts the depth of distortion. The volume will change together with the depth of distortion.
7	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [7 (40 03 09)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
8	OD:Amp Switch	Off/On [8 (40 03 0A)]	Turns OD Amp on/off.
9	OD:Low Gain	-12--+12 [9 (40 03 0B)]	Adjusts the gain of the low frequency range.
10	OD:High Gain	-12--+12 [10 (40 03 0C)]	Adjusts the gain of the high frequency range.
11	OD:Switch	Off/On [11 (40 03 0D)]	Turns Overdrive or Distortion on/off.
12	CF:Cho/Flg Sel	Chorus/Flanger [12 (40 03 0E)]	Selects either Chorus or Flanger.
13	CF:Rate	0.05-6.40 [13 (40 03 0F)]	Adjusts the speed of modulation
14	CF:Depth	0-127 [14 (40 03 10)]	Adjusts the depth of modulation.
15	CF:Feedback(Flg)	-98%--+98% [15 (40 03 11)]	Adjusts the amount (%) of the flanger sound that is returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
16	CF:Mix	0-127 [16 (40 03 12)]	Adjusts the volume of the chorus or flanger sound.
17	Dly:Delay Time	0-635ms [17 (40 03 13)]	Adjusts the time from the original sound until when the delay sound is heard.
18	Dly:Feedback	0-127 [18 (40 03 14)]	Adjusts the amount of the delay sound that is returned to the input.
19	Dly:Mix	0-127 [19 (40 03 15)]	Adjusts the volume of the delay sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 49: Guitar Multi 2 (Comp-OD-EQ-CF) [04H, 01H]

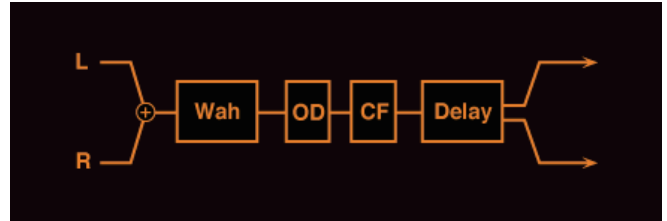
Guitar Multi 2 provides Compressor (Cmp), Overdrive or Distortion (OD), Equalizer (EQ), and Chorus or Flanger (CF) effects connected in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cmp:Attack	0-127 [1 (40 03 03)]	Adjusts the time over which the sound will rise after it is input.
2	Cmp:Sustain	0-127 [2 (40 03 04)]	Adjusts the time over which low-level sounds are boosted until they reach a specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Cmp:Level	0-127 [3 (40 03 05)]	Adjusts the volume of the compressor sound.
4	Cmp:Switch	Off/On [4 (40 03 06)]	Turns the compressor on/off.
5	OD:ODrv/DistSel	Overdrive/ Distortion [5 (40 03 07)]	Selects either Overdrive or Distortion.
6	OD:Drive	0-127 [6 (40 03 08)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
7	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [7 (40 03 09)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
8	OD:Amp Switch	Off/On [8 (40 03 0A)]	Turns OD Amp on/off.
9	OD:Switch	Off/On [9 (40 03 0B)]	Turns Overdrive or Distortion on/off.
10	EQ:Low Gain	-12-+12 [10 (40 03 0C)]	Adjusts the low-range gain of the equalizer.
11	EQ:Mid Freq	200-6300 [11 (40 03 0D)]	Sets the center frequency for the equalizer mid-range.
12	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [12 (40 03 0E)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
13	EQ:Mid Gain	-12-+12 [13 (40 03 0F)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
14	EQ:High Gain	-12-+12 [14 (40 03 10)]	Adjusts the high-range gain of the equalizer.
15	CF:Cho/Flg Sel	Chorus/Flanger [15 (40 03 11)]	Selects either Chorus or Flanger.
16	CF:Rate	0.05-6.40 [16 (40 03 12)]	Adjusts the speed of modulation for the chorus or flanger.
17	CF:Depth	0-127 [17 (40 03 13)]	Adjusts the depth of modulation for the chorus or flanger.
18	CF: Feedback(Flg)	-98%-+98% [18 (40 03 14)]	Adjusts the amount (%) of the flanger sound that will be returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
19	CF:Mix	0-127 [19 (40 03 15)]	Adjusts the volume of the chorus or flanger sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 50: Guitar Multi 3 (Wah-OD-CF-Dly) [04H, 02H]

Guitar Multi 3 connects Wah (Wah), Overdrive or Distortion (OD), Chorus or Flanger (CF), and Delay (Dly) effects in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Wah:Filter Type	LowPass/ BandPass [1 (40 03 03)]	Selects the type of filter. LowPass: The wah effect will be produced over a broad frequency range. BandPass: The wah effect will be produced in a narrow frequency range.
2	Wah:Manual	0-127 [2 (40 03 04)]	Sets the center frequency at which the effect will be produced.
3	Wah:Peak	0-127 [3 (40 03 05)]	Adjusts the way in which the wah effect will be applied to the region of the center frequency. Lower settings will produce a wah effect in a broad area around the center frequency, and higher settings will produce a wah effect in a narrower area around the center frequency.
4	Wah:Switch	Off/On [4 (40 03 06)]	Turns Wah on/off.
5	OD:ODrv/DistSel	Overdrive/ Distortion [5 (40 03 07)]	Selects either Overdrive or Distortion.
6	OD:Drive	0-127 [6 (40 03 08)]	Adjusts the depth of distortion. The volume will change together with the depth of distortion.
7	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [7 (40 03 09)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
8	OD:Amp Switch	Off/On [8 (40 03 0A)]	Turns OD Amp on/off.
9	OD:Low Gain	-12-+12 [9 (40 03 0B)]	Adjusts the low-range gain for the overdrive (or distortion) sound.
10	OD:High Gain	-12-+12 [10 (40 03 0C)]	Adjusts the high-range gain for the overdrive (or distortion) sound.
11	OD:Switch	Off/On [11 (40 03 0D)]	Turns overdrive or distortion on/off.
12	CF:Cho/Flg Sel	Chorus/Flanger [12 (40 03 0E)]	Selects either Chorus or Flanger.
13	CF:Rate	0.05-6.40 [13 (40 03 0F)]	Adjusts the modulation speed for the chorus or flanger.
14	CF:Depth	0-127 [14 (40 03 10)]	Adjusts the modulation depth for the chorus or flanger.
15	CF: Feedback(Flg)	-98%-+98% [15 (40 03 11)]	Adjusts the amount (%) of the flanger sound that is returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
16	CF:Mix	0-127 [16 (40 03 12)]	Adjusts the volume of the chorus or flanger sound.
17	Dly:Delay Time	0-635ms [17 (40 03 13)]	Adjusts the time from the original sound until when the delay sound is heard.
18	Dly:Feedback	0-127 [18 (40 03 14)]	Adjusts the amount of the delay sound that is returned to the input.
19	Dly:Mix	0-127 [19 (40 03 15)]	Adjusts the volume of the delay sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.



## 51: C.Guitar Multi 1 (CL-EQ-CF-Dly) [04H, 03H]

Clean Guitar Multi 1 connects Compressor (Cmp), Equalizer (EQ), Chorus or Flanger (CF), and Delay (Dly) effects in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cmp:Attack	0–127 [1 (40 03 03)]	Adjusts the time over which the sound will rise after it is input.
2	Cmp:Sustain	0–127 [2 (40 03 04)]	Adjusts the time over which low-level sounds are boosted until they reach a specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Cmp:Level	0–127 [3 (40 03 05)]	Adjusts the volume of the compressor sound.
4	Cmp:Switch	Off/On [4 (40 03 06)]	Turns the compressor on/off.
5	EQ:Low Gain	-12–+12 [5 (40 03 07)]	Adjusts the low-range gain of the equalizer.
6	EQ:Mid Freq	200–6300 [6 (40 03 08)]	Sets the center frequency for the equalizer mid-range.
7	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [7 (40 03 09)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
8	EQ:Mid Gain	-12–+12 [8 (40 03 0A)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
9	EQ:High Gain	-12–+12 [9 (40 03 0B)]	Adjusts the high-range gain of the equalizer.
10	CF:Cho/Flg Sel	Chorus/Flanger [10 (40 03 0C)]	Selects either Chorus or Flanger.
11	CF:Rate	0.05–6.40 [11 (40 03 0D)]	Adjusts the speed of modulation for the chorus or flanger.
12	CF:Depth	0–127 [12 (40 03 0E)]	Adjusts the depth of modulation for the chorus or flanger.
13	CF:Feedback(Flg)	-98%–+98% [13 (40 03 0F)]	Adjusts the amount (%) of the flanger sound that will be returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
14	CF:Mix	0–127 [14 (40 03 10)]	Adjusts the volume of the chorus or flanger sound.
15	Dly:Delay Time	0–635ms [15 (40 03 11)]	Adjusts the time from the original sound until when the delay sound is heard.
16	Dly:Feedback	0–127 [16 (40 03 12)]	Adjusts the amount of the delay sound that is returned to the input.
17	Dly:HF Damp	315–8000/ Bypass [17 (40 03 13)]	Adjusts the frequency at which the high range will be cut from the delay sound that is returned to the input. If you do not wish to cut the high range of the returned sound, select Bypass.
18	Dly:Mix	0–127 [18 (40 03 14)]	Adjusts the volume of the delay sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## 52: C.Guitar Multi 2 (AW-EQ-CF-Dly) [04H, 04H]

Clean Guitar Multi 2 provides Auto-wah (AW), Equalizer (EQ), Chorus or Flanger (CF), and Delay (Dly) effects connected in series.



EFX Parameter No.	Parameter	Value	Explanation
1	AW:Filter Type	LowPass/ BandPass [1 (40 03 03)]	Selects the type of filter for the Auto-wah. LowPass: The wah effect will be produced over a broad frequency range. BandPass: The wah effect will be produced over a narrow frequency range.
2	AW:Manual	0–127 [2 (40 03 04)]	Sets the center frequency at which the auto-wah effect will be produced.
3	AW:Peak	0–127 [3 (40 03 05)]	Adjusts the way in which the wah effect will be applied to the region of the center frequency. Lower settings will produce a wah effect in a broad area around the center frequency, and higher settings will produce a wah effect in a narrower area around the center frequency.
4	AW:Rate	0.05–6.40 [4 (40 03 06)]	Adjusts the modulation speed of the Auto-wah.
5	AW:Depth	0–127 [5 (40 03 07)]	Adjusts the modulation depth of the Auto-wah.
6	AW:Switch	Off/On [6 (40 03 08)]	Turns Auto-wah on/off.
7	EQ:Low Gain	-12–+12 [7 (40 03 09)]	Adjusts the low-range gain of the equalizer.
8	EQ:Mid Freq	200–6300 [8 (40 03 0A)]	Sets the center frequency for the equalizer mid-range.
9	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [9 (40 03 0B)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
10	EQ:Mid Gain	-12–+12 [10 (40 03 0C)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
11	EQ:High Gain	-12–+12 [11 (40 03 0D)]	Adjusts the high-range gain of the equalizer.
12	CF:Cho/Flg Sel	Chorus/Flanger [12 (40 03 0E)]	Selects either Chorus or Flanger.
13	CF:Rate	0.05–6.40 [13 (40 03 0F)]	Adjusts the speed of modulation for the chorus or flanger.
14	CF:Depth	0–127 [14 (40 03 10)]	Adjusts the depth of modulation for the chorus or flanger.
15	CF:Feedback(Flg)	-98%–+98% [15 (40 03 11)]	Adjusts the amount (%) of the flanger sound that will be returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
16	CF:Mix	0–127 [16 (40 03 12)]	Adjusts the volume of the chorus or flanger sound.
17	Dly:Delay Time	0–635ms [17 (40 03 13)]	Adjusts the time from the original sound until when the delay sound is heard.
18	Dly:Feedback	0–127 [18 (40 03 14)]	Adjusts the amount of the delay sound that is returned to the input.
19	Dly:Mix	0–127 [19 (40 03 15)]	Adjusts the volume of the delay sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 53: Bass Multi (EH-PH-CF-Dly) [04H, 05H]

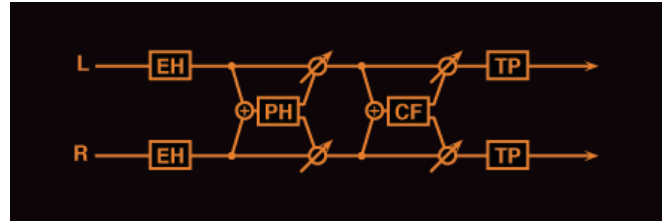
Bass Multi provides Compressor (Cmp), Overdrive or Distortion (OD), Equalizer (EQ), and Chorus or Flanger (CF) effects connected in series.



EFX Parameter No.	Parameter	Value	Explanation
1	Cmp:Attack	0-127 [1 (40 03 03)]	Adjusts the time over which the sound will rise after it is input.
2	Cmp:Sustain	0-127 [2 (40 03 04)]	Adjusts the time over which low-level sounds are boosted until they reach a specified volume. Increasing the value will shorten the time. When the value is modified, the level will also change.
3	Cmp:Level	0-127 [3 (40 03 05)]	Adjusts the volume of the compressor sound.
4	Cmp:Switch	Off/On [4 (40 03 06)]	Turns the compressor on/off.
5	OD:ODrv/DistSel	Overdrive/ Distortion [5 (40 03 07)]	Selects either bass guitar Overdrive or Distortion.
6	OD:Drive	0-127 [6 (40 03 08)]	Adjusts the depth of distortion. The volume will change together with the depth of distortion.
7	OD:Amp Type	Small/Built-In/ 2 Stack [7 (40 03 09)]	Selects the type of bass amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: large double stack amp
8	OD:Amp Switch	Off/On [8 (40 03 0A)]	Turns OD Amp on/off.
9	OD:Switch	Off/On [9 (40 03 0B)]	Turns Overdrive/Distortion on/off.
10	EQ:Low Gain	-12-+12 [10 (40 03 0C)]	Adjusts the low-range gain of the equalizer.
11	EQ:Mid Freq	200-6300 [11 (40 03 0D)]	Sets the center frequency for the equalizer mid-range.
12	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [12 (40 03 0E)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
13	EQ:Mid Gain	-12-+12 [13 (40 03 0F)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
14	EQ:High Gain	-12-+12 [14 (40 03 10)]	Adjusts the high-range gain of the equalizer.
15	CF:Cho/Flg Sel	Chorus/Flanger [15 (40 03 11)]	Selects either Chorus or Flanger.
16	CF:Rate	0.05-6.40 [16 (40 03 12)]	Adjusts the speed of modulation for the chorus or flanger.
17	CF:Depth	0-127 [17 (40 03 13)]	Adjusts the depth of modulation for the chorus or flanger.
18	CF: Feedback(Flg)	-98%-+98% [18 (40 03 14)]	Adjusts the amount (%) of the flanger sound that will be returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
19	CF:Mix	0-127 [19 (40 03 15)]	Adjusts the volume of the chorus or flanger sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 54: EP Multi (EH-PH-CF-TP) [04H, 06H]

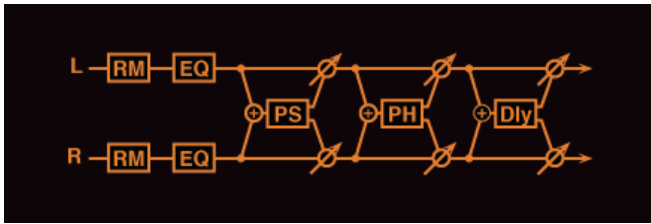
Rhodes Multi provides Enhancer (EH), Phaser (PH), Chorus or Flanger (CF), and Tremolo or Pan (TP) effects connected in series.



EFX Parameter No.	Parameter	Value	Explanation
1	EH:Sens	0-127 [1 (40 03 03)]	Adjusts the sensitivity of the enhancer.
2	EH:Mix	0-127 [2 (40 03 04)]	Adjusts the level at which the overtones generated by the enhancer will be mixed with the direct sound.
3	PH:Manual	100-8000 [3 (40 03 05)]	Adjusts the center frequency at which the sound will be modulated.
4	PH:Rate	0.05-6.40 [4 (40 03 06)]	Adjusts the modulation speed.
5	PH:Depth	0-127 [5 (40 03 07)]	Adjusts the modulation depth.
6	PH:Resonance	0-127 [6 (40 03 08)]	Adjusts the emphasis for the region around the center frequency specified by the PH:Manual parameter.
7	PH:Mix	0-127 [7 (40 03 09)]	Adjusts the proportion of the phase-shifted sound that will be mixed with the direct sound.
8	CF:Cho/Flg Sel	Chorus/Flanger [8 (40 03 0A)]	Selects either Chorus or Flanger.
9	CF:LPF	250-6300/ Bypass [9 (40 03 0B)]	Cuts the high frequency range of the chorus or flanger sound.
10	CF:Delay	0-100ms [10 (40 03 0C)]	Adjusts the time from the direct sound until when the chorus or flanger sound is heard.
11	CF:Rate	0.05-6.40 [11 (40 03 0D)]	Adjusts the modulation speed.
12	CF:Depth	0-127 [12 (40 03 0E)]	Adjusts the modulation depth.
13	CF: Feedback(Flg)	-98%-+98% [13 (40 03 0F)]	Adjusts the amount (%) of the flanger sound that will be returned to the input. Negative (-) values will invert the phase. * In the case of Chorus, this will have no effect.
14	CF:Mix	0-127 [14 (40 03 10)]	Adjusts the volume of the chorus or flanger sound.
15	TP:Select	Trem/Pan [15 (40 03 11)]	Selects either Tremolo or Pan.
16	TP:Mod Wave	Tri/Sqr/Sin/ Saw1/Saw2 [16 (40 03 12)]	Selects the way in which tremolo or pan will be modulated. Tri: Triangle wave Sqr: Square wave Sin: Sine wave Saw1: Sawtooth wave Saw2: Inverted saw wave
17	TP:Mod Rate	0.05-6.40 [17 (40 03 13)]	Adjusts the modulation speed.
18	TP:Mod Depth	0-127 [18 (40 03 14)]	Adjusts the modulation depth.
19	TP:Switch	Off/On [19 (40 03 15)]	Turns tremolo or pan on/off.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 55: Keyboard Multi (RM-EQ-PS-PH-Dly) [05H, 00H]

Keyboard Multi provides Ring Modulator (RM), Equalizer (EQ), Pitch Shifter (PS), Phaser (PH) and Delay (Dly) effects connected in series. Ring Modulator is an effect which applies amplitude modulation (AM) to the input signal, producing bell-like sounds.



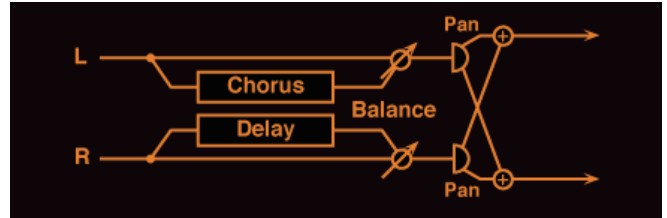
EFX Parameter No.	Parameter	Value	Explanation
1	RM:Mod Freq	0-127 [1 (40 03 03)]	Sets the frequency at which modulation will be applied.
2	RM:Balance	D>0E-D0<E [2 (40 03 04)]	Adjusts the balance between the direct and the ring modulated sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
3	EQ:Low Gain	-12--+12 [3 (40 03 05)]	Adjusts the low range gain of the equalizer.
4	EQ:Mid Freq	200-6300 [4 (40 03 06)]	Sets the center frequency for the equalizer mid-range.
5	EQ:Mid Q	0.5/1.0/2.0/ 4.0/9.0 [5 (40 03 07)]	Adjusts the width of the area centered at the EQ:Mid Freq setting in which the gain will be affected. The area affected will become narrower as this value is increased.
6	EQ:Mid Gain	-12--+12 [6 (40 03 08)]	Adjusts the gain of the area specified by the EQ:Mid Freq parameter and the EQ:Mid Q parameter.
7	EQ:High Gain	-12--+12 [7 (40 03 09)]	Adjusts the high-range gain of the equalizer.
8	PS:Coarse	-24-0--+12 [8 (40 03 0A)]	Adjusts the amount of pitch shift in semitone steps (-2 to +1 octaves).
9	PS:Fine	-100-0--+100 [9 (40 03 0B)]	Makes fine adjustments to the pitch shift in 2-cent steps (-100 to +100 cents).
10	PS:Mode	Mode1-5 [10 (40 03 0C)]	As this value is increased, the response will become slower but the sound will be more stable.
11	PS:Balance	D>0E-D0<E [11 (40 03 0D)]	Adjusts the volume balance between the direct and the pitch shifted sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
12	PH:Manual	100-8000 [12 (40 03 0E)]	Sets the center frequency at which the phaser sound will be modulated.
13	PH:Rate	0.05-6.40 [13 (40 03 0F)]	Adjusts the modulation speed of the phaser.
14	PH:Depth	0-127 [14 (40 03 10)]	Adjusts the modulation depth of the phaser.
15	PH:Resonance	0-127 [15 (40 03 11)]	Adjusts the emphasis for the region in the area of the center frequency specified by the PH:Manual parameter.
16	PH:Mix	0-127 [16 (40 03 12)]	Adjusts the proportion at which the phase-shifted sound will be mixed with the original sound.
17	Dly:Delay	0-635ms [17 (40 03 13)]	Adjusts the time from the original sound until when the delay sound is heard.
18	Dly:Feedback	0-127 [18 (40 03 14)]	Adjusts the amount of the delay sound that is returned to the input.
19	Dly:Mix	0-127 [19 (40 03 15)]	Adjusts the proportion at which the delay sound is mixed with the direct sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### Effects that connect two types of effect in parallel (parallel 2)

Effect types in which two different effects are connected in parallel allow you to apply different effects to L and R independently. By using parallel effects for the sound of two Parts, you can achieve a result as if two separate effect units were used.

### 56: Chorus / Delay [11H, 00H]

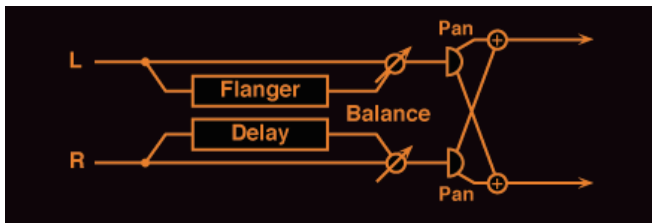
This effect connects a chorus and a delay in parallel.



EFX Parameter No.	Parameter	Value	Explanation
1	Cho:Pre Delay	0-100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
2	Cho:Rate	0.05-10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus effect.
3	Cho:Depth	0-127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus effect.
5	Cho:Balance	D>0E-D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct and the chorus sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
6	Dly:Delay Time	0-500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%--+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315-8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not wish to cut the high frequencies of the feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E-D0<E [10 (40 03 0C)]	Adjusts the volume balance between the direct and the delay sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
16	Cho:Pan	L63-Center-R63 [16 (40 03 12)]	Adjusts the stereo position of the chorus sound. L63 is far left, and R63 is far right.
17	Cho:Level	0-127 [17 (40 03 13)]	Adjusts the volume of the chorus sound.
18	Dly:Pan	L63-Center-R63 [18 (40 03 14)]	Adjusts the stereo position of the delay sound. L63 is far left, and R63 is far right.
19	Dly:Level	0-127 [19 (40 03 15)]	Adjusts the volume of the delay sound.
20	Level	0-127 [20 (40 03 16)]	Adjusts the output level.

### 57: Flanger / Delay [11H, 01H]

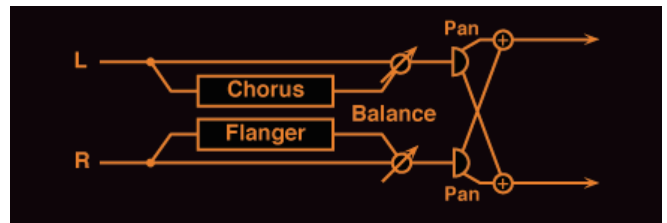
This effect connects a flanger and a delay in parallel.



EFX Parameter No.	Parameter	Value	Explanation
1	Flg:Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
2	Flg:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the flanger effect.
3	Flg:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the flanger effect.
4	Flg:Feedback	-98%–+98% [4 (40 03 06)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
5	Flg:Balance	D>0E–D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct sound and the flanger sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
6	Dly:Delay	0–500ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
7	Dly:Feedback	-98%–+98% [7 (40 03 09)]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
8	Dly:HF Damp	315–8000/ Bypass [8 (40 03 0A)]	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not want to cut the high frequencies of the delay feedback, set this parameter to Bypass.
10	Dly:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the direct and the delay sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
16	Flg:Pan	L63–Center–R63 [16 (40 03 12)]	Adjusts the stereo position of the flanger sound. L63 is far left, and R63 is far right.
17	Flg:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the flanger sound.
18	Dly:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the delay sound. L63 is far left, and R63 is far right.
19	Dly:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the delay sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 58: Chorus / Flanger [11H, 02H]

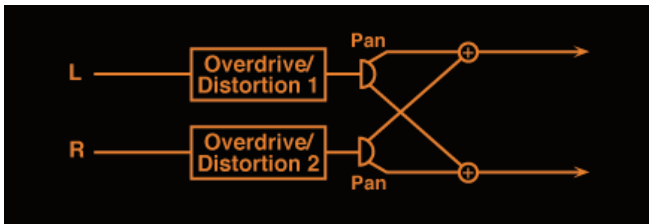
This effect connects a chorus and a flanger in parallel.



EFX Parameter No.	Parameter	Value	Explanation
1	Cho:Delay	0–100ms [1 (40 03 03)]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
2	Cho:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the chorus effect.
3	Cho:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the chorus effect.
5	Cho:Balance	D>0E–D0<E [5 (40 03 07)]	Adjusts the volume balance between the direct and the chorus sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
6	Flg:Delay	0–100ms [6 (40 03 08)]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
7	Flg:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed of the flanger effect.
8	Flg:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth of the flanger effect.
9	Flg:Feedback	-98%–+98% [9 (40 03 0B)]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
10	Flg:Balance	D>0E–D0<E [10 (40 03 0C)]	Adjusts the volume balance between the direct sound and the flanger sound. "D" and "E" stand for "direct sound" and "effect sound" respectively.
16	Cho:Pan	L63–Center–R63 [16 (40 03 12)]	Adjusts the stereo position of the chorus sound. L63 is far left, and R63 is far right.
17	Cho:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the chorus sound.
18	Flg:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the flanger sound. L63 is far left, and R63 is far right.
19	Flg:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the flanger sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 59: Overdrive 1 / Overdrive 2 [11H, 03H]

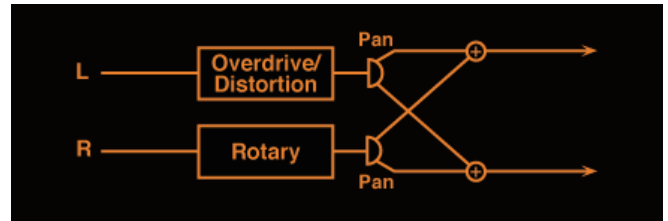
This connects two effect units in parallel, each of which allows you to select Overdrive or Distortion.



EFX Parameter No.	Parameter	Value	Explanation
1	OD1:Select	Overdrive/ Distortion [1 (40 03 03)]	Selects either Overdrive or Distortion for set 1.
2	OD1:Drive	0–127 [2 (40 03 04)]	Adjusts the degree of distortion for set 1. The volume will change together with the degree of distortion.
3	OD1:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Selects the type of guitar amp for set 1. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD1:Amp Switch	Off/On [4 (40 03 06)]	Turns OD1 Amp on/off.
6	OD2:Select	Overdrive/ Distortion [6 (40 03 08)]	Selects either Overdrive or Distortion for set 2.
7	OD2:Drive	0–127 [7 (40 03 09)]	Adjusts the degree of distortion for set 2. The volume will change together with the degree of distortion.
8	OD2:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [8 (40 03 0A)]	Selects the type of guitar amp for set 2. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
9	OD2:Amp Switch	Off/On [9 (40 03 0B)]	Turns OD2 Amp on/off.
16	OD1:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the overdrive or distortion sound for set 1. L63 is far left, and R63 is far right.
17	OD1:Level	0–127 [17 (40 03 13)]	Adjusts the overdrive or distortion volume for set 1.
18	OD2:Pan	L63–Center–R63 [18 (40 03 14)]	Sets the stereo location of the overdrive or distortion sound for set 2. L63 is far left, and R63 is far right.
19	OD2:Level	0–127 [19 (40 03 15)]	Adjusts the overdrive or distortion volume for set 2.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 60: Overdrive / Rotary [11H, 04H]

This connects Overdrive or Distortion in parallel with Rotary.

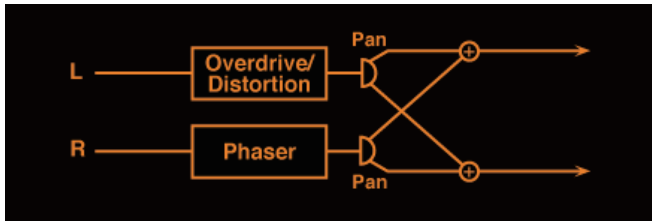


EFX Parameter No.	Parameter	Value	Explanation
1	OD:Select	Overdrive/ Distortion [1 (40 03 03)]	Selects either Overdrive or Distortion.
2	OD:Drive	0–127 [2 (40 03 04)]	Adjusts the depth of overdrive or distortion. The volume will change together with the depth of distortion.
3	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Switch	Off/On [4 (40 03 06)]	Turns the OD Amp parameter on/off.
6	RT:LowSlowRate	0.05–10.0 [6 (40 03 08)]	Adjusts the speed of the low-range rotor for the slow-speed setting.
7	RT:LowFastRate	0.05–10.0 [7 (40 03 09)]	Adjusts the speed of the low-range rotor for the fast-speed setting.
8	RT:LowAccl	0–15 [8 (40 03 0A)]	Adjusts the time over which the rotation speed of the low-range rotor will change from low-speed to high-speed (or high-speed to low-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
9	RT:LowLevel	0–127 [9 (40 03 0B)]	Adjusts the volume of the low-range rotor.
10	RT:HighSlowRate	0.05–10.0 [10 (40 03 0C)]	Adjusts the speed of the high-range rotor for the slow-speed setting.
11	RT:HighFastRate	0.05–10.0 [11 (40 03 0D)]	Adjusts the speed of the high-range rotor for the fast-speed setting.
12	RT:HighAccl	0–15 [12 (40 03 0E)]	Adjusts the time over which the rotation speed of the high-range rotor will change from slow-speed to fast-speed (or fast-speed to slow-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
13	RT:HighLevel	0–127 [13 (40 03 0F)]	Adjusts the volume of the high-range rotor.
14	RT:Separation	0–127 [14 (40 03 10)]	Adjusts the spatial spread of the rotary sound.
15	RT:Speed	Slow/Fast [15 (40 03 11)]	Simultaneously switch the rotational speed of both the low-range and the high-range rotors. Slow: Slow down the rotation to the specified speeds (RT L Slow parameter/RT H Slow parameter values). Fast: Speed up the rotation to the specified speeds (RT L Fast parameter/RT H Fast parameter values).
16	OD:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the overdrive or distortion sound. L63 is far left, and R63 is far right.
17	OD:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the overdrive or distortion sound.
18	RT:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the rotary sound. L63 is far left, and R63 is far right.
19	RT:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the rotary sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.



### 61: Overdrive / Phaser [11H, 05H]

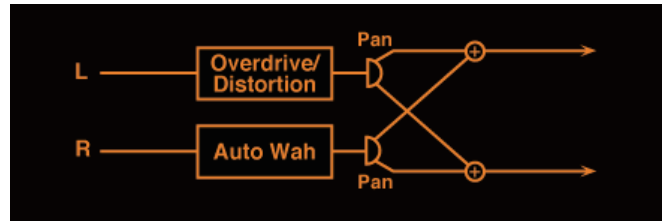
This connects an overdrive or distortion in parallel with a phaser.



EFX Parameter No.	Parameter	Value	Explanation
1	OD:Select	Overdrive/ Distortion [1 (40 03 03)]	Selects either Overdrive or Distortion.
2	OD:Drive	0–127 [2 (40 03 04)]	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
3	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Switch	Off/On [4 (40 03 06)]	Turns the OD Amp parameter on/off.
6	PH:Manual	100–8000 [6 (40 03 08)]	Adjusts the center frequency at which the sound will be modulated.
7	PH:Rate	0.05–10.0 [7 (40 03 09)]	Adjusts the modulation speed.
8	PH:Depth	0–127 [8 (40 03 0A)]	Adjusts the modulation depth.
9	PH:Resonance	0–127 [9 (40 03 0B)]	Adjusts the emphasis for the region around the center frequency specified by the PH:Manual parameter.
10	PH:Mix	0–127 [10 (40 03 0C)]	Adjusts the proportion of the phase-shifted sound that will be mixed with the direct sound.
16	OD:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the overdrive or distortion sound. L63 is far left, and R63 is far right.
17	OD:Level	0–127 [17 (40 03 13)]	Adjusts the overdrive or distortion volume.
18	PH:Pan	L63–Center–R63 [18 (40 03 14)]	Sets the stereo location of the phaser sound. L63 is far left, and R63 is far right.
19	PH:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the phaser sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 62: Overdrive / Auto Wah [11H, 06H]

This connects an Overdrive or Distortion in parallel with an Auto-wah.

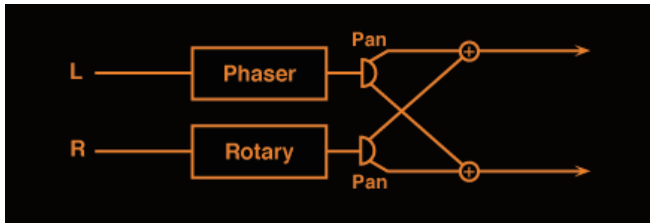


EFX Parameter No.	Parameter	Value	Explanation
1	OD:Select	Overdrive/ Distortion [1 (40 03 03)]	Selects either Overdrive or Distortion.
2	OD:Drive	0–127 [2 (40 03 04)]	Adjusts the degree of overdrive or distortion. The volume will change together with the degree of distortion.
3	OD:Amp Type	Small/ Built-In/ 2 Stack/ 3 Stack [3 (40 03 05)]	Select the type of guitar amp. Small: Small amp Built-In: Single-unit type amp 2 Stack: Large double stack amp 3 Stack: Large triple stack amp
4	OD:Amp Switch	Off/On [4 (40 03 06)]	Turns the OD Amp parameter on/off.
6	AW:Filter Type	LowPass/ BandPass [6 (40 03 08)]	Selects the type of filter for the auto-wah. LowPass: The wah effect will be produced over a broad frequency range. BandPass: The wah effect will be produced over a narrow frequency range.
7	AW:Sens	0–127 [7 (40 03 09)]	Adjusts the sensitivity with which the auto-wah filter will be controlled.
8	AW:Manual	0–127 [8 (40 03 0A)]	Sets the center frequency at which the auto-wah effect will be produced.
9	AW:Peak	0–127 [9 (40 03 0B)]	Adjusts the way in which the wah effect will be applied to the region of the center frequency. Lower settings will produce a wah effect in a broad area around the center frequency, and higher settings will produce a wah effect in a narrower area around the center frequency.
10	AW:Rate	0.05–10.0 [10 (40 03 0C)]	Adjusts the modulation speed of the auto-wah.
11	AW:Depth	0–127 [11 (40 03 0D)]	Adjusts the modulation depth of the auto-wah.
12	AW:Polarity	Down/Up [12 (40 03 0E)]	Sets the direction in which the frequency will change when the auto-wah filter is modulated. With a setting of Up, the filter will change toward a higher frequency. With a setting of Down, it will change toward a lower frequency.
16	OD:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the overdrive or distortion sound. L63 is far left, and R63 is far right.
17	OD:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the overdrive or distortion sound.
18	AW:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the auto-wah sound. L63 is far left, and R63 is far right.
19	AW:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the auto-wah sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.



### 63: Phaser / Rotary [11H, 07H]

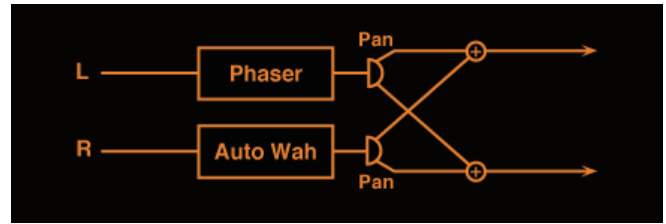
This connects a Phaser effect in parallel with a Rotary effect.



EFX Parameter No.	Parameter	Value	Explanation
1	PH:Manual	100–8000 [1 (40 03 03)]	Adjusts the center frequency at which the sound will be modulated.
2	PH:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the phaser.
3	PH:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the phaser.
4	PH:Resonance	0–127 [4 (40 03 06)]	Adjusts the emphasis for the region around the center frequency specified by the PH:Manual parameter.
5	PH:Mix	0–127 [5 (40 03 07)]	Adjusts the proportion of the phase-shifted sound that will be mixed with the direct sound.
6	RT:LowSlowRate	0.05–10.0 [6 (40 03 08)]	Adjusts the speed of the low-range rotor for the slow-speed setting.
7	RT:LowFastRate	0.05–10.0 [7 (40 03 09)]	Adjusts the speed of the low-range rotor for the fast-speed setting.
8	RT:LowAccl	0–15 [8 (40 03 0A)]	Adjusts the time over which the rotation speed of the low-range rotor will change from slow-speed to fast-speed (or fast-speed to slow-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
9	RT:LowLevel	0–127 [9 (40 03 0B)]	Adjusts the volume of the low-range rotor.
10	RT:HighSlowRate	0.05–10.0 [10 (40 03 0C)]	Adjusts the speed of the high-range rotor for the slow-speed setting.
11	RT:HighFastRate	0.05–10.0 [11 (40 03 0D)]	Adjusts the speed of the high-range rotor for the fast-speed setting.
12	RT:HighAccl	0–15 [12 (40 03 0E)]	Adjusts the time over which the rotation speed of the high-range rotor will change from slow-speed to fast-speed (or fast-speed to slow-speed) rotation. Smaller values will require greater time to reach the new rotational speed.
13	RT:HighLevel	0–127 [13 (40 03 0F)]	Adjusts the volume of the high-range rotor.
14	RT:Separation	0–127 [14 (40 03 10)]	Adjusts the spread of the rotary sound.
15	RT:Speed	Slow/Fast [15 (40 03 11)]	Simultaneously switch the rotational speed of both the low-range and the high-range rotors. Slow: Slow down the rotation to the specified speeds (RT L Slow parameter/RT H Slow parameter values). Fast: Speed up the rotation to the specified speeds (RT L Fast parameter/RT H Fast parameter values).
16	OD:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the phaser sound. L63 is far left, and R63 is far right.
17	OD:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the phaser sound.
18	AW:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the rotary sound. L63 is far left, and R63 is far right.
19	AW:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the rotary sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

### 64: Phaser / Auto Wah [11H, 08H]

This connects a Phaser effect and an Auto-wah effect in parallel.



EFX Parameter No.	Parameter	Value	Explanation
1	PH:Manual	100–8000 [1 (40 03 03)]	Adjusts the center frequency at which the phaser sound will be modulated.
2	PH:Rate	0.05–10.0 [2 (40 03 04)]	Adjusts the modulation speed of the phaser.
3	PH:Depth	0–127 [3 (40 03 05)]	Adjusts the modulation depth of the phaser.
4	PH:Resonance	0–127 [4 (40 03 06)]	Adjusts the emphasis for the region around the center frequency specified by the PH:Manual parameter.
5	PH:Mix	0–127 [5 (40 03 07)]	Adjusts the proportion of the phase-shifted sound that will be mixed with the direct sound.
6	AW:Filter Type	LowPass/ BandPass [6 (40 03 08)]	Selects the type of filter for the auto-wah. LowPass: The wah effect will be produced over a broad frequency range. BandPass: The wah effect will be produced over a narrow frequency range.
7	AW:Sens	0–127 [7 (40 03 09)]	Adjusts the sensitivity with which the auto-wah filter will be modulated.
8	AW:Manual	0–127 [8 (40 03 0A)]	Sets the center frequency at which the auto-wah effect will be produced.
9	AW:Peak	0–127 [9 (40 03 0B)]	Adjusts the way in which the wah effect will be applied to the region of the center frequency. Lower settings will produce a wah effect in a broad area around the center frequency, and higher settings will produce a wah effect in a narrower area around the center frequency.
10	AW:Rate	0.05–10.0 [10 (40 03 0C)]	Adjusts the modulation speed of the auto-wah.
11	AW:Depth	0–127 [11 (40 03 0D)]	Adjusts the modulation depth of the auto-wah.
12	AW:Polarity	Down/Up [12 (40 03 0E)]	Sets the direction in which the frequency will change when the auto-wah filter is modulated. With a setting of Up, the filter will change toward a higher frequency. With a setting of Down it will change toward a lower frequency.
16	PH:Pan	L63–Center–R63 [16 (40 03 12)]	Sets the stereo location of the phaser sound. L63 is far left, and R63 is far right.
17	PH:Level	0–127 [17 (40 03 13)]	Adjusts the volume of the phaser sound.
18	AW:Pan	L63–Center–R63 [18 (40 03 14)]	Adjusts the stereo position of the auto-wah sound. L63 is far left, and R63 is far right.
19	AW:Level	0–127 [19 (40 03 15)]	Adjusts the volume of the auto-wah sound.
20	Level	0–127 [20 (40 03 16)]	Adjusts the output level.

## Effect Parameter Value Conversion Table

Here is a table for converting between the hexadecimal value and the actual setting for each parameter. These parameters are used in the following effect types.

- |                     |                      |                    |                      |                      |                    |
|---------------------|----------------------|--------------------|----------------------|----------------------|--------------------|
| 1. Pre Delay Time   | 2. Delay Time1       | 6. Rate1           | 56: Cho/Delay        | 26: Reverb           | 11. LPF            |
| 10: Stereo Flanger  | 23: 3 Tap Delay      | 07: Phaser         | 57: FL/Delay         | 28: 3D Delay         | 34: Lo-Fi 2        |
| 11: Step Flanger    | 24: 4 Tap Delay      | 08: Auto Wah       | 58: Cho/Flanger      | 37: OD → Delay       | 54: Rhodes Multi   |
| 16: Hexa Chorus     |                      | 09: Rotary         | 60: OD/Rotary        | 40: DS → Delay       |                    |
| 17: Tremolo Chorus  | 3. Delay Time2       | 10: Stereo Flanger | 61: OD/Phaser        | 43: EH → Delay       | 12. Manual         |
| 18: Stereo Chorus   | 25: Tm Ctrl Delay    | 11: Step Flanger   | 62: OD/Auto Wah      | 44: Cho → Delay      | 07: Phaser         |
| 19: Space-D         |                      | 12: Tremolo        | 63: PH/Rotary        | 45: FL → Delay       | 54: Rhodes Multi   |
| 20: 3D Chorus       | 4. Delay Time3       | 13: Auto Pan       | 64: PH/Auto Wah      | 51: Clean Gt Multi 1 | 55: Keyboard Multi |
| 26: Reverb          | 21: Stereo Delay     | 16: Hexa Chorus    |                      | 56: Cho/Delay        | 61: OD/Phaser      |
| 27: Gate Reverb     | 22: Mod Delay        | 17: Tremolo Chorus | 7. Rate 2            | 57: FL/Delay         | 63: PH/Rotary      |
| 29: 2 Pitch Shifter | 28: 3D Delay         | 18: Stereo Chorus  | 48: GTR Multi 1      |                      | 64: PH/Auto Wah    |
| 30: Fb P.Shifter    | 37: OD → Delay       | 19: Space-D        | 49: GTR Multi 2      | 9. Cutoff Freq       |                    |
| 35: OD → Chorus     | 40: DS → Delay       | 20: 3D Chorus      | 50: GTR Multi 3      | 10: Stereo Flanger   | 13. Azimuth        |
| 36: OD → Flanger    | 43: EH → Delay       | 22: Mod Delay      | 51: Clean Gt Multi 1 | 18: Stereo Chorus    | 31: 3D Auto        |
| 38: DS → Chorus     | 44: Cho → Delay      | 31: 3D Auto        | 52: Clean Gt Multi 2 | 34: Lo-Fi 2          | 32: 3D Locate      |
| 39: DS → Flanger    | 45: FL → Delay       | 35: OD → Chorus    | 53: Bass Multi       |                      |                    |
| 41: EH → Chorus     | 56: Cho/Delay        | 36: OD → Flanger   | 54: Rhodes Multi     | 10. EQ Freq          | 14. Accl           |
| 42: EH → Flanger    | 57: FL/Delay         | 38: DS → Chorus    | 55: Keyboard Multi   | 01: Stereo-EQ        | 04: Humanizer      |
| 44: Cho → Delay     |                      | 39: DS → Flanger   |                      | 47: Rotary Multi     | 09: Rotary         |
| 45: FL → Delay      | 5. Delay Time4       | 41: EH → Chorus    | 8. HF Damp           | 49: GTR Multi 2      | 60: OD/Rotary      |
| 46: Cho → Flanger   | 48: GTR Multi 1      | 42: EH → Flanger   | 21: Stereo Delay     | 51: Clean Gt Multi 1 | 63: PH/Rotary      |
| 54: Rhodes Multi    | 50: GTR Multi 3      | 44: Cho → Delay    | 22: Mod Delay        | 52: Clean Gt Multi 2 |                    |
| 56: Cho/Delay       | 51: Clean Gt Multi 1 | 45: FL → Delay     | 23: 3 Tap Delay      | 53: Bass Multi       |                    |
| 57: FL/Delay        | 52: Clean Gt Multi 2 | 46: Cho → Flanger  | 24: 4 Tap Delay      | 55: Keyboard Multi   |                    |
| 58: Cho/Flanger     | 55: Keyboard Multi   | 47: Rotary Multi   | 25: Tm Ctrl Delay    |                      |                    |

Value (Hex.)	Value (Dec.)	1 Pre Delay Time (ms)	2 Delay Time 1 (ms)	3 Delay Time 2 (ms)	4 Delay Time 3 (ms)	5 Delay Time 4 (ms)	6 Rate1 (Hz)	7 Rate2 (Hz)	8 HF Damp (Hz)	9 Cutoff Freq (Hz)	10 EQ Freq (Hz)	11 LPF (Hz)	12 Manual (Hz)	13 Azimuth (deg)	14 Accl
00	0	0.0	200	200	0.0	0	0.05	0.05	315	250	200	250	100	L180(=R180)	0
01	1	0.1	205	205	0.1	5	0.10	0.10	"	"	"	"	110	"	"
02	2	0.2	210	210	0.2	10	0.15	0.15	"	"	"	"	120	"	"
03	3	0.3	215	215	0.3	15	0.20	0.20	"	"	"	"	130	"	"
04	4	0.4	220	220	0.4	20	0.25	0.25	"	"	"	"	140	"	"
05	5	0.5	225	225	0.5	25	0.30	0.30	"	"	"	"	150	"	"
06	6	0.6	230	230	0.6	30	0.35	0.35	"	"	"	"	160	L168	"
07	7	0.7	235	235	0.7	35	0.40	0.40	"	"	"	"	170	"	"
08	8	0.8	240	240	0.8	40	0.45	0.45	400	315	250	315	180	"	1
09	9	0.9	245	245	0.9	45	0.50	0.50	"	"	"	"	190	"	"
0A	10	1.0	250	250	1.0	50	0.55	0.55	"	"	"	"	200	L156	"
0B	11	1.1	255	255	1.1	55	0.60	0.60	"	"	"	"	210	"	"
0C	12	1.2	260	260	1.2	60	0.65	0.65	"	"	"	"	220	"	"
0D	13	1.3	265	265	1.3	65	0.70	0.70	"	"	"	"	230	"	"
0E	14	1.4	270	270	1.4	70	0.75	0.75	"	"	"	"	240	L144	"
0F	15	1.5	275	275	1.5	75	0.80	0.80	"	"	"	"	250	"	"
10	16	1.6	280	280	1.6	80	0.85	0.85	500	400	315	400	260	"	2
11	17	1.7	285	285	1.7	85	0.90	0.90	"	"	"	"	270	"	"
12	18	1.8	290	290	1.8	90	0.95	0.95	"	"	"	"	280	L132	"
13	19	1.9	295	295	1.9	95	1.00	1.00	"	"	"	"	290	"	"
14	20	2.0	300	300	2.0	100	1.05	1.05	"	"	"	"	300	"	"
15	21	2.1	305	305	2.1	105	1.10	1.10	"	"	"	"	320	"	"
16	22	2.2	310	310	2.2	110	1.15	1.15	"	"	"	"	340	L120	"
17	23	2.3	315	315	2.3	115	1.20	1.20	"	"	"	"	360	"	"
18	24	2.4	320	320	2.4	120	1.25	1.25	630	500	400	500	380	"	3
19	25	2.5	325	325	2.5	125	1.30	1.30	"	"	"	"	400	"	"
1A	26	2.6	330	330	2.6	130	1.35	1.35	"	"	"	"	420	L108	"
1B	27	2.7	335	335	2.7	135	1.40	1.40	"	"	"	"	440	"	"
1C	28	2.8	340	340	2.8	140	1.45	1.45	"	"	"	"	460	"	"
1D	29	2.9	345	345	2.9	145	1.50	1.50	"	"	"	"	480	"	"
1E	30	3.0	350	350	3.0	150	1.55	1.55	"	"	"	"	500	L96	"
1F	31	3.1	355	355	3.1	155	1.60	1.60	"	"	"	"	520	"	"
20	32	3.2	360	360	3.2	160	1.65	1.65	800	630	500	630	540	"	4
21	33	3.3	365	365	3.3	165	1.70	1.70	"	"	"	"	560	"	"
22	34	3.4	370	370	3.4	170	1.75	1.75	"	"	"	"	580	L84	"
23	35	3.5	375	375	3.5	175	1.80	1.80	"	"	"	"	600	"	"
24	36	3.6	380	380	3.6	180	1.85	1.85	"	"	"	"	620	"	"
25	37	3.7	385	385	3.7	185	1.90	1.90	"	"	"	"	640	"	"
26	38	3.8	390	390	3.8	190	1.95	1.95	"	"	"	"	660	L72	"
27	39	3.9	395	395	3.9	195	2.00	2.00	"	"	"	"	680	"	"
28	40	4.0	400	400	4.0	200	2.05	2.05	1000	800	630	800	700	"	5
29	41	4.1	405	405	4.1	205	2.10	2.10	"	"	"	"	720	"	"
2A	42	4.2	410	410	4.2	210	2.15	2.15	"	"	"	"	740	L60	"
2B	43	4.3	415	415	4.3	215	2.20	2.20	"	"	"	"	760	"	"
2C	44	4.4	420	420	4.4	220	2.25	2.25	"	"	"	"	780	"	"
2D	45	4.5	425	425	4.5	225	2.30	2.30	"	"	"	"	800	"	"
2E	46	4.6	430	430	4.6	230	2.35	2.35	"	"	"	"	820	L48	"
2F	47	4.7	435	435	4.7	235	2.40	2.40	"	"	"	"	840	"	"

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Value (Hex.)	Value (Dec.)	Pre Delay Time (ms)	Delay Time 1 (ms)	Delay Time 2 (ms)	Delay Time 3 (ms)	Delay Time 4 (ms)	Rate1 (Hz)	Rate2 (Hz)	HF Damp (Hz)	Cutoff Freq (Hz)	EQ Freq (Hz)	LPF (Hz)	Manual (Hz)	Azimuth (deg)	Accl
30	48	4.8	440	440	4.8	240	2.45	2.45	1250	1000	800	1000	860	"	6
31	49	4.9	445	445	4.9	245	2.50	2.50	"	"	"	"	880	"	"
32	50	5.0	450	450	5.0	250	2.55	2.55	"	"	"	"	900	L36	"
33	51	5.5	455	455	5.5	255	2.60	2.60	"	"	"	"	920	"	"
34	52	6.0	460	460	6.0	260	2.65	2.65	"	"	"	"	940	"	"
35	53	6.5	465	465	6.5	265	2.70	2.70	"	"	"	"	960	"	"
36	54	7.0	470	470	7.0	270	2.75	2.75	"	"	"	"	980	L24	"
37	55	7.5	475	475	7.5	275	2.80	2.80	"	"	"	"	1000	"	"
38	56	8.0	480	480	8.0	280	2.85	2.85	1600	1250	1000	1250	1100	"	7
39	57	8.5	485	485	8.5	285	2.90	2.90	"	"	"	"	1200	"	"
3A	58	9.0	490	490	9.0	290	2.95	2.95	"	"	"	"	1300	L12	"
3B	59	9.5	495	495	9.5	295	3.00	3.00	"	"	"	"	1400	"	"
3C	60	10	500	500	10	300	3.05	3.05	"	"	"	"	1500	"	"
3D	61	11	505	505	11	305	3.10	3.10	"	"	"	"	1600	"	"
3E	62	12	510	510	12	310	3.15	3.15	"	"	"	"	1700	0	"
3F	63	13	515	515	13	315	3.20	3.20	"	"	"	"	1800	"	"
40	64	14	520	520	14	320	3.25	3.25	2000	1600	1250	1600	1900	0	8
41	65	15	525	525	15	325	3.30	3.30	"	"	"	"	2000	"	"
42	66	16	530	530	16	330	3.35	3.35	"	"	"	"	2100	R12	"
43	67	17	535	535	17	335	3.40	3.40	"	"	"	"	2200	"	"
44	68	18	540	540	18	340	3.45	3.45	"	"	"	"	2300	"	"
45	69	19	545	545	19	345	3.50	3.50	"	"	"	"	2400	"	"
46	70	20	550	550	20	350	3.55	3.55	"	"	"	"	2500	R24	"
47	71	21	560	555	21	355	3.60	3.60	"	"	"	"	2600	"	"
48	72	22	570	560	22	360	3.65	3.65	2500	2000	1600	2000	2700	"	9
49	73	23	580	565	23	365	3.70	3.70	"	"	"	"	2800	"	"
4A	74	24	590	570	24	370	3.75	3.75	"	"	"	"	2900	R36	"
4B	75	25	600	575	25	375	3.80	3.80	"	"	"	"	3000	"	"
4C	76	26	610	580	26	380	3.85	3.85	"	"	"	"	3100	"	"
4D	77	27	620	585	27	385	3.90	3.90	"	"	"	"	3200	"	"
4E	78	28	630	590	28	390	3.95	3.95	"	"	"	"	3300	R48	"
4F	79	29	640	595	29	395	4.00	4.00	"	"	"	"	3400	"	"
50	80	30	650	600	30	400	4.05	4.05	3150	2500	2000	2500	3500	"	10
51	81	31	660	610	31	405	4.10	4.10	"	"	"	"	3600	"	"
52	82	32	670	620	32	410	4.15	4.15	"	"	"	"	3700	R60	"
53	83	33	680	630	33	415	4.20	4.20	"	"	"	"	3800	"	"
54	84	34	690	640	34	420	4.25	4.25	"	"	"	"	3900	"	"
55	85	35	700	650	35	425	4.30	4.30	"	"	"	"	4000	"	"
56	86	36	710	660	36	430	4.35	4.35	"	"	"	"	4100	R72	"
57	87	37	720	670	37	435	4.40	4.40	"	"	"	"	4200	"	"
58	88	38	730	680	38	440	4.45	4.45	4000	3150	2500	3150	4300	"	11
59	89	39	740	690	39	445	4.50	4.50	"	"	"	"	4400	"	"
5A	90	40	750	700	40	450	4.55	4.55	"	"	"	"	4500	R84	"
5B	91	41	760	710	50	455	4.60	4.60	"	"	"	"	4600	"	"
5C	92	42	770	720	60	460	4.65	4.65	"	"	"	"	4700	"	"
5D	93	43	780	730	70	465	4.70	4.70	"	"	"	"	4800	"	"
5E	94	44	790	740	80	470	4.75	4.75	"	"	"	"	4900	R96	"
5F	95	45	800	750	90	475	4.80	4.80	"	"	"	"	5000	"	"
60	96	46	810	760	100	480	4.85	4.85	5000	4000	3150	4000	5100	"	12
61	97	47	820	770	110	485	4.90	4.90	"	"	"	"	5200	"	"
62	98	48	830	780	120	490	4.95	4.95	"	"	"	"	5300	R108	"
63	99	49	840	790	130	495	5.00	5.00	"	"	"	"	5400	"	"
64	100	50	850	800	140	500	5.10	5.05	"	"	"	"	5500	"	"
65	101	52	860	810	150	505	5.20	5.10	"	"	"	"	5600	"	"
66	102	54	870	820	160	510	5.30	5.15	"	"	"	"	5700	R120	"
67	103	56	880	830	170	515	5.40	5.20	"	"	"	"	5800	"	"
68	104	58	890	840	180	520	5.50	5.25	6300	5000	4000	5000	5900	"	13
69	105	60	900	850	190	525	5.60	5.30	"	"	"	"	6000	"	"
6A	106	62	910	860	200	530	5.70	5.35	"	"	"	"	6100	R132	"
6B	107	64	920	870	210	535	5.80	5.40	"	"	"	"	6200	"	"
6C	108	66	930	880	220	540	5.90	5.45	"	"	"	"	6300	"	"
6D	109	68	940	890	230	545	6.00	5.50	"	"	"	"	6400	"	"
6E	110	70	950	900	240	550	6.10	5.55	"	"	"	"	6500	R144	"
6F	111	72	960	910	250	555	6.20	5.60	"	"	"	"	6600	"	"
70	112	74	970	920	260	560	6.30	5.65	8000	6300	5000	6300	6700	"	14
71	113	76	980	930	270	565	6.40	5.70	"	"	"	"	6800	"	"
72	114	78	990	940	280	570	6.50	5.75	"	"	"	"	6900	R156	"
73	115	80	1000	950	290	575	6.60	5.80	"	"	"	"	7000	"	"
74	116	82	-	960	300	580	6.70	5.85	"	"	"	"	7100	"	"
75	117	84	-	970	320	585	6.80	5.90	"	"	"	"	7200	"	"
76	118	86	-	980	340	590	6.90	5.95	"	"	"	"	7300	R168	"
77	119	88	-	990	360	595	7.00	6.00	"	"	"	"	7400	"	"
78	120	90	-	1000	380	600	7.50	6.05	Bypass	8000	6300	Bypass	7500	"	15
79	121	92	-	1000	400	605	8.00	6.10	"	"	"	"	7600	"	"
7A	122	94	-	1000	420	610	8.50	6.15	"	"	"	"	7700	R180(=L180)	"
7B	123	96	-	1000	440	615	9.00	6.20	"	"	"	"	7800	"	"
7C	124	98	-	1000	460	620	9.50	6.25	"	"	"	"	7900	"	"
7D	125	100	-	1000	480	625	10.00	6.30	"	"	"	"	8000	"	"
7E	126	100	-	1000	500	630	10.00	6.35	"	"	"	"	8000	"	"
7F	127	100	-	1000	500	635	10.00	6.40	"	"	"	"	8000	"	"

## Tone List

SOUND Canvas VA has tones (Instruments) on following lists.

CC00 : Value of controller number 0  
(Bank number, Variation number)  
PC : Program number (Instrument number)  
Voices : Number of voices used by the Instrument  
: : Legato- enabled sounds  
[Pro] : Same sound as SC-88Pro map  
[88] : Same sound as SC-88 map  
[55] : Same sound as SC-55 map  
Remark + : A percussive sound which cannot be played  
melodically. Use near C4 (note number 60).

## Piano

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	001	<b>Piano 1</b>	1 [Pro]	<b>Piano 1</b>	1	<b>Piano 1</b>	1	<b>Piano 1</b>	1
001		UprightPiano	1	----		----		----	
002		Mild Piano	1	----		----		----	
008		Upright P w	1	Piano 1w	1	Piano 1w	1	Piano 1w	1
009		Mild Piano w	1	----		----		----	
016		European Pf	1 [Pro]	European Pf	1	Piano 1d	1	Piano 1d	1
024		Piano + Str.	2 [Pro]	Piano + Str.	2	----		----	
025		Piano + Str2	2	----		----		----	
026		Piano+Choir1	2	----		----		----	
027		Piano+Choir2	2	----		----		----	
000	002	<b>Piano 2</b>	2 [Pro]	<b>Piano 2</b>	2	<b>Piano 2</b>	1	<b>Piano 2</b>	1
001		Pop Piano	2	----		----		----	
002		Rock Piano	2	----		----		----	
008		Pop Piano w	2	Piano 2w	2	Piano 2w	1	Piano 2w	1
009		Rock Piano w	2	----		----		----	
016		Dance Piano	2 [Pro]	Dance Piano	2	----		----	
000	003	<b>Piano 3</b>	2 [Pro]	<b>Piano 3</b>	2	<b>Piano 3</b>	1	<b>Piano 3</b>	1
001		EG+Rhodes 1	2 [Pro]	EG+Rhodes 1	2	EG+Rhodes 1	2	----	
002		EG+Rhodes 2	2 [Pro]	EG+Rhodes 2	2 [88]	EG+Rhodes 2	2	----	
008		Piano 3w	2 [Pro]	Piano 3w	2	Piano 3w	1	Piano 3w	1
000	004	<b>Honky-tonk</b>	2 [Pro]	<b>Honky-tonk</b>	2	<b>Honky-tonk</b>	2	<b>Honky-tonk</b>	2
008		Honky-tonk 2	2 [Pro]	Honky-tonk 2	2	Old Upright	2	HonkyTonk w	2
000	005	<b>E.Piano 1</b>	1 [Pro]	<b>E.Piano 1</b>	1	<b>E.Piano 1</b>	2	<b>E.Piano 1</b>	1
008		St.Soft EP	2 [Pro]	St.Soft EP	2 [88]	St.Soft EP	2	Detuned EP1	2
009		Cho. E.Piano	2 [Pro]	Cho. E.Piano	2	----		----	
010		SilentRhodes	2 [Pro]	SilentRhodes	2	----		----	
016		FM+SA EP	2 [Pro]	FM+SA EP	2 [88]	FM+SA EP	2	E.Piano 1v	2
017		Dist E.Piano	2 [Pro]	Dist E.Piano	2	----		----	
024		Wurlly	2 [Pro]	Wurlly	2	60'sE.Piano	1	60s E.Piano	1
025		Hard Rhodes	2 [Pro]	Hard Rhodes	2 [88]	Hard Rhodes	2	----	
026		MellowRhodes	2 [Pro]	MellowRhodes	2 [88]	MellowRhodes	2	----	
000	006	<b>E.Piano 2</b>	2 [Pro]	<b>E.Piano 2</b>	2 [88]	<b>E.Piano 2</b>	2	<b>E.Piano 2</b>	1
001		E.Piano 3	2	----		----		----	
008		Detuned EP 2	2 [Pro]	Detuned EP 2	2 [88]	Detuned EP2	2	Detuned EP2	2
009		Detuned EP 3	2	----		----		----	
010		EP Legend	2	----		----		----	
016		St.FM EP	2 [Pro]	St.FM EP	2 [88]	St.FM EP	2	E.Piano 2v	2
024		Hard FM EP	2 [Pro]	Hard FM EP	2 [88]	Hard FM EP	2	----	
032		EP Phase	2	----		----		----	
000	007	<b>Harpsichord</b>	1 [Pro]	<b>Harpsichord</b>	1 [88]	<b>Harpsichord</b>	1	<b>Harpsichord</b>	1
001		Harpsichord2	2 [Pro]	Harpsichord2	2	----		----	
002		Harpsichord3	2	----		----		----	
008		Coupled Hps.	2 [Pro]	Coupled Hps.	2 [88]	Coupled Hps	2 [55]	Coupled Hps	2
016		Harpsi.w	1 [Pro]	Harpsi.w	1 [88]	Harpsi.w	1	Harpsi.w	1
024		Harpsi.o	2 [Pro]	Harpsi.o	2 [88]	Harpsi.o	2	Harpsi.o	2
032		Synth Harpsi	2 [Pro]	Synth Harpsi	2	----		----	
000	008	<b>Clav.</b>	1 [Pro]	<b>Clav.</b>	1 [88]	<b>Clav.</b>	1	<b>Clav.</b>	1
001		Clav. 2	2	----		----		----	
002		Atk Clav.1	2	----		----		----	
003		Atk Clav.2	2	----		----		----	
008		Comp Clav.	1 [Pro]	Comp Clav.	1	----		----	
016		Reso Clav.	1 [Pro]	Reso Clav.	1	----		----	
017		Phase Clav	1	----		----		----	
024		Clav.o	2 [Pro]	Clav.o	2	----		----	
032		Analog Clav.	2 [Pro]	Analog Clav.	2	----		----	
033		JP8 Clav. 1	1 [Pro]	JP8 Clav. 1	1	----		----	
035		JP8 Clav. 2	1 [Pro]	JP8 Clav. 2	1	----		----	
036		SynRingClav.	2	----		----		----	
037		SynDistClav.	1	----		----		----	
038		JP8000 Clav.	1	----		----		----	
039		Pulse Clav	1	----		----		----	

## Chromatic percussion

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	009	<b>Celesta</b>	1 [Pro]	<b>Celesta</b>	1 [88]	<b>Celesta</b>	1 [55]	<b>Celesta</b>	1
001		Pop Celesta	2 [Pro]	Pop Celesta	2	-----		-----	
000	010	<b>Glockenspiel</b>	1 [Pro]	<b>Glockenspiel</b>	1 [88]	<b>Glockenspiel</b>	1	<b>Glockenspi</b>	1
000	011	<b>Music Box</b>	1 [Pro]	<b>Music Box</b>	1 [88]	<b>Music Box</b>	1	<b>Music Box</b>	1
001		Music Box 2	2	-----		-----		-----	
008		St.Music Box	2	-----		-----		-----	
000	012	<b>Vibraphone</b>	1 [Pro]	<b>Vibraphone</b>	1	<b>Vibraphone</b>	1	<b>Vibraphone</b>	1
001		Pop Vibe.	2 [Pro]	Pop Vibe.	2	Hard Vibe	2	-----	
008		Vibraphone w	1 [Pro]	Vibraphone w	1	Vib.w	1 [55]	Vib.w	1
009		Vibraphones	2 [Pro]	Vibraphones	2	-----		-----	
000	013	<b>Marimba</b>	1 [Pro]	<b>Marimba</b>	1 [88]	<b>Marimba</b>	1	<b>Marimba</b>	1
008		Marimba w	1 [Pro]	Marimba w	1 [88]	Marimba w	1	Marimba w	1
016		Barafon	1 [Pro]	Barafon	1 [88]	Barafon	1	-----	
017		Barafon 2	1 [Pro]	Barafon 2	1 [88]	Barafon 2	1	-----	
024		Log drum	1 [Pro]	Log drum	1 [88]	Log drum	1	-----	
000	014	<b>Xylophone</b>	1 [Pro]	<b>Xylophone</b>	1 [88]	<b>Xylophone</b>	1	<b>Xylophone</b>	1
008		Xylophone w	1	-----		-----		-----	
000	015	<b>Tubular-bell</b>	1 [Pro]	<b>Tubular-bell</b>	1 [88]	<b>Tubularbell</b>	1 [55]	<b>Tubularbell</b>	1
008		Church Bell	1 [Pro]	Church Bell	1 [88]	Church Bell	1 [55]	Church Bell	1
009		Carillon	1 [Pro]	Carillon	1 [88]	Carillon	1 [55]	Carillon	1
010		Church Bell2	2	-----		-----		-----	
016		Tubularbellw	1	-----		-----		-----	
000	016	<b>Santur</b>	1 [Pro]	<b>Santur</b>	1 [88]	<b>Santur</b>	1 [55]	<b>Santur</b>	1
001		Santur 2	2 [Pro]	Santur 2	2 [88]	Santur 2	2	-----	
002		Santur 3	2	-----		-----		-----	
008		Cimbalom	2 [Pro]	Cimbalom	2 [88]	Cimbalom	2	-----	
016		Zither 1	1 [Pro]	Zither 1	1	-----		-----	
017		Zither 2	2 [Pro]	Zither 2	2	-----		-----	
024		Dulcimer	2 [Pro]	Dulcimer	2	-----		-----	

## Organ

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	017	<b>Organ 1</b>	2 [Pro]	<b>Organ 1</b>	2	<b>Organ 1</b>	1	<b>Organ 1</b>	1
001		Organ 101	2 [Pro]	Organ 101	2	Organ 101	2	-----	
002		Ful Organ 1	2	-----		-----		-----	
003		Ful Organ 2	2	-----		-----		-----	
004		Ful Organ 3	2	-----		-----		-----	
005		Ful Organ 4	2	-----		-----		-----	
006		Ful Organ 5	2	-----		-----		-----	
007		Ful Organ 6	2	-----		-----		-----	
008		Trem. Organ	2 [Pro]	Trem. Organ	2	DetunedOr.1	2	Detuned Or1	2
009		Organ o	2 [Pro]	Organ o	2	Organ 109	2	-----	
010		Ful Organ 7	2	-----		-----		-----	
011		Ful Organ 8	2	-----		-----		-----	
012		Ful Organ 9	2	-----		-----		-----	
016		60's Organ 1	1 [Pro]	60's Organ 1	1	60'sOrgan 1	1	60's Organ1	1
017		60's Organ 2	1 [Pro]	60's Organ 2	1	60'sOrgan 2	1	-----	
018		60's Organ 3	1 [Pro]	60's Organ 3	1	60'sOrgan 3	1	-----	
019		Farf Organ	1 [Pro]	Farf Organ	1	-----		-----	
024		Cheese Organ	1 [Pro]	Cheese Organ	1 [88]	CheeseOrgan	1	-----	
025		D-50 Organ	2 [Pro]	D-50 Organ	2	-----		-----	
026		JUNO Organ	2 [Pro]	JUNO Organ	2	-----		-----	
027		Hybrid Organ	2 [Pro]	Hybrid Organ	2	-----		-----	
028		VS Organ	2 [Pro]	VS Organ	2	-----		-----	
029		Digi Church	2 [Pro]	Digi Church	2	-----		-----	
030		JX-8P Organ	2	-----		-----		-----	
031		FM Organ	2	-----		-----		-----	
032		70's E.Organ	2 [Pro]	70's E.Organ	2	Organ 4	1	Organ 4	2
033		Even Bar	2 [Pro]	Even Bar	2 [88]	Even Bar	2	-----	
040		Organ Bass	1 [Pro]	Organ Bass	1 [88]	Organ Bass	1	-----	
048		5th Organ	2 [Pro]	5th Organ	2	-----		-----	
000	018	<b>Organ 2</b>	2 [Pro]	<b>Organ 2</b>	2	<b>Organ 2</b>	1	<b>Organ 2</b>	1
001		Jazz Organ	2 [Pro]	Jazz Organ	2	Organ 201	2	-----	
002		E.Organ 16+2	2 [Pro]	E.Organ 16+2	2	-----		-----	
003		Jazz Organ 2	2	-----		-----		-----	
004		Jazz Organ 3	2	-----		-----		-----	
005		Jazz Organ 4	2	-----		-----		-----	
006		Jazz Organ 5	2	-----		-----		-----	
007		Jazz Organ 6	2	-----		-----		-----	
008		Chorus Or.2	2 [Pro]	Chorus Or.2	2	DetunedOr.2	2	Detuned Or2	2
009		Octave Organ	2 [Pro]	Octave Organ	2	-----		-----	
032		Perc. Organ	2 [Pro]	Perc. Organ	2	Organ 5	2	Organ 5	2
033		Perc.Organ 2	2	-----		-----		-----	
034		Perc.Organ 3	2	-----		-----		-----	
035		Perc.Organ 4	2	-----		-----		-----	
000	019	<b>Organ 3</b>	2 [Pro]	<b>Organ 3</b>	2 [88]	<b>Organ 3</b>	2 [55]	<b>Organ 3</b>	2
008		Rotary Org.	1 [Pro]	Rotary Org.	1 [88]	Rotary Org.	1	-----	
016		Rotary Org.S	1 [Pro]	Rotary Org.S	1 [88]	RotaryOrg.S	1	-----	
017		Rock Organ 1	2 [Pro]	Rock Organ 1	2	-----		-----	
018		Rock Organ 2	2 [Pro]	Rock Organ 2	2	-----		-----	
024		Rotary Org.F	1 [Pro]	Rotary Org.F	1 [88]	RotaryOrg.F	1	-----	
000	020	<b>Church Org.1</b>	1 [Pro]	<b>Church Org.1</b>	1 [88]	<b>ChurchOrg.1</b>	1	<b>Church Org1</b>	1
008		Church Org.2	2 [Pro]	Church Org.2	2 [88]	ChurchOrg.2	2	Church Org2	2
016		Church Org.3	2 [Pro]	Church Org.3	2 [88]	ChurchOrg.3	2	Church Org3	2
024		Organ Flute	1 [Pro]	Organ Flute	1 [88]	Organ Flute	1	-----	
032		Trem.Flute	2 [Pro]	Trem.Flute	2 [88]	Trem.Flute	2	-----	
033		Theater Org.	2 [Pro]	Theater Org.	2	-----		-----	
000	021	<b>Reed Organ</b>	1 [Pro]	<b>Reed Organ</b>	1 [88]	<b>Reed Organ</b>	1 [55]	<b>Reed Organ</b>	1
008		Wind Organ	2 [Pro]	Wind Organ	2	-----		-----	
016		Puff Organ	2	-----		-----		-----	
000	022	<b>Accordion Fr</b>	1 [Pro]	<b>Accordion Fr</b>	1	<b>AccordionFr</b>	1	<b>Accordion F</b>	2
008		Accordion It	1 [Pro]	Accordion It	1	AccordionIt	2	Accordion I	2
009		Dist. Accord	2 [Pro]	Dist. Accord	2	-----		-----	
016		Cho. Accord	2 [Pro]	Cho. Accord	2	-----		-----	
024		Hard Accord	2 [Pro]	Hard Accord	2	-----		-----	
025		Soft Accord	2 [Pro]	Soft Accord	2	-----		-----	
000	023	<b>Harmonica</b>	1 [Pro]	<b>Harmonica</b>	1	<b>Harmonica</b>	1	<b>Harmonica</b>	1
001		Harmonica 2	1 [Pro]	Harmonica 2	1	Harmonica 2	2	-----	
008		B.Harp Basic	1	-----		-----		-----	
009		B.Harp Suppl	1	-----		-----		-----	
000	024	<b>Bandoneon</b>	2 [Pro]	<b>Bandoneon</b>	2	<b>Bandoneon</b>	1	<b>Bandoneon</b>	2
008		Bandoneon 2	2 [Pro]	Bandoneon 2	2	-----		-----	
016		Bandoneon 3	2 [Pro]	Bandoneon 3	2	-----		-----	



## Guitar

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	025	Nylon-str.Gt	2 [Pro]	Nylon-str.Gt	2	Nylonstr.Gt	1	Nylon Gt.	1
008		Ukulele	1 [Pro]	Ukulele	1 [88]	Ukulele	1	Ukulele	1
016		Nylon Gt.o	2 [Pro]	Nylon Gt.o	2	Nylon Gt.o	2	Nylon Gt.o	2
024		Velo Harmnix	1 [Pro]	Velo Harmnix	1 [88]	VeloHarmnix	1	-----	
032		Nylon Gt.2	1 [Pro]	Nylon Gt.2	1	Nylon Gt.2	1	Nylon Gt.2	1
040		Lequint Gt.	1 [Pro]	Lequint Gt.	1 [88]	Lequint Gt.	1	-----	
000	026	Steel-str.Gt	1 [Pro]	Steel-str.Gt	1	Steelstr.Gt	1	Steel Gt.	1
008		12-str.Gt	2 [Pro]	12-str.Gt	2	12-str.Gt	2	12-str.Gt	2
009		Nylon+Steel	2 [Pro]	Nylon+Steel	2	Nylon+Steel	2	-----	
010		Atk Steel Gt	2	-----		-----		-----	
016		Mandolin	2 [Pro]	Mandolin	2 [88]	Mandolin	2	Mandolin	1
017		Mandolin 2	2 [Pro]	Mandolin 2	2	-----		-----	
018		MandolinTrem	2 [Pro]	MandolinTrem	2	-----		-----	
032		Steel Gt.2	1 [Pro]	Steel Gt.2	1 [88]	Steel Gt.2	1	-----	
033		Steel + Body	2	-----		-----		-----	
000	027	Jazz Gt.	1 [Pro]	Jazz Gt.	1	Jazz Gt.	1 [55]	Jazz Gt.	1
001		Mellow Gt.	2 [Pro]	Mellow Gt.	2 [88]	Mellow Gt.	2	-----	
008		Pedal Steel	1 [Pro]	Pedal Steel	1 [88]	Pedal Steel	1	Hawaiian Gt	1
000	028	Clean Gt.	1 [Pro]	Clean Gt.	1	Clean Gt.	1	Clean Gt.	1
001		Clean Half	1 [Pro]	Clean Half	1	-----		-----	
002		Open Hard 1	2 [Pro]	Open Hard 1	2	-----		-----	
003		Open Hard 2	1 [Pro]	Open Hard 2	1	-----		-----	
004		JC Clean Gt.	1 [Pro]	JC Clean Gt.	1	-----		-----	
005		Atk CleanGt.	2	-----		-----		-----	
008		Chorus Gt.	2 [Pro]	Chorus Gt.	2	Chorus Gt.	2	Chorus Gt.	2
009		JC Chorus Gt	2 [Pro]	JC Chorus Gt	2	-----		-----	
016		TC FrontPick	1 [Pro]	TC FrontPick	1	-----		-----	
017		TC Rear Pick	1 [Pro]	TC Rear Pick	1	-----		-----	
018		TC Clean ff	2 [Pro]	TC Clean ff	2	-----		-----	
019		TC Clean 2:	2 [Pro]	TC Clean 2:	2	-----		-----	
020		LP Rear Pick	1	-----		-----		-----	
021		LP Rear 2	2	-----		-----		-----	
022		LP RearAtack	2	-----		-----		-----	
023		Mid Tone GTR	1	-----		-----		-----	
024		Chung Ruan	1	-----		-----		-----	
025		Chung Ruan 2	2	-----		-----		-----	
000	029	Muted Gt.	1 [Pro]	Muted Gt.	1	Muted Gt.	1	Muted Gt.	1
001		Muted Dis.Gt	1 [Pro]	Muted Dis.Gt	1 [88]	MutedDis.Gt	1	-----	
002		TC Muted Gt.	2 [Pro]	TC Muted Gt.	2	-----		-----	
008		Funk Pop	1 [Pro]	Funk Pop	1 [88]	Funk Pop	1	Funk Gt.	1
016		Funk Gt.2	1 [Pro]	Funk Gt.2	1 [88]	Funk Gt.2	1	Funk Gt.2	1
024		Jazz Man	2	-----		-----		-----	
000	030	Overdrive Gt	2 [Pro]	Overdrive Gt	2	OverdriveGt	1	OverdriveGt	1
001		Overdrive 2	2 [Pro]	Overdrive 2	2	-----		-----	
002		Overdrive 3	2 [Pro]	Overdrive 3	2	-----		-----	
003		More Drive	2 [Pro]	More Drive	2	-----		-----	
004		Guitar Pinch	1	-----		-----		-----	
005		Attack Drive	2	-----		-----		-----	
008		LP OverDrvGt	2 [Pro]	LP OverDrvGt	2	-----		-----	
009		LP OverDrv:	2 [Pro]	LP OverDrv:	2	-----		-----	
010		LP Half Drv	2	-----		-----		-----	
011		LP Half Drv2	2	-----		-----		-----	
012		LP Chorus	2	-----		-----		-----	
000	031	DistortionGt	2 [Pro]	DistortionGt	2	DistortionGt	1	Dist.Gt.	1
001		Dist. Gt2 :	2 [Pro]	Dist. Gt2 :	2	Dist. Gt2	2	-----	
002		Dazed Guitar	2 [Pro]	Dazed Guitar	2 [88]	DazedGuitar	2	-----	
003		Distortion:	2 [Pro]	Distortion:	2	-----		-----	
004		Dist.Fast :	2 [Pro]	Dist.Fast :	2	-----		-----	
005		Attack Dist	2	-----		-----		-----	
008		Feedback Gt.	2 [Pro]	Feedback Gt.	2 [88]	FeedbackGt.	2	Feedback Gt	2
009		Feedback Gt2	2 [Pro]	Feedback Gt2	2 [88]	FeedbackGt2	2	-----	
016		Power Guitar	2 [Pro]	Power Guitar	2 [88]	PowerGuitar	2	-----	
017		Power Gt.2	2 [Pro]	Power Gt.2	2	Power Gt.2	2	-----	
018		5th Dist.	2 [Pro]	5th Dist.	2 [88]	5th Dist.	2	-----	
024		Rock Rhythm	2 [Pro]	Rock Rhythm	2 [88]	Rock Rhythm	2	-----	
025		Rock Rhythm2	2 [Pro]	Rock Rhythm2	2 [88]	RockRhythm2	2	-----	
026		Dist Rtm GTR	1	-----		-----		-----	
000	032	Gt.Harmonics	1 [Pro]	Gt.Harmonics	1 [88]	Gt.Harmonix	1 [55]	Gt.Harmonix	1
008		Gt. Feedback	1 [Pro]	Gt. Feedback	1 [88]	Gt.Feedback	1 [55]	Gt.Feedback	1
009		Gt.Feedback2	2 [Pro]	Gt. Feedback2	2	-----		-----	
016		Ac.Gt.Harmnx	1 [Pro]	Ac.Gt.Harmnx	1 [88]	Ac.Gt.Harm.	1	-----	
024		E.Bass Harm.	1 [Pro]	E.Bass Harm.	1	-----		-----	

## Bass

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	033	Acoustic Bs.	1	Acoustic Bs.	1	AcousticBs.	2	Acoustic Bs	1
001		Rockabilly	2 [Pro]	Rockabilly	2	-----		-----	
008		Wild A.Bass	2 [Pro]	Wild A.Bass	2	-----		-----	
009		Atk A.Bass	2	-----		-----		-----	
016		Bass + OHH	2 [Pro]	Bass + OHH	2	-----		-----	
000	034	Fingered Bs.	1 [Pro]	Fingered Bs.	1	FingeredBs.	1	Fingered Bs	1
001		Fingered Bs2	2 [Pro]	Fingered Bs2	2	FingeredBs2	2	-----	
002		Jazz Bass	1 [Pro]	Jazz Bass	1 [88]	Jazz Bass	1	-----	
003		Jazz Bass 2	2 [Pro]	Jazz Bass 2	2	-----		-----	
004		Rock Bass	2 [Pro]	Rock Bass	2	-----		-----	
005		Heart Bass	1	-----		-----		-----	
006		AttackFinger	2	-----		-----		-----	
007		Finger Slap	2	-----		-----		-----	
008		ChorusJazzBs	2 [Pro]	ChorusJazzBs	2	-----		-----	
016		F.Bass/Harm.	1 [Pro]	F.Bass/Harm.	1	-----		-----	
000	035	Picked Bass	1 [Pro]	Picked Bass	1	Picked Bass	1	Picked Bass	1
001		Picked Bass2	2 [Pro]	Picked Bass2	2	-----		-----	
002		Picked Bass3	2 [Pro]	Picked Bass3	2	-----		-----	
003		Picked Bass4	2 [Pro]	Picked Bass4	2	-----		-----	
004		Double Pick	2	-----		-----		-----	
008		Muted PickBs	1 [Pro]	Muted PickBs	1	MutePickBs.	1	-----	
016		P.Bass/Harm.	1 [Pro]	P.Bass/Harm.	1	-----		-----	
000	036	Fretless Bs.	1 [Pro]	Fretless Bs.	1 [88]	FretlessBs.	1	Fretless Bs	1
001		Fretless Bs2	2 [Pro]	Fretless Bs2	2	FretlessBs2	2	-----	
002		Fretless Bs3	2 [Pro]	Fretless Bs3	2 [88]	FretlessBs3	2	-----	
003		Fretless Bs4	2 [Pro]	Fretless Bs4	2 [88]	FretlessBs4	2	-----	
004		Syn Fretless	2 [Pro]	Syn Fretless	2 [88]	SynFretless	2	-----	
005		Mr.Smooth	2 [Pro]	Mr.Smooth	2 [88]	Mr.Smooth	2	-----	
008		Wood+FlessBs	2 [Pro]	Wood+FlessBs	2	-----		-----	
000	037	Slap Bass 1	1 [Pro]	Slap Bass 1	1 [88]	Slap Bass 1	1	Slap Bass 1	1
001		Slap Pop	1 [Pro]	Slap Pop	1	-----		-----	
008		Reso Slap	1 [Pro]	Reso Slap	1 [88]	Reso Slap	1	-----	
009		Unison Slap	2 [Pro]	Unison Slap	2	-----		-----	
000	038	Slap Bass 2	2 [Pro]	Slap Bass 2	2 [88]	Slap Bass 2	2	Slap Bass 2	1
001		Slap Bass 3	2	-----		-----		-----	
008		FM Slap	2 [Pro]	FM Slap	2	-----		-----	
000	039	Synth Bass 1	2 [Pro]	Synth Bass 1	2 [88]	SynthBass 1	2	Syn.Bass 1	1
001		SynthBass101	1 [Pro]	SynthBass101	1 [88]	Syn.Bass101	1 [55]	Syn.Bass101	1
002		CS Bass	2 [Pro]	CS Bass	2	-----		-----	
003		JP-4 Bass	1 [Pro]	JP-4 Bass	1	-----		-----	
004		JP-8 Bass	2 [Pro]	JP-8 Bass	2	-----		-----	
005		P5 Bass	1 [Pro]	P5 Bass	1	-----		-----	
006		JPMG Bass	2 [Pro]	JPMG Bass	2	-----		-----	
008		Acid Bass	1 [Pro]	Acid Bass	1 [88]	Acid Bass	1	Syn.Bass 3	1
009		TB303 Bass	1 [Pro]	TB303 Bass	1 [88]	TB303 Bass	1	-----	
010		Tekno Bass	2 [Pro]	Tekno Bass	2 [88]	Tekno Bass	2	-----	
011		TB303 Bass 2	1 [Pro]	TB303 Bass 2	1	-----		-----	
012		Kicked TB303	2 [Pro]	Kicked TB303	2	-----		-----	
013		TB303 Saw Bs	1 [Pro]	TB303 Saw Bs	1	-----		-----	
014		Rubber303 Bs	1 [Pro]	Rubber303 Bs	1	-----		-----	
015		Reso 303 Bs	1 [Pro]	Reso 303 Bs	1	-----		-----	
016		Reso SH Bass	1 [Pro]	Reso SH Bass	1 [88]	Reso SHBass	1	-----	
017		TB303 Sqr Bs	1 [Pro]	TB303 Sqr Bs	1	-----		-----	
018		TB303 DistBs	1 [Pro]	TB303 DistBs	1	-----		-----	
019		Clavi Bass	2	-----		-----		-----	
020		Hammer	2	-----		-----		-----	
021		Jungle Bass	1	-----		-----		-----	
022		Square Bass	2	-----		-----		-----	
023		Square Bass2	2	-----		-----		-----	
024		Arpeggio Bs	1 [Pro]	Arpeggio Bs	1	-----		-----	
032		Hit&Saw Bass	2	-----		-----		-----	
033		Ring Bass	2	-----		-----		-----	
034		AtkSineBass	2	-----		-----		-----	
035		OB sine Bass	2	-----		-----		-----	
036		Auxiliary Bs	2	-----		-----		-----	
040		303SqDistBs	1	-----		-----		-----	
041		303SqDistBs2	2	-----		-----		-----	
042		303SqDistBs3	1	-----		-----		-----	
043		303Sqr.Rev	1	-----		-----		-----	
044		TeeBee	1	-----		-----		-----	

# Bass

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	040	Synth Bass 2	2 [Pro]	Synth Bass 2	2 [88]	SynthBass 2	2	Syn.Bass 2	2
001		SynthBass201	2 [Pro]	SynthBass201	2 [88]	Syn.Bass201	2	-----	
002		Modular Bass	2 [Pro]	Modular Bass	2 [88]	ModularBass	2	-----	
003		Seq Bass	2 [Pro]	Seq Bass	2 [88]	Seq Bass	2	-----	
004		MG Bass	1 [Pro]	MG Bass	1	-----		-----	
005		Mg Oct Bass1	2 [Pro]	Mg Oct Bass1	2	-----		-----	
006		MG Oct Bass2	2 [Pro]	MG Oct Bass2	2	-----		-----	
007		MG Blip Bs:	2 [Pro]	MG Blip Bs:	2	-----		-----	
008		Beef FM Bass	2 [Pro]	Beef FM Bass	2 [88]	Beef FMBass	2	Syn.Bass 4	2
009		Dly Bass	2 [Pro]	Dly Bass	2	X Wire Bass	2	-----	
010		X Wire Bass	2 [Pro]	X Wire Bass	2 [88]	-----		-----	
011		WireStr Bass	2 [Pro]	WireStr Bass	2	-----		-----	
012		Blip Bass :	2 [Pro]	Blip Bass :	2	-----		-----	
013		RubberBass 1	2 [Pro]	RubberBass 1	2	-----		-----	
014		Syn Bell Bs	2	-----		-----		-----	
015		Odd Bass	2	-----		-----		-----	
016		RubberBass 2	2 [Pro]	RubberBass 2	2	Rubber Bass	2 [55]	Rubber Bass	2
017		SH101 Bass 1	1 [Pro]	SH101 Bass 1	1 [88]	SH101Bass 1	1	-----	
018		SH101 Bass 2	1 [Pro]	SH101 Bass 2	1 [88]	SH101Bass 2	1	-----	
019		Smooth Bass	2 [Pro]	Smooth Bass	2 [88]	Smooth Bass	2	-----	
020		SH101 Bass 3	1 [Pro]	SH101 Bass 3	1	-----		-----	
021		Spike Bass	1 [Pro]	Spike Bass	1	-----		-----	
022		House Bass:	2 [Pro]	House Bass:	2	-----		-----	
023		KG Bass	2 [Pro]	KG Bass	2	-----		-----	
024		Sync Bass	2 [Pro]	Sync Bass	2	-----		-----	
025		MG 5th Bass	2 [Pro]	MG 5th Bass	2	-----		-----	
026		RND Bass	2 [Pro]	RND Bass	2	-----		-----	
027		WowMG Bass	2 [Pro]	WowMG Bass	2	-----		-----	
028		Bubble Bass	2 [Pro]	Bubble Bass	2	-----		-----	
029		Attack Pulse	1	-----		-----		-----	
030		Sync Bass 2	2	-----		-----		-----	
031		Pulse Mix Bs	2	-----		-----		-----	
032		MG Dist Bass	2	-----		-----		-----	
033		Seq Bass 2	2	-----		-----		-----	
034		3rd Bass	2	-----		-----		-----	
035		MG Oct Bass	2	-----		-----		-----	
036		SlowEnvBass	2	-----		-----		-----	
037		Mild Bass	2	-----		-----		-----	
038		DistEnvBass	2	-----		-----		-----	
039		MG LightBass	2	-----		-----		-----	
040		DistSynBass	2	-----		-----		-----	
041		Rise Bass	2	-----		-----		-----	
042		Cyber Bass	2	-----		-----		-----	

## Strings/orchestra

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	041	<b>Violin :</b>	<b>2 [Pro]</b>	<b>Violin :</b>	<b>2</b>	<b>Violin</b>	<b>1</b>	<b>Violin</b>	<b>1</b>
001		Violin Atk:	2 [Pro]	Violin Atk:	2	-----		-----	
008		Slow Violin	1 [Pro]	Slow Violin	1	Slow Violin	1	Slow Violin	1
000	042	<b>Viola :</b>	<b>2 [Pro]</b>	<b>Viola :</b>	<b>2</b>	<b>Viola</b>	<b>1</b>	<b>Viola</b>	<b>1</b>
001		Viola Atk.:	2 [Pro]	Viola Atk.:	2	-----		-----	
000	043	<b>Cello :</b>	<b>2</b>	<b>Cello :</b>	<b>2</b>	<b>Cello</b>	<b>1</b>	<b>Cello</b>	<b>1</b>
001		Cello Atk.:	2	Cello Atk.:	2	-----		-----	
000	044	<b>Contrabass</b>	<b>1</b>	<b>Contrabass</b>	<b>1</b>	<b>Contrabass</b>	<b>1</b>	<b>Contrabass</b>	<b>1</b>
000	045	<b>Tremolo Str</b>	<b>1 [Pro]</b>	<b>Tremolo Str</b>	<b>1 [88]</b>	<b>Tremolo Str</b>	<b>1</b>	<b>Tremolo Str</b>	<b>1</b>
002		Trem Str.St.	2	-----		-----		-----	
008		Slow Tremolo	1 [Pro]	Slow Tremolo	1 [88]	SlowTremolo	1	-----	
009		Suspense Str	2 [Pro]	Suspense Str	2 [88]	SuspenseStr	2	-----	
010		SuspenseStr2	2	-----		-----		-----	
000	046	<b>PizzicatoStr</b>	<b>1 [Pro]</b>	<b>PizzicatoStr</b>	<b>1 [88]</b>	<b>Pizz. Str.</b>	<b>1</b>	<b>Pizzicato</b>	<b>1</b>
001		Vcs&Cbs Pizz	2 [Pro]	Vcs&Cbs Pizz	2	-----		-----	
002		Chamber Pizz	2 [Pro]	Chamber Pizz	2	-----		-----	
003		St.Pizzicato	2 [Pro]	St. Pizzicato	2	-----		-----	
008		Solo Pizz.	1 [Pro]	Solo Pizz.	1	-----		-----	
016		Solo Spic.	1 [Pro]	Solo Spic.	1	-----		-----	
017		StringsSpic.	2	-----		-----		-----	
000	047	<b>Harp</b>	<b>1 [Pro]</b>	<b>Harp</b>	<b>1 [88]</b>	<b>Harp</b>	<b>1</b>	<b>Harp</b>	<b>1</b>
001		Harp&Strings	2	-----		-----		-----	
002		Harp St.	2	-----		-----		-----	
008		Uilleann Harp	2	-----		-----		-----	
016		Synth Harp	1 [Pro]	Synth Harp	1	-----		-----	
024		Yang Qin	2	-----		-----		-----	
025		Yang Qin 2	2	-----		-----		-----	
026		SynthYangQin	2	-----		-----		-----	
000	048	<b>Timpani</b>	<b>1 [Pro]</b>	<b>Timpani</b>	<b>1 [88]</b>	<b>Timpani</b>	<b>1</b>	<b>Timpani</b>	<b>1</b>

## Ensemble

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	049	<b>Strings :</b>	2 [Pro]	<b>Strings :</b>	2	<b>Strings</b>	1	<b>Strings</b>	1
001		Bright Str:	1 [Pro]	Bright Str:	1	Strings 2	1	-----	
002		ChamberStr :	2 [Pro]	ChamberStr :	2	-----		-----	
003		Cello sect.	1 [Pro]	Cello sect.	1	-----		-----	
004		Bright Str.2	2	-----		-----		-----	
005		Bright Str.3	2	-----		-----		-----	
006		Quad Strings	2	-----		-----		-----	
007		Mild Strings	2	-----		-----		-----	
008		Orchestra	2 [Pro]	Orchestra	2	Orchestra	2	Orchestra	2
009		Orchestra 2	2 [Pro]	Orchestra 2	2	Orchestra 2	2	-----	
010		Tremolo Orch	2 [Pro]	Tremolo Orch	2 [88]	TremoloOrch	2	-----	
011		Choir Str.	2 [Pro]	Choir Str.	2	Choir Str.	2	-----	
012		Strings+Horn	2 [Pro]	Strings+Horn	2	-----		-----	
013		Str.+Flute	2	-----		-----		-----	
014		Choir Str.2	2	-----		-----		-----	
015		Choir Str.3	2	-----		-----		-----	
016		St. Strings	2 [Pro]	St. Strings	2	St.Strings	2	-----	
017		St.Strings 2	2	-----		-----		-----	
018		St.Strings 3	2	-----		-----		-----	
019		Orchestra 3	2	-----		-----		-----	
020		Orchestra 4	2	-----		-----		-----	
024		Velo Strings	2 [Pro]	Velo Strings	2 [88]	VeloStrings	2	-----	
032		Oct Strings1	2 [Pro]	Oct Strings1	2	-----		-----	
033		Oct Strings2	2 [Pro]	Oct Strings2	2	-----		-----	
034		ContraBsSect	2	-----		-----		-----	
040		60s Strings	2	-----		-----		-----	
000	050	<b>Slow Strings</b>	1 [Pro]	<b>Slow Strings</b>	1	<b>SlowStrings</b>	1	<b>SlowStrings</b>	1
001		SlowStrings2	1 [Pro]	SlowStrings2	1	Slow Str. 2	1	-----	
002		SlowStrings3	2	-----		-----		-----	
008		Legato Str.	2 [Pro]	Legato Str.	2 [88]	Legato Str.	2	-----	
009		Warm Strings	2 [Pro]	Warm Strings	2 [88]	WarmStrings	2	-----	
010		St.Slow Str.	2 [Pro]	St.Slow Str.	2	St.SlowStr.	2	-----	
011		St.Slow Str2	2	-----		-----		-----	
012		S.Str+Choir	2	-----		-----		-----	
013		S.Str+Choir2	2	-----		-----		-----	
000	051	<b>Syn.Strings1</b>	2 [Pro]	<b>Syn.Strings1</b>	2	<b>SynStrings1</b>	2	<b>SynStrings1</b>	1
001		OB Strings	2 [Pro]	OB Strings	2	OB Strings	2	-----	
002		StackStrings	2 [Pro]	StackStrings	2	-----		-----	
003		JP Strings	2 [Pro]	JP Strings	2	-----		-----	
004		Chorus Str.	2	-----		-----		-----	
008		Syn.Strings3	2 [Pro]	Syn.Strings3	2 [88]	SynStrings3	2 [55]	SynStrings3	2
009		Syn.Strings4	2 [Pro]	Syn.Strings4	2	-----		-----	
010		Syn.Strings6	2	-----		-----		-----	
011		Syn.Strings7	2	-----		-----		-----	
012		LoFi Strings	2	-----		-----		-----	
016		High Strings	2 [Pro]	High Strings	2	-----		-----	
017		Hybrid Str.	2 [Pro]	Hybrid Str.	2	-----		-----	
024		Tron Strings	2 [Pro]	Tron Strings	2	-----		-----	
025		Noiz Strings	2 [Pro]	Noiz Strings	2	-----		-----	
000	052	<b>Syn.Strings2</b>	2 [Pro]	<b>Syn.Strings2</b>	2 [88]	<b>SynStrings2</b>	2 [55]	<b>SynStrings2</b>	2
001		Syn.Strings5	2 [Pro]	Syn.Strings5	2	-----		-----	
002		JUNO Strings	2 [Pro]	JUNO Strings	2	-----		-----	
003		FilteredOrch	2	-----		-----		-----	
004		JP Saw Str.	2	-----		-----		-----	
005		Hybrid Str.2	2	-----		-----		-----	
006		DistStrings	2	-----		-----		-----	
007		JUNOFullStr.	2	-----		-----		-----	
008		Air Strings	2 [Pro]	Air Strings	2	-----		-----	
009		Atk Syn Str.	2	-----		-----		-----	
010		StraightStr.	2	-----		-----		-----	
000	053	<b>Choir Aahs</b>	1 [Pro]	<b>Choir Aahs</b>	1	<b>Choir Aahs</b>	1	<b>Choir Aahs</b>	1
008		St.ChoirAahs	2 [Pro]	St.ChoirAahs	2	St.Choir	2	-----	
009		Meltd Choir	2 [Pro]	Meltd Choir	2	Mello Choir	2	-----	
010		Church Choir	2 [Pro]	Church Choir	2	-----		-----	
011		Boys Choir 1	1	-----		-----		-----	
012		Boys Choir 2	2	-----		-----		-----	
013		St.BoysChoir	2	-----		-----		-----	
014		Rich Choir	2	-----		-----		-----	
016		Choir Hahs	1 [Pro]	Choir Hahs	1	-----		-----	
024		Chorus Lahs	1 [Pro]	Chorus Lahs	1	-----		-----	
032		Chorus Aahs	2 [Pro]	Chorus Aahs	2	ChoirAahs 2	1 [55]	Choir Aahs2	1
033		Male Aah+Str	2 [Pro]	Male Aah+Str	2	-----		-----	

## Ensemble

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	054	Voice Oohs	1	Voice Oohs	1 [88]	Voice Oohs	1 [55]	Voice Oohs	1
001		Chorus Oohs	2	-----		-----		-----	
002		Voice Oohs 2	2	-----		-----		-----	
003		Chorus Oohs2	2	-----		-----		-----	
004		OohsCodeMaj7	1	-----		-----		-----	
005		OohsCodeSus4	1	-----		-----		-----	
006		Jazz Scat	1	-----		-----		-----	
008		Voice Dahs	1 [Pro]	Voice Dahs	1	-----		-----	
009		JzVoice Dat	1	-----		-----		-----	
010		JzVoice Bap	1	-----		-----		-----	
011		JzVoice Dow	1	-----		-----		-----	
012		JzVoice Thum	1	-----		-----		-----	
016		VoiceLah Fem	1	-----		-----		-----	
017		ChorusLahFem	2	-----		-----		-----	
018		VoiceLuh Fem	1	-----		-----		-----	
019		ChorusLuhFem	2	-----		-----		-----	
020		VoiceLan Fem	1	-----		-----		-----	
021		ChorusLanFem	2	-----		-----		-----	
022		VoiceAah Fem	1	-----		-----		-----	
023		VoiceUuh Fem	1	-----		-----		-----	
024		Fem Lah&Lan	1	-----		-----		-----	
032		VoiceWah Mal	1	-----		-----		-----	
033		ChorusWahMal	2	-----		-----		-----	
034		VoiceWoh Mal	1	-----		-----		-----	
035		ChorusWohMal	2	-----		-----		-----	
036		VoiceAah Mal	1	-----		-----		-----	
037		VoiceOoh Mal	1	-----		-----		-----	
040		Humming	2	-----		-----		-----	
000	055	SynVox	1 [Pro]	SynVox	1 [88]	SynVox	1 [55]	SynVox	1
001		SynVox 2	2	-----		-----		-----	
002		SynVox 3	2	-----		-----		-----	
008		Syn.Voice	2 [Pro]	Syn.Voice	2 [88]	Syn.Voice	2	-----	
009		Silent Night	2 [Pro]	Silent Night	2	-----		-----	
010		Syn.Voice 2	2	-----		-----		-----	
016		VP330 Choir	1 [Pro]	VP330 Choir	1	-----		-----	
017		Vinyl Choir	2 [Pro]	Vinyl Choir	2	-----		-----	
018		JX8P Vox	2	-----		-----		-----	
019		Analog Voice	1	-----		-----		-----	
000	056	OrchestraHit	2 [Pro]	OrchestraHit	2 [88]	Orch. Hit	2	Orchest.Hit	2
001		Bass Hit	2	-----		-----		-----	
002		6th Hit	2	-----		-----		-----	
003		Euro Hit	2	-----		-----		-----	
008		Impact Hit	2 [Pro]	Impact Hit	2 [88]	Impact Hit	2	-----	
009		Philly Hit	2 [Pro]	Philly Hit	2 [88]	Philly Hit	2	-----	
010		Double Hit	2 [Pro]	Double Hit	2 [88]	Double Hit	2	-----	
011		Perc. Hit	1 [Pro]	Perc. Hit	1	-----		-----	
012		Shock Wave	2 [Pro]	Shock Wave	2	-----		-----	
013		Bounce Hit	1	-----		-----		-----	
014		Drill Hit	1	-----		-----		-----	
015		Thrill Hit	1	-----		-----		-----	
016		Lo Fi Rave	2 [Pro]	Lo Fi Rave	2 [88]	Lo Fi Rave	2	-----	
017		Techno Hit	1 [Pro]	Techno Hit	1	-----		-----	
018		Dist. Hit	1 [Pro]	Dist. Hit	1	-----		-----	
019		Bam Hit	1 [Pro]	Bam Hit	1	-----		-----	
020		Bit Hit	1 [Pro]	Bit Hit	1	-----		-----	
021		Bim Hit	1 [Pro]	Bim Hit	1	-----		-----	
022		Technorg Hit	1 [Pro]	Technorg Hit	1	-----		-----	
023		Rave Hit	2 [Pro]	Rave Hit	2	-----		-----	
024		Strings Hit	2 [Pro]	Strings Hit	2	-----		-----	
025		Stack Hit	2 [Pro]	Stack Hit	2	-----		-----	
026		Industry Hit	1	-----		-----		-----	
027		Clap Hit	1	-----		-----		-----	



## Brass

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	057	<b>Trumpet</b>	1 [Pro]	<b>Trumpet</b>	1	<b>Trumpet</b>	1	<b>Trumpet</b>	1
001		Trumpet 2	1 [Pro]	Trumpet 2	1 [88]	Trumpet 2	1	-----	
002		Trumpet :	1 [Pro]	Trumpet :	1	-----		-----	
003		Dark Trumpet	1	-----		-----		-----	
004		Trumpet & Nz	2	-----		-----		-----	
008		Flugel Horn	1 [Pro]	Flugel Horn	1 [88]	Flugel Horn	1	-----	
016		4th Trumpets	2 [Pro]	4th Trumpets	2	-----		-----	
024		Bright Tp.	2 [Pro]	Bright Tp.	2	-----		-----	
025		Warm Tp.	2 [Pro]	Warm Tp.	2 [88]	Warm Tp.	2	-----	
026		Warm Tp.2	2	-----		-----		-----	
027		Twin Tp.	2	-----		-----		-----	
032		Syn. Trumpet	1 [Pro]	Syn. Trumpet	1	-----		-----	
000	058	<b>Trombone</b>	1 [Pro]	<b>Trombone</b>	1	<b>Trombone</b>	1	<b>Trombone</b>	1
001		Trombone 2	1 [Pro]	Trombone 2	1	Trombone 2	2 [55]	Trombone 2	2
002		Twin bones	2 [Pro]	Twin bones	2	-----		-----	
003		Bones & Tuba	2	-----		-----		-----	
004		Bright Tb	1	-----		-----		-----	
008		Bs. Trombone	1 [Pro]	Bs. Trombone	1	-----		-----	
016		Euphonium	2	-----		-----		-----	
000	059	<b>Tuba</b>	1 [Pro]	<b>Tuba</b>	1 [88]	<b>Tuba</b>	1	<b>Tuba</b>	1
001		Tuba 2	1 [Pro]	Tuba 2	1 [88]	Tuba 2	1	-----	
008		Tuba + Horn	2	-----		-----		-----	
000	060	<b>MutedTrumpet</b>	1 [Pro]	<b>MutedTrumpet</b>	1 [88]	<b>Muted Tp.</b>	1	<b>MuteTrumpet</b>	1
001		Cup Mute Tp	1	-----		-----		-----	
002		MuteTrumpet2	1	-----		-----		-----	
003		MuteTrumpet3	2	-----		-----		-----	
008		Muted Horns	1 [Pro]	Muted Horns	1	-----		-----	
000	061	<b>French Horns</b>	1 [Pro]	<b>French Horns</b>	1 [88]	<b>FrenchHorns</b>	1	<b>French Horn</b>	2
001		Fr.Horn 2	2 [Pro]	Fr.Horn 2	2 [88]	Fr.Horn 2	2 [55]	Fr.Horn 2	2
002		Horn + Orche	2 [Pro]	Horn + Orche	2	-----		-----	
003		Wide FreHrns	2 [Pro]	Wide FreHrns	2	-----		-----	
008		F.Hrn Slow:	1 [Pro]	F.Hrn Slow:	1	Fr.HornSolo	1	-----	
009		Dual Horns	2 [Pro]	Dual Horns	2	-----		-----	
016		Synth Horn	2 [Pro]	Synth Horn	2	Horn Orch	2	-----	
024		F.Horn Rip	1 [Pro]	F.Horn Rip	1	-----		-----	
000	062	<b>Brass 1</b>	2 [Pro]	<b>Brass 1</b>	2	<b>Brass 1</b>	1 [55]	<b>Brass 1</b>	1
001		Brass ff	1 [Pro]	Brass ff	1	-----		-----	
002		Bones Sect.	1 [Pro]	Bones Sect.	1	-----		-----	
003		St. Brass ff	2	-----		-----		-----	
004		Quad Brass1	2	-----		-----		-----	
005		Quad Brass2	2	-----		-----		-----	
008		Brass 2	2 [Pro]	Brass 2	2	Brass 2	2	Brass 2	2
009		Brass 3	2 [Pro]	Brass 3	2	-----		-----	
010		Brass sfz	2 [Pro]	Brass sfz	2	-----		-----	
012		Brass sfz 2	2	-----		-----		-----	
014		FatPop Brass	2	-----		-----		-----	
016		Brass Fall	1 [Pro]	Brass Fall	1 [88]	Brass Fall	1	-----	
017		Trumpet Fall	1 [Pro]	Trumpet Fall	1	-----		-----	
024		Octave Brass	2 [Pro]	Octave Brass	2	-----		-----	
025		Brass + Reed	2 [Pro]	Brass + Reed	2	-----		-----	
026		Fat + Reed	2	-----		-----		-----	
032		Orch Brass	2	-----		-----		-----	
033		Orch Brass 2	2	-----		-----		-----	
035		St.FatPopBrs	2	-----		-----		-----	
036		St.Orch Brs	2	-----		-----		-----	
037		St.Orch Brs2	2	-----		-----		-----	
038		St.Orch Brs3	2	-----		-----		-----	
000	063	<b>Synth Brass1</b>	2 [Pro]	<b>Synth Brass1</b>	2	<b>SynthBrass1</b>	2	<b>Syn.Brass 1</b>	2
001		JUNO Brass	2 [Pro]	JUNO Brass	2	Poly Brass	2	-----	
002		Stack Brass	2 [Pro]	Stack Brass	2	-----		-----	
003		SH-5 Brass	2 [Pro]	SH-5 Brass	2	-----		-----	
004		MKS Brass	2 [Pro]	MKS Brass	2	-----		-----	
005		Jump Brass	1	-----		-----		-----	
008		Pro Brass	2 [Pro]	Pro Brass	2	Syn.Brass 3	2 [55]	Syn.Brass 3	2
009		P5 Brass	2 [Pro]	P5 Brass	2	Quack Brass	2	-----	
010		OrchSynBrass	2	-----		-----		-----	
016		Oct SynBrass	2 [Pro]	Oct SynBrass	2	OctaveBrass	2	Analog Brs1	2
017		Hybrid Brass	2 [Pro]	Hybrid Brass	2	-----		-----	
018		OctSynBrass2	2	-----		-----		-----	
019		BPF Brass	2	-----		-----		-----	

## Brass

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	064	Synth Brass2	2 [Pro]	Synth Brass 2	2	Syn.Brass 2	2 [55]	Syn.Brass 2	2
001		Soft Brass	2 [Pro]	Soft Brass	2	Soft Brass	2	-----	
002		Warm Brass	2 [Pro]	Warm Brass	2	-----		-----	
003		Synth Brass3	2	-----		-----		-----	
004		Sync Brass	2	-----		-----		-----	
005		Fat SynBrass	2	-----		-----		-----	
006		DeepSynBrass	2	-----		-----		-----	
008		SynBrass sfz	1 [Pro]	SynBrass sfz	1	Syn.Brass 4	1 [55]	Syn.Brass 4	1
009		OB Brass	2 [Pro]	OB Brass	2	-----		-----	
010		Reso Brass	2 [Pro]	Reso Brass	2	-----		-----	
011		DistSqrBrass	2	-----		-----		-----	
012		JP8000SawBrs	2	-----		-----		-----	
016		Velo Brass 1	2 [Pro]	Velo Brass 1	2 [88]	VeloBrass 1	2	Analog Brs2	2
017		Transbrass	2 [Pro]	Transbrass	2	VeloBrass 2	2	-----	

## Reed

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	065	Soprano Sax	1 [Pro]	Soprano Sax	1	Soprano Sax	1	Soprano Sax	1
008		Soprano Exp.	1 [Pro]	Soprano Exp.	1	-----		-----	
000	066	Alto Sax	1 [Pro]	Alto Sax	1	Alto Sax	1	Alto Sax	1
008		AltoSax Exp.	1 [Pro]	AltoSax Exp.	1	Hyper Alto	1	-----	
009		Grow Sax	1 [Pro]	Grow Sax	1	-----		-----	
016		AltoSax + Tp	2 [Pro]	AltoSax + Tp	2	-----		-----	
017		Sax Section	2	-----		-----		-----	
000	067	Tenor Sax	2 [Pro]	Tenor Sax	2	Tenor Sax	2	Tenor Sax	1
001		Tenor Sax :	2 [Pro]	Tenor Sax :	2	-----		-----	
008		BreathyTn.:	1 [Pro]	BreathyTn.:	1	BreathyTnr.	1	-----	
009		St.Tenor Sax	2 [Pro]	St. Tenor Sax	2	-----		-----	
000	068	Baritone Sax	2 [Pro]	Baritone Sax	2	BaritoneSax	1	BaritoneSax	1
001		Bari. Sax :	2 [Pro]	Bari. Sax :	2	-----		-----	
008		Bari & Tenor	2	-----		-----		-----	
000	069	Oboe	1 [Pro]	Oboe	1	Oboe	1	Oboe	1
008		Oboe Exp.	1 [Pro]	Oboe Exp.	1	-----		-----	
016		Multi Reed	1 [Pro]	Multi Reed	1	-----		-----	
000	070	English Horn	1 [Pro]	English Horn	1 [88]	EnglishHorn	1	EnglishHorn	1
000	071	Bassoon	1 [Pro]	Bassoon	1 [88]	Bassoon	1	Bassoon	1
000	072	Clarinet	1 [Pro]	Clarinet	1	Clarinet	1	Clarinet	1
008		Bs Clarinet	1 [Pro]	Bs Clarinet	1 [88]	Bs Clarinet	1	-----	
016		Multi Wind	1 [Pro]	Multi Wind	1	-----		-----	
017		Quad Wind	2	-----		-----		-----	

## Pipe

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	073	<b>Piccolo</b>	1 [Pro]	<b>Piccolo</b>	1 [88]	<b>Piccolo</b>	1	<b>Piccolo</b>	1
001		Piccolo :	1 [Pro]	Piccolo :	1	----		----	
008		Nay	2 [Pro]	Nay	2	----		----	
009		Nay Tremolo	2 [Pro]	Nay Tremolo	2	----		----	
016		Di	2 [Pro]	Di	2	----		----	
000	074	<b>Flute</b>	1 [Pro]	<b>Flute</b>	1 [88]	<b>Flute</b>	1	<b>Flute</b>	1
001		Flute 2 :	1 [Pro]	Flute 2 :	1	----		----	
002		Flute Exp.	1 [Pro]	Flute Exp.	1	----		----	
003		Fit Travelso	2 [Pro]	Fit Travelso	2	----		----	
008		Flute + Vln	2 [Pro]	Flute + Vln	2	----		----	
009		Pipe & Reed	2	----		----		----	
016		Tron Flute	1 [Pro]	Tron Flute	1	----		----	
017		Indian Flute	1	----		----		----	
000	075	<b>Recorder</b>	1 [Pro]	<b>Recorder</b>	1 [88]	<b>Recorder</b>	1 [55]	<b>Recorder</b>	1
000	076	<b>Pan Flute</b>	2 [Pro]	<b>Pan Flute</b>	2 [88]	<b>Pan Flute</b>	2	<b>Pan Flute</b>	1
008		Kawala	2 [Pro]	Kawala	2 [88]	Kawala	2	----	
016		Zampona	2 [Pro]	Zampona	2	----		----	
017		Zampona Atk	1 [Pro]	Zampona Atk	1	----		----	
024		Tin Whistle	1	----		----		----	
025		TinWhistle Nm	1	----		----		----	
026		TinWhistle Or	1	----		----		----	
000	077	<b>Bottle Blow</b>	2 [Pro]	<b>Bottle Blow</b>	2 [88]	<b>Bottle Blow</b>	2	<b>Bottle Blow</b>	2
000	078	<b>Shakuhachi</b>	2 [Pro]	<b>Shakuhachi</b>	2 [88]	<b>Shakuhachi</b>	2 [55]	<b>Shakuhachi</b>	2
001		Shakuhachi:	2 [Pro]	Shakuhachi:	2	----		----	
000	079	<b>Whistle</b>	1 [Pro]	<b>Whistle</b>	1 [88]	<b>Whistle</b>	1 [55]	<b>Whistle</b>	1
001		Whistle 2	2 [Pro]	Whistle 2	2	----		----	
000	080	<b>Ocarina</b>	1 [Pro]	<b>Ocarina</b>	1 [88]	<b>Ocarina</b>	1 [55]	<b>Ocarina</b>	1

## Synth Lead

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	081	<b>Square Wave</b>	2 [Pro]	<b>Square Wave</b>	2	<b>Square Wave</b>	2 [55]	<b>Square Wave</b>	2
001		MG Square	1 [Pro]	MG Square	1	Square	1 [55]	Square	1
002		Hollow Mini	1 [Pro]	Hollow Mini	1 [88]	Hollow Mini	1	----	
003		Mellow FM	2 [Pro]	Mellow FM	2 [88]	Mellow FM	2	----	
004		CC Solo	2 [Pro]	CC Solo	2 [88]	CC Solo	2	----	
005		Shmoog	2 [Pro]	Shmoog	2 [88]	Shmoog	2	----	
006		LM Square	2 [Pro]	LM Square	2 [88]	LM Square	2	----	
007		JP8000 TWM	2	----		----		----	
008		2600 Sine	1 [Pro]	2600 Sine	1	Sine Wave	1 [55]	Sine Wave	1
009		Sine Lead	1 [Pro]	Sine Lead	1	----		----	
010		KG Lead	1 [Pro]	KG Lead	1	----		----	
011		Twin Sine	2	----		----		----	
016		P5 Square	1 [Pro]	P5 Square	1	----		----	
017		OB Square	1 [Pro]	OB Square	1	----		----	
018		JP-8 Square	1 [Pro]	JP-8 Square	1	----		----	
019		Dist Square	1	----		----		----	
020		303SquarDst1	1	----		----		----	
021		303SquarDst2	1	----		----		----	
022		303 Mix Sqr	2	----		----		----	
023		Dual Sqr&Saw	2	----		----		----	
024		Pulse Lead	2 [Pro]	Pulse Lead	2	----		----	
025		JP8 PulseLd1	2 [Pro]	JP8 PulseLd1	2	----		----	
026		JP8 PulseLd2	1 [Pro]	JP8 PulseLd2	1	----		----	
027		MG Reso. Pls	1 [Pro]	MG Reso. Pls	1	----		----	
028		JP8 PulseLd3	2	----		----		----	
029		260RingLead	2	----		----		----	
030		303DistLead	2	----		----		----	
031		JP8000DistLd	2	----		----		----	
032		HipHop SinLd	1	----		----		----	
033		HipHop SqrLd	1	----		----		----	
034		HipHop PlsLd	1	----		----		----	
035		Flux Pulse	2	----		----		----	

## Synth Lead

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	082	Saw Wave	2 [Pro]	Saw Wave	2	Saw Wave	2 [55]	Saw Wave	2
001		OB2 Saw	1 [Pro]	OB2 Saw	1	Saw	1 [55]	Saw	1
002		Pulse Saw	2 [Pro]	Pulse Saw	2 [88]	Pulse Saw	2	-----	
003		Feline GR	2 [Pro]	Feline GR	2 [88]	Feline GR	2	-----	
004		Big Lead	2 [Pro]	Big Lead	2 [88]	Big Lead	2	-----	
005		Velo Lead	2 [Pro]	Velo Lead	2 [88]	Velo Lead	2	-----	
006		GR-300	2 [Pro]	GR-300	2 [88]	GR-300	2	-----	
007		LA Saw	1 [Pro]	LA Saw	1 [88]	LA Saw	1	-----	
008		Doctor Solo	2 [Pro]	Doctor Solo	2 [88]	Doctor Solo	2 [55]	Doctor Solo	2
009		Fat Saw Lead	2 [Pro]	Fat Saw Lead	2	-----		-----	
010		JP8000 Saw	1	-----		-----		-----	
011		D-50 Fat Saw	2 [Pro]	D-50 Fat Saw	2	-----		-----	
012		OB DoubleSaw	2	-----		-----		-----	
013		JP DoubleSaw	2	-----		-----		-----	
014		FatSawLead 2	2	-----		-----		-----	
015		JP SuperSaw	2	-----		-----		-----	
016		Waspy Synth	2 [Pro]	Waspy Synth	2 [88]	Waspy Synth	2	-----	
017		PM Lead	1 [Pro]	PM Lead	1	-----		-----	
018		CS Saw Lead	1 [Pro]	CS Saw Lead	1	-----		-----	
024		MG Saw 1	1 [Pro]	MG Saw 1	1	-----		-----	
025		MG Saw 2	1 [Pro]	MG Saw 2	1	-----		-----	
026		OB Saw 1	1 [Pro]	OB Saw 1	1	-----		-----	
027		OB Saw 2	1 [Pro]	OB Saw 2	1	-----		-----	
028		D-50 Saw	1 [Pro]	D-50 Saw	1	-----		-----	
029		SH-101 Saw	1 [Pro]	SH-101 Saw	1	-----		-----	
030		CS Saw	1 [Pro]	CS Saw	1	-----		-----	
031		MG Saw Lead	1 [Pro]	MG Saw Lead	1	-----		-----	
032		OB Saw Lead	1 [Pro]	OB Saw Lead	1	-----		-----	
033		P5 Saw Lead	2 [Pro]	P5 Saw Lead	2	-----		-----	
034		MG unison	2 [Pro]	MG unison	2	-----		-----	
035		Oct Saw Lead	2 [Pro]	Oct Saw Lead	2	-----		-----	
036		Natural Lead	2	-----		-----		-----	
040		SequenceSaw1	2	SequenceSaw1	2	-----		-----	
041		SequenceSaw2	1 [Pro]	SequenceSaw2	1	-----		-----	
042		Reso Saw	1 [Pro]	Reso Saw	1	-----		-----	
043		Cheese Saw 1	1 [Pro]	Cheese Saw 1	1	-----		-----	
044		Cheese Saw 2	1 [Pro]	Cheese Saw 2	1	-----		-----	
045		Rhythmic Saw	2 [Pro]	Rhythmic Saw	2	-----		-----	
046		SequencedSaw	2	-----		-----		-----	
047		Techno Saw	2	-----		-----		-----	
000	083	Syn.Calliope	2 [Pro]	Syn.Calliope	2 [88]	SynCalliope	2 [55]	SynCalliope	2
001		Vent Synth	2 [Pro]	Vent Synth	2 [88]	Vent Synth	2	-----	
002		Pure PanLead	2 [Pro]	Pure PanLead	2 [88]	PurePanLead	2	-----	
008		LM Pure Lead	2	-----		-----		-----	
009		LM Blow Lead	2	-----		-----		-----	
000	084	Chiffer Lead	2 [Pro]	Chiffer Lead	2 [88]	ChifferLead	2 [55]	ChifferLead	2
001		TB Lead	2 [Pro]	TB Lead	2	-----		-----	
002		Hybrid Lead	2	-----		-----		-----	
003		Unison SqrLd	2	-----		-----		-----	
004		FatSolo Lead	2	-----		-----		-----	
005		ForcefulLead	2	-----		-----		-----	
006		Oct.UnisonLd	2	-----		-----		-----	
007		Unison SawLd	2	-----		-----		-----	
008		Mad Lead	2 [Pro]	Mad Lead	2	-----		-----	
009		CrowdingLead	2	-----		-----		-----	
010		Double Sqr.	2	-----		-----		-----	
000	085	Charang	2 [Pro]	Charang	2 [88]	Charang	2 [55]	Charang	2
001		Wire Lead	2	-----		-----		-----	
002		FB.Charang	2	-----		-----		-----	
003		Fat GR Lead	2	-----		-----		-----	
004		Windy GR Ld	2	-----		-----		-----	
005		Mellow GR Ld	2	-----		-----		-----	
006		GR & Pulse	2	-----		-----		-----	
008		Dist.Lead	2 [Pro]	Dist.Lead	2 [88]	Dist.Lead	2	-----	
009		Acid Guitar1	2 [Pro]	Acid Guitar1	2	-----		-----	
010		Acid Guitar2	2 [Pro]	Acid Guitar2	2	-----		-----	
011		Dance Dst.Gt	2	-----		-----		-----	
012		DanceDst.Gt2	2	-----		-----		-----	
016		P5 Sync Lead	1 [Pro]	P5 Sync Lead	1	-----		-----	
017		Fat SyncLead	2 [Pro]	Fat Sync Lead	2	-----		-----	
018		Rock Lead	2 [Pro]	Rock Lead	2	-----		-----	
019		5th DecaSync	2 [Pro]	5th DecaSync	2	-----		-----	
020		Dirty Sync	1 [Pro]	Dirty Sync	1	-----		-----	
021		DualSyncLead	2	-----		-----		-----	
022		LA Brass Ld	2	-----		-----		-----	
024		JUNO Sub Osc	1 [Pro]	JUNO Sub Osc	1	-----		-----	
025		2600 Sub Osc	1	-----		-----		-----	
026		JP8000Fd Osc	1	-----		-----		-----	

## Synth Lead

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	086	<b>Solo Vox</b>	2 [Pro]	<b>Solo Vox</b>	2 [88]	<b>Solo Vox</b>	2 [55]	<b>Solo Vox</b>	2
001		Solo Vox 2	2	-----		-----		-----	
008		Vox Lead	2 [Pro]	Vox Lead	2	-----		-----	
009		LFO Vox	2 [Pro]	LFO Vox	2	-----		-----	
010		Vox Lead 2	2	-----		-----		-----	
000	087	<b>5th Saw Wave</b>	2 [Pro]	<b>5th Saw Wave</b>	2 [88]	<b>5th Saw</b>	2 [55]	<b>5th Saw</b>	2
001		Big Fives	2 [Pro]	Big Fives	2 [88]	Big Fives	2	-----	
002		5th Lead	2 [Pro]	5th Lead	2	-----		-----	
003		5th Ana.Clav	2 [Pro]	5th Ana.Clav	2	-----		-----	
004		5th Pulse	2	-----		-----		-----	
005		JP 5th Saw	2	-----		-----		-----	
006		JP8000 5thFB	2	-----		-----		-----	
008		4th Lead	2 [Pro]	4th Lead	2	-----		-----	
000	088	<b>Bass &amp; Lead</b>	2 [Pro]	<b>Bass &amp; Lead</b>	2 [88]	<b>Bass &amp; Lead</b>	2 [55]	<b>Bass &amp; Lead</b>	2
001		Big & Raw	2 [Pro]	Big & Raw	2 [88]	Big & Raw	2	-----	
002		Fat & Perky	2 [Pro]	Fat & Perky	2 [88]	Fat & Perky	2	-----	
003		JUNO Rave	1 [Pro]	JUNO Rave	1	-----		-----	
004		JP8 BsLead 1	1 [Pro]	JP8 BsLead 1	1	-----		-----	
005		JP8 BsLead 2	2 [Pro]	JP8 BsLead 2	2	-----		-----	
006		SH-5 Bs.Lead	2 [Pro]	SH-5 Bs.Lead	2	-----		-----	
007		Delayed Lead	2	-----		-----		-----	

## Synth Pad, etc

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	089	<b>Fantasia</b>	2 [Pro]	<b>Fantasia</b>	2 [88]	<b>Fantasia</b>	2 [55]	<b>Fantasia</b>	2
001		Fantasia 2	2 [Pro]	Fantasia 2	2 [88]	Fantasia 2	2	-----	
002		New Age Pad	2 [Pro]	New Age Pad	2	-----		-----	
003		Bell Heaven	2 [Pro]	Bell Heaven	2	-----		-----	
004		Fantasia 3	2	-----		-----		-----	
005		Fantasia 4	2	-----		-----		-----	
006		After D !	2	-----		-----		-----	
007		260HarmPad	2	-----		-----		-----	
000	090	<b>Warm Pad</b>	1 [Pro]	<b>Warm Pad</b>	1 [88]	<b>Warm Pad</b>	1 [55]	<b>Warm Pad</b>	1
001		Thick Matrix	2 [Pro]	Thick Matrix	2	Thick Pad	2	-----	
002		Horn Pad	2 [Pro]	Horn Pad	2 [88]	Horn Pad	2	-----	
003		Rotary Strng	2 [Pro]	Rotary Strng	2 [88]	RotaryStrng	2	-----	
004		OB Soft Pad	2 [Pro]	OB Soft Pad	2	Soft Pad	2	-----	
005		Sine Pad	2	-----		-----		-----	
006		OB Soft Pad2	2	-----		-----		-----	
008		Octave Pad	2 [Pro]	Octave Pad	2	-----		-----	
009		Stack Pad	2 [Pro]	Stack Pad	2	-----		-----	
010		Human Pad	2	-----		-----		-----	
011		Sync Brs.Pad	2	-----		-----		-----	
012		Oct.PWM Pad	2	-----		-----		-----	
013		JP Soft Pad	2	-----		-----		-----	
000	091	<b>Polysynth</b>	2 [Pro]	<b>Polysynth</b>	2 [88]	<b>Polysynth</b>	2 [55]	<b>Polysynth</b>	2
001		80's PolySyn	2 [Pro]	80's PolySyn	2 [88]	80'sPolySyn	2	-----	
002		Polysynth 2	2 [Pro]	Polysynth 2	2	-----		-----	
003		Poly King	2 [Pro]	Poly King	2	-----		-----	
004		Super Poly	2	-----		-----		-----	
008		Power Stack	2 [Pro]	Power Stack	2	-----		-----	
009		Octave Stack	2 [Pro]	Octave Stack	2	-----		-----	
010		Reso Stack	1 [Pro]	Reso Stack	1	-----		-----	
011		Techno Stack	2 [Pro]	Techno Stack	2	-----		-----	
012		Pulse Stack	2	-----		-----		-----	
013		TwinOct.Rave	2	-----		-----		-----	
014		Oct.Rave	2	-----		-----		-----	
015		Happy Synth	2	-----		-----		-----	
016		ForwardSweep	2	-----		-----		-----	
017		ReverseSweep	2	-----		-----		-----	
024		Minor Rave	2	-----		-----		-----	
000	092	<b>Space Voice</b>	1 [Pro]	<b>Space Voice</b>	1 [88]	<b>Space Voice</b>	1 [55]	<b>Space Voice</b>	1
001		Heaven II	2 [Pro]	Heaven II	2 [88]	Heaven II	2	-----	
002		SC Heaven	2 [Pro]	SC Heaven	2	-----		-----	
003		Itopia	2	-----		-----		-----	
004		Water Space	2	-----		-----		-----	
005		Cold Space	2	-----		-----		-----	
006		Noise Peaker	1	-----		-----		-----	
007		Bamboo Hit	1	-----		-----		-----	
008		Cosmic Voice	2 [Pro]	Cosmic Voice	2	-----		-----	
009		Auh Vox	1 [Pro]	Auh Vox	1	-----		-----	
010		AuhAuh	2 [Pro]	AuhAuh	2	-----		-----	
011		Vocoderman	2 [Pro]	Vocoderman	2	-----		-----	
012		Holy Voices	2	-----		-----		-----	

## Synth Pad, etc

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	093	<b>Bowed Glass</b>	2 [Pro]	<b>Bowed Glass</b>	2 [88]	<b>Bowed Glass</b>	2 [55]	<b>Bowed Glass</b>	2
001		SoftBellPad	2 [Pro]	SoftBellPad	2	-----	-----	-----	-----
002		JP8 Sqr Pad	2 [Pro]	JP8 Sqr Pad	2	-----	-----	-----	-----
003		7thBelPad	2 [Pro]	7thBelPad	2	-----	-----	-----	-----
004		Steel Glass	2	-----	-----	-----	-----	-----	-----
005		Bottle Stack	2	-----	-----	-----	-----	-----	-----
000	094	<b>Metal Pad</b>	2 [Pro]	<b>Metal Pad</b>	2 [88]	<b>Metal Pad</b>	2 [55]	<b>Metal Pad</b>	2
001		Tine Pad	2 [Pro]	Tine Pad	2 [88]	Tine Pad	2	-----	-----
002		Panner Pad	2 [Pro]	Panner Pad	2 [88]	Panner Pad	2	-----	-----
003		Steel Pad	2	-----	-----	-----	-----	-----	-----
004		Special Rave	2	-----	-----	-----	-----	-----	-----
005		Metal Pad 2	2	-----	-----	-----	-----	-----	-----
000	095	<b>Halo Pad</b>	2 [Pro]	<b>Halo Pad</b>	2 [88]	<b>Halo Pad</b>	2 [55]	<b>Halo Pad</b>	2
001		Vox Pad	2 [Pro]	Vox Pad	2	-----	-----	-----	-----
002		Vox Sweep	2 [Pro]	Vox Sweep	2	-----	-----	-----	-----
008		Horror Pad	2 [Pro]	Horror Pad	2	-----	-----	-----	-----
009		SynVox Pad	2	-----	-----	-----	-----	-----	-----
010		SynVox Pad 2	2	-----	-----	-----	-----	-----	-----
011		Breath&Rise	2	-----	-----	-----	-----	-----	-----
012		Tears Voices	2	-----	-----	-----	-----	-----	-----
000	096	<b>Sweep Pad</b>	1 [Pro]	<b>Sweep Pad</b>	1 [88]	<b>Sweep Pad</b>	1 [55]	<b>Sweep Pad</b>	1
001		Polar Pad	1 [Pro]	Polar Pad	1 [88]	Polar Pad	1	-----	-----
002		Ambient BPF	2	-----	-----	-----	-----	-----	-----
003		Sync Pad	2	-----	-----	-----	-----	-----	-----
004		Warriors	2	-----	-----	-----	-----	-----	-----
008		Converge	1 [Pro]	Converge	1 [88]	Converge	1	-----	-----
009		Shwimmer	2 [Pro]	Shwimmer	2 [88]	Shwimmer	2	-----	-----
010		Celestial Pd	2 [Pro]	Celestial Pd	2 [88]	CelestialPd	2	-----	-----
011		Bag Sweep	2 [Pro]	Bag Sweep	2	-----	-----	-----	-----
012		Sweep Pipe	2	-----	-----	-----	-----	-----	-----
013		Sweep Stack	2	-----	-----	-----	-----	-----	-----
014		Deep Sweep	2	-----	-----	-----	-----	-----	-----
015		Stray Pad	2	-----	-----	-----	-----	-----	-----
000	097	<b>Ice Rain</b>	2 [Pro]	<b>Ice Rain</b>	2 [88]	<b>Ice Rain</b>	2 [55]	<b>Ice Rain</b>	2
001		Harmo Rain	2 [Pro]	Harmo Rain	2 [88]	Harmo Rain	2	-----	-----
002		African wood	2 [Pro]	African wood	2 [88]	AfricanWood	2	-----	-----
003		Anklung Pad	2 [Pro]	Anklung Pad	2	-----	-----	-----	-----
004		Rattle Pad	2 [Pro]	Rattle Pad	2	-----	-----	-----	-----
005		Saw Impulse	2	-----	-----	-----	-----	-----	-----
006		Strange Str.	2	-----	-----	-----	-----	-----	-----
007		FastFWD Pad	2	-----	-----	-----	-----	-----	-----
008		Clavi Pad	2 [Pro]	Clavi Pad	2 [88]	Clavi Pad	2	-----	-----
009		EP Pad	2	-----	-----	-----	-----	-----	-----
010		Tambra Pad	2	-----	-----	-----	-----	-----	-----
011		CP Pad	2	-----	-----	-----	-----	-----	-----
000	098	<b>Soundtrack</b>	2 [Pro]	<b>Soundtrack</b>	2 [88]	<b>Soundtrack</b>	2 [55]	<b>Soundtrack</b>	2
001		Ancestral	2 [Pro]	Ancestral	2 [88]	Ancestral	2	-----	-----
002		Prologue	2 [Pro]	Prologue	2 [88]	Prologue	2	-----	-----
003		Prologue 2	2 [Pro]	Prologue 2	2	-----	-----	-----	-----
004		Hols Strings	2 [Pro]	Hols Strings	2	-----	-----	-----	-----
005		HistoryWave	2	-----	-----	-----	-----	-----	-----
008		Rave	2 [Pro]	Rave	2 [88]	Rave	2	-----	-----
000	099	<b>Crystal</b>	2 [Pro]	<b>Crystal</b>	2 [88]	<b>Crystal</b>	2 [55]	<b>Crystal</b>	2
001		Syn Mallet	1 [Pro]	Syn Mallet	1 [88]	Syn Mallet	1 [55]	Syn Mallet	1
002		Soft Crystal	2 [Pro]	Soft Crystal	2 [88]	SoftCrystal	2	-----	-----
003		Round Glock	2 [Pro]	Round Glock	2 [88]	Round Glock	2	-----	-----
004		Loud Glock	2 [Pro]	Loud Glock	2 [88]	Loud Glock	2	-----	-----
005		GlockenChime	2 [Pro]	GlockenChime	2 [88]	GlocknChime	2	-----	-----
006		Clear Bells	2 [Pro]	Clear Bells	2 [88]	Clear Bells	2	-----	-----
007		ChristmasBel	2 [Pro]	ChristmasBel	2 [88]	X'mas Bell	2	-----	-----
008		Vibra Bells	2 [Pro]	Vibra Bells	2 [88]	Vibra Bells	2	-----	-----
009		Digi Bells	2 [Pro]	Digi Bells	2 [88]	Digi Bells	2	-----	-----
010		Music Bell	2 [Pro]	Music Bell	2	-----	-----	-----	-----
011		Analog Bell	1 [Pro]	Analog Bell	1	-----	-----	-----	-----
012		Blow Bell	2	-----	-----	-----	-----	-----	-----
013		Hyper Bell	2	-----	-----	-----	-----	-----	-----
016		Choral Bells	2 [Pro]	Choral Bells	2 [88]	ChoralBells	2	-----	-----
017		Air Bells	2 [Pro]	Air Bells	2 [88]	Air Bells	2	-----	-----
018		Bell Harp	2 [Pro]	Bell Harp	2 [88]	Bell Harp	2	-----	-----
019		Gamelimba	2 [Pro]	Gamelimba	2 [88]	Gamelimba	2	-----	-----
020		JUNO Bell	2 [Pro]	JUNO Bell	2	-----	-----	-----	-----
021		JP Bell	2	-----	-----	-----	-----	-----	-----
022		Pizz Bell	2	-----	-----	-----	-----	-----	-----
023		Bottom Bell	2	-----	-----	-----	-----	-----	-----



## Synth SFX

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	100	<b>Atmosphere</b>	2 [Pro]	<b>Atmosphere</b>	2 [88]	<b>Atmosphere</b>	2 [55]	<b>Atmosphere</b>	2
001		Warm Atmos	2 [Pro]	Warm Atmos	2 [88]	Warm Atmos	2	-----	-----
002		Nylon Harp	2 [Pro]	Nylon Harp	2 [88]	Nylon Harp	2	-----	-----
003		Harpvox	2 [Pro]	Harpvox	2 [88]	Harpvox	2	-----	-----
004		HollowReleas	2 [Pro]	HollowReleas	2 [88]	HollowRels.	2	-----	-----
005		Nylon+Rhodes	2 [Pro]	Nylon+Rhodes	2 [88]	NylonRhodes	2	-----	-----
006		Ambient Pad	2 [Pro]	Ambient Pad	2 [88]	Ambient Pad	2	-----	-----
007		Invisible	2 [Pro]	Invisible	2	-----	-----	-----	-----
008		Pulsey Key	2 [Pro]	Pulsey Key	2	-----	-----	-----	-----
009		Noise Piano	2 [Pro]	Noise Piano	2	-----	-----	-----	-----
010		Heaven Atmos	2	-----	-----	-----	-----	-----	-----
011		Tambra Atmos	2	-----	-----	-----	-----	-----	-----
000	101	<b>Brightness</b>	2 [Pro]	<b>Brightness</b>	2 [88]	<b>Brightness</b>	2 [55]	<b>Brightness</b>	2
001		Shining Star	2 [Pro]	Shining Star	2	-----	-----	-----	-----
002		OB Stab	1 [Pro]	OB Stab	1	-----	-----	-----	-----
003		Brass Star	2	-----	-----	-----	-----	-----	-----
004		Choir Stab	2	-----	-----	-----	-----	-----	-----
005		D-50 Retour	2	-----	-----	-----	-----	-----	-----
006		SouthernWind	2	-----	-----	-----	-----	-----	-----
007		SymbolicBell	2	-----	-----	-----	-----	-----	-----
008		Org Bell	2 [Pro]	Org Bell	2	-----	-----	-----	-----
000	102	<b>Goblin</b>	2 [Pro]	<b>Goblin</b>	2 [88]	<b>Goblin</b>	2 [55]	<b>Goblin</b>	2
001		Goblinson	2 [Pro]	Goblinson	2 [88]	Goblinson	2	-----	-----
002		50's Sci-Fi	2 [Pro]	50's Sci-Fi	2 [88]	50's Sci-Fi	2	-----	-----
003		Abduction	2 [Pro]	Abduction	2	-----	-----	-----	-----
004		Auhbient	2 [Pro]	Auhbient	2	-----	-----	-----	-----
005		LFO Pad	2 [Pro]	LFO Pad	2	-----	-----	-----	-----
006		Random Str	2 [Pro]	Random Str	2	-----	-----	-----	-----
007		Random Pad	2 [Pro]	Random Pad	2	-----	-----	-----	-----
008		LowBirds Pad	2 [Pro]	LowBirds Pad	2	-----	-----	-----	-----
009		Falling Down	2 [Pro]	Falling Down	2	-----	-----	-----	-----
010		LFO RAVE	2 [Pro]	LFO RAVE	2	-----	-----	-----	-----
011		LFO Horror	2 [Pro]	LFO Horror	2	-----	-----	-----	-----
012		LFO Techno	2 [Pro]	LFO Techno	2	-----	-----	-----	-----
013		Alternative	2 [Pro]	Alternative	2	-----	-----	-----	-----
014		UFO FX	2 [Pro]	UFO FX	2	-----	-----	-----	-----
015		Gargle Man	1 [Pro]	Gargle Man	1	-----	-----	-----	-----
016		Sweep FX	1 [Pro]	Sweep FX	1	-----	-----	-----	-----
017		LM Has Come	2	-----	-----	-----	-----	-----	-----
018		FallinInsect	2	-----	-----	-----	-----	-----	-----
019		LFO Oct.Rave	2	-----	-----	-----	-----	-----	-----
020		Just Before	2	-----	-----	-----	-----	-----	-----
021		RND Fl.Chord	2	-----	-----	-----	-----	-----	-----
022		RandomEnding	2	-----	-----	-----	-----	-----	-----
023		Random Sine	2	-----	-----	-----	-----	-----	-----
024		EatingFilter	2	-----	-----	-----	-----	-----	-----
025		Noise&SawHit	2	-----	-----	-----	-----	-----	-----
026		Pour Magic	2	-----	-----	-----	-----	-----	-----
027		DancingDrill	2	-----	-----	-----	-----	-----	-----
028		Dirty Stack	2	-----	-----	-----	-----	-----	-----
029		Big Blue	2	-----	-----	-----	-----	-----	-----
030		Static Hit	2	-----	-----	-----	-----	-----	-----
031		Atl.Mod.FX	2	-----	-----	-----	-----	-----	-----
032		Acid Copter	2	-----	-----	-----	-----	-----	-----
000	103	<b>Echo Drops</b>	1 [Pro]	<b>Echo Drops</b>	1 [88]	<b>Echo Drops</b>	1 [55]	<b>Echo Drops</b>	1
001		Echo Bell	2 [Pro]	Echo Bell	2 [88]	Echo Bell	2 [55]	Echo Bell	2
002		Echo Pan	2 [Pro]	Echo Pan	2 [88]	Echo Pan	2 [55]	Echo Pan	2
003		Echo Pan 2	2 [Pro]	Echo Pan 2	2 [88]	Echo Pan 2	2	-----	-----
004		Big Panner	2 [Pro]	Big Panner	2 [88]	Big Panner	2	-----	-----
005		Reso Panner	2 [Pro]	Reso Panner	2 [88]	Reso Panner	2	-----	-----
006		Water Piano	2 [Pro]	Water Piano	2 [88]	Water Piano	2	-----	-----
007		Echo SynBass	2	-----	-----	-----	-----	-----	-----
008		Pan Sequence	2 [Pro]	Pan Sequence	2	-----	-----	-----	-----
009		Aqua	2 [Pro]	Aqua	2	-----	-----	-----	-----
010		Panning Lead	2	-----	-----	-----	-----	-----	-----
011		PanningBrass	2	-----	-----	-----	-----	-----	-----
000	104	<b>Star Theme</b>	2 [Pro]	<b>Star Theme</b>	2 [88]	<b>Star Theme</b>	2 [55]	<b>Star Theme</b>	2
001		Star Theme 2	2 [Pro]	Star Theme 2	2 [88]	StarTheme 2	2	-----	-----
002		Star Mind	2	-----	-----	-----	-----	-----	-----
003		Star Dust	2	-----	-----	-----	-----	-----	-----
004		Rep.Trance	2	-----	-----	-----	-----	-----	-----
005		Etherality	2	-----	-----	-----	-----	-----	-----
006		Mystic Pad	2	-----	-----	-----	-----	-----	-----
008		Dream Pad	2 [Pro]	Dream Pad	2	-----	-----	-----	-----
009		Silky Pad	2 [Pro]	Silky Pad	2	-----	-----	-----	-----
010		Dream Pad 2	2	-----	-----	-----	-----	-----	-----
011		Silky Pad 2	2	-----	-----	-----	-----	-----	-----
016		New Century	1 [Pro]	New Century	1	-----	-----	-----	-----
017		7th Atmos.	2 [Pro]	7th Atmos.	2	-----	-----	-----	-----
018		Galaxy Way	2 [Pro]	Galaxy Way	2	-----	-----	-----	-----
019		Rising OSC.	2	-----	-----	-----	-----	-----	-----

## Ethnic, etc

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	105	<b>Sitar</b>	1 [Pro]	<b>Sitar</b>	1 [88]	<b>Sitar</b>	1 [55]	<b>Sitar</b>	1
001		Sitar 2	2 [Pro]	Sitar 2	2 [88]	Sitar 2	2 [55]	Sitar 2	2
002		Detune Sitar	2 [Pro]	Detune Sitar	2 [88]	DetuneSitar	2	-----	-----
003		Sitar 3	2 [Pro]	Sitar 3	2	-----	-----	-----	-----
004		Sitar/Drone	1	-----	-----	-----	-----	-----	-----
005		Sitar 4	2	-----	-----	-----	-----	-----	-----
008		Tambra	1 [Pro]	Tambra	1 [88]	Tambra	1	-----	-----
016		Tamboura	2 [Pro]	Tamboura	2 [88]	Tamboura	2	-----	-----
000	106	<b>Banjo</b>	1 [Pro]	<b>Banjo</b>	1 [88]	<b>Banjo</b>	1	<b>Banjo</b>	1
001		Muted Banjo	1 [Pro]	Muted Banjo	1 [88]	Muted Banjo	1	-----	-----
008		Rabab	2 [Pro]	Rabab	2 [88]	Rabab	2	-----	-----
009		San Xian	2 [Pro]	San Xian	2	-----	-----	-----	-----
016		Gopichant	2 [Pro]	Gopichant	2 [88]	Gopichant	2	-----	-----
024		Oud	2 [Pro]	Oud	2 [88]	Oud	2	-----	-----
028		Oud+Strings	2 [Pro]	Oud+Strings	2	-----	-----	-----	-----
032		Pi Pa	1 [Pro]	Pi Pa	1	-----	-----	-----	-----
000	107	<b>Shamisen</b>	1 [Pro]	<b>Shamisen</b>	1 [88]	<b>Shamisen</b>	1 [55]	<b>Shamisen</b>	1
001		Tsugaru	2 [Pro]	Tsugaru	2 [88]	Tsugaru	2	-----	-----
008		Syn Shamisen	2 [Pro]	Syn Shamisen	2	-----	-----	-----	-----
000	108	<b>Koto</b>	2 [Pro]	<b>Koto</b>	2	<b>Koto</b>	1 [55]	<b>Koto</b>	1
001		Gu Zheng	2 [Pro]	Gu Zheng	2	-----	-----	-----	-----
008		Taisho Koto	1 [Pro]	Taisho Koto	1 [88]	Taisho Koto	1	Taisho Koto	2
016		Kanoon	2 [Pro]	Kanoon	2 [88]	Kanoon	2	-----	-----
019		Kanoon+Choir	2 [Pro]	Kanoon+Choir	2	-----	-----	-----	-----
024		Oct Harp	1 [Pro]	Oct Harp	1	-----	-----	-----	-----
000	109	<b>Kalimba</b>	1 [Pro]	<b>Kalimba</b>	1	<b>Kalimba</b>	1	<b>Kalimba</b>	1
008		Sanza	2 [Pro]	Sanza	2	-----	-----	-----	-----
009		Bodhran	1	-----	-----	-----	-----	-----	-----
010		Bodhran Mute	1	-----	-----	-----	-----	-----	-----
000	110	<b>Bagpipe</b>	1 [Pro]	<b>Bagpipe</b>	1 [88]	<b>Bagpipe</b>	1	<b>Bagpipe</b>	1
008		Didgeridoo	1 [Pro]	Didgeridoo	1 +	-----	-----	-----	-----
009		Uilleann Pipe	1	-----	-----	-----	-----	-----	-----
010		UillnPipe Nm	1	-----	-----	-----	-----	-----	-----
011		UillnPipe Or	1	-----	-----	-----	-----	-----	-----
000	111	<b>Fiddle</b>	1 [Pro]	<b>Fiddle</b>	1 [88]	<b>Fiddle</b>	1 [55]	<b>Fiddle</b>	1
008		Er Hu	1 [Pro]	Er Hu	1	-----	-----	-----	-----
009		Gao Hu	1 [Pro]	Gao Hu	1	-----	-----	-----	-----
000	112	<b>Shanai</b>	1 [Pro]	<b>Shanai</b>	1 [88]	<b>Shanai</b>	1 [55]	<b>Shanai</b>	1
001		Shanai 2	1 [Pro]	Shanai 2	1 [88]	Shanai 2	1	-----	-----
008		Pungi	1 [Pro]	Pungi	1 [88]	Pungi	1	-----	-----
016		Hichiriki	2 [Pro]	Hichiriki	2 [88]	Hichiriki	2	-----	-----
024		Mizmar	1 [Pro]	Mizmar	1	-----	-----	-----	-----
032		Suona 1	1 [Pro]	Suona 1	1	-----	-----	-----	-----
033		Suona 2	1 [Pro]	Suona 2	1	-----	-----	-----	-----
000	113	<b>Tinkle Bell</b>	1 [Pro]	<b>Tinkle Bell</b>	1 [88]	<b>Tinkle Bell</b>	1 [55]	<b>Tinkle Bell</b>	1
008		Bonang	1 [Pro]	Bonang	1 [88]	Bonang	1	-----	-----
009		Gender	1 [Pro]	Gender	1 [88]	Gender	1	-----	-----
010		Gamelan Gong	1 [Pro]	Gamelan Gong	1 [88]	GamelanGong	1	-----	-----
011		St.Gamelan	2 [Pro]	St.Gamelan	2 [88]	St.Gamelan	2	-----	-----
012		Jang Gu	2 [Pro]	Jang Gu	2	-----	-----	-----	-----
013		Jegogan	2	-----	-----	-----	-----	-----	-----
014		Jublag	1	-----	-----	-----	-----	-----	-----
015		Pemade	1	-----	-----	-----	-----	-----	-----
016		RAMA Cymbal	1 [Pro]	RAMA Cymbal	1 [88]	RAMA Cymbal	1	-----	-----
017		Kajar	1	-----	-----	-----	-----	-----	-----
018		Kelontuk	1	-----	-----	-----	-----	-----	-----
019		Kelontuk Mt	1	-----	-----	-----	-----	-----	-----
020		Kelontuk Sid	1	-----	-----	-----	-----	-----	-----
021		Kopyak Op	1 +	-----	-----	-----	-----	-----	-----
022		Kopyak Mt	1 +	-----	-----	-----	-----	-----	-----
023		Ceng Ceng	2 +	-----	-----	-----	-----	-----	-----
024		Reyoung	2	-----	-----	-----	-----	-----	-----
025		Kempur	2	-----	-----	-----	-----	-----	-----
032		Jngl Crash	1 +	-----	-----	-----	-----	-----	-----
040		Crash Menu	1	-----	-----	-----	-----	-----	-----
041		RideCym Menu	1	-----	-----	-----	-----	-----	-----
042		RideBellMenu	1	-----	-----	-----	-----	-----	-----

## Percussive

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	114	<b>Agogo</b>	1 [Pro]	<b>Agogo</b>	1 [88]	<b>Agogo</b>	1	<b>Agogo</b>	1
008		Atarigane	1 [Pro]	Atarigane	1 [88]	Atarigane	1	-----	
016		Tambourine	1 [Pro] +	Tambourine	1 +	-----		-----	
000	115	<b>Steel Drums</b>	1 [Pro]	<b>Steel Drums</b>	1 [88]	<b>Steel Drums</b>	1 [55]	<b>Steel Drums</b>	1
001		Island Mlt	2 [Pro]	Island Mlt	2	-----		-----	
000	116	<b>Woodblock</b>	1 [Pro] +	<b>Woodblock</b>	1 [88] +	<b>Woodblock</b>	1 [55] +	<b>Woodblock</b>	1 +
008		Castanets	1 [Pro] +	Castanets	1 [88] +	Castanets	1 [55] +	Castanets	1 +
016		Angklung	1 [Pro]	Angklung	1	-----		-----	
017		Angkl Rhythm	2 [Pro]	Angkl Rhythm	2	-----		-----	
024		Finger Snaps	1 [Pro] +	Finger Snaps	1 +	-----		-----	
032		909 HandClap	1 [Pro] +	909 HandClap	1 +	-----		-----	
040		HandClapMenu	1	-----		-----		-----	
000	117	<b>Taiko</b>	1 [Pro] +	<b>Taiko</b>	1 [88] +	<b>Taiko</b>	1 [55] +	<b>Taiko</b>	1 +
001		Small Taiko	1 [Pro] +	Small Taiko	1 +	-----		-----	
008		Concert BD	1 [Pro] +	Concert BD	1 [88] +	Concert BD	1 [55] +	Concert BD	1 +
009		ConcertBD Mt	1 +	-----		-----		-----	
016		Jungle BD	1 [Pro] +	Jungle BD	1 +	-----		-----	
017		Techno BD	1 [Pro] +	Techno BD	1 +	-----		-----	
018		Bounce	1 [Pro] +	Bounce	1 +	-----		-----	
024		KendangWadon	1 +	-----		-----		-----	
025		Bebarongan	1 +	-----		-----		-----	
026		Pelegongan	1 +	-----		-----		-----	
027		Dholak 1	1 +	-----		-----		-----	
028		Dholak 2	1 +	-----		-----		-----	
032		Jngl BD Roll	1 +	-----		-----		-----	
040		Kick Menu 1	1	-----		-----		-----	
041		Kick Menu 2	1	-----		-----		-----	
042		Kick Menu 3	1	-----		-----		-----	
043		Kick Menu 4	1	-----		-----		-----	
000	118	<b>Melo. Tom 1</b>	1 [Pro] +	<b>Melo. Tom 1</b>	1 [88] +	<b>Melo. Tom 1</b>	1 [55] +	<b>Melo. Tom 1</b>	1 +
001		Real Tom	2 [Pro] +	Real Tom	2 [88] +	Real Tom	2 +	-----	
002		Real Tom 2	2 +	-----		-----		-----	
003		Jazz Tom	2 +	-----		-----		-----	
004		Brush Tom	2 +	-----		-----		-----	
008		Melo. Tom 2	1 [Pro] +	Melo. Tom 2	1 [88] +	Melo. Tom 2	1 [55] +	Melo. Tom 2	1 +
009		Rock Tom	2 [Pro] +	Rock Tom	2 [88] +	Rock Tom	2 +	-----	
016		Rash SD	1 [Pro] +	Rash SD	1 +	-----		-----	
017		House SD	1 [Pro] +	House SD	1 +	-----		-----	
018		Jungle SD	1 [Pro] +	Jungle SD	1 +	-----		-----	
019		909 SD	1 [Pro] +	909 SD	1 +	-----		-----	
024		Jngl SD Roll	1 +	-----		-----		-----	
040		SD Menu 1	1	-----		-----		-----	
041		SD Menu 2	1	-----		-----		-----	
042		SD Menu 3	1	-----		-----		-----	
043		SD Menu 4	1	-----		-----		-----	
044		SD Menu 5	1	-----		-----		-----	
000	119	<b>Synth Drum</b>	1 [Pro] +	<b>Synth Drum</b>	1 [88] +	<b>Synth Drum</b>	1 [55] +	<b>Synth Drum</b>	1 +
008		808 Tom	2 [Pro] +	808 Tom	2 [88] +	808 Tom	2 +	808 Tom	1 +
009		Elec Perc	1 [Pro] +	Elec Perc	1 [88] +	Elec Perc	1 [55] +	Elec Perc	1 +
010		Sine Perc.	1 [Pro]	Sine Perc.	1	-----		-----	
011		606 Tom	1 [Pro] +	606 Tom	1 +	-----		-----	
012		909 Tom	1 [Pro] +	909 Tom	1 +	-----		-----	
013		606 Dist.Tom	1 +	-----		-----		-----	
000	120	<b>Reverse Cym.</b>	1 [Pro] +	<b>Reverse Cym.</b>	1 [88] +	<b>Reverse Cym</b>	1 [55] +	<b>Reverse Cym</b>	1 +
001		Reverse Cym2	1 [Pro] +	Reverse Cym2	1 [88] +	ReverseCym2	1 +	-----	
002		Reverse Cym3	1 [Pro]	Reverse Cym3	1 +	-----		-----	
003		Reverse Cym4	2 +	-----		-----		-----	
008		Rev.Snare 1	1 [Pro] +	Rev.Snare 1	1 [88] +	Rev.Snare 1	1 +	-----	
009		Rev.Snare 2	1 [Pro] +	Rev.Snare 2	1 [88] +	Rev.Snare 2	1 +	-----	
016		Rev.Kick 1	1 [Pro] +	Rev.Kick 1	1 [88] +	Rev.Kick 1	1 +	-----	
017		Rev.ConBD	1 [Pro] +	Rev.ConBD	1 [88] +	Rev.ConBD	1 +	-----	
024		Rev.Tom 1	1 [Pro] +	Rev.Tom 1	1 [88] +	Rev.Tom 1	1 +	-----	
025		Rev.Tom 2	1 [Pro] +	Rev.Tom 2	1 [88] +	Rev.Tom 2	1 +	-----	
026		Rev.Tom 3	1 +	-----		-----		-----	
027		Rev.Tom 4	1 +	-----		-----		-----	
040		Rev.SD Menu1	1	-----		-----		-----	
041		Rev.SD Menu2	1	-----		-----		-----	
042		Rev.SD Menu3	1	-----		-----		-----	
043		Rev.BD Menu1	1	-----		-----		-----	
044		Rev.BD Menu2	1	-----		-----		-----	
045		Rev.BD Menu3	1	-----		-----		-----	
046		Rev.ClapMenu	1	-----		-----		-----	

## SFX

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
000	121	Gt.FretNoise	1 [Pro]	Gt.FretNoise	1 [88]	Gt.FretNoiz	1 [55]	Gt.FretNoiz	1
001		Gt.Cut Noise	1 [Pro] +	Gt.Cut Noise	1 [88] +	Gt.CutNoise	1 [55] +	Gt.CutNoise	1 +
002		String Slap	1 [Pro] +	String Slap	1 [88] +	String Slap	1 [55] +	String Slap	1 +
003		Gt.CutNoise2	1 [Pro] +	Gt.CutNoise2	1 [88] +	Gt.CutNz. 2	1 +	-----	
004		Dist.CutNoiz	1 [Pro] +	Dist.CutNoiz	1 [88] +	Dist.CutNz.	1 +	-----	
005		Bass Slide	1 [Pro] +	Bass Slide	1 [88] +	Bass Slide	1 +	-----	
006		Pick Scrape	1 [Pro] +	Pick Scrape	1 [88] +	Pick Scrape	1 +	-----	
008		Gt. FX Menu	1 [Pro]	Gt. FX Menu	1	-----		-----	
009		Bartok Pizz.	1 [Pro]	Bartok Pizz.	1	-----		-----	
010		Guitar Slap	1 [Pro] +	Guitar Slap	1 +	-----		-----	
011		Chord Stroke	1 [Pro]	Chord Stroke	1	-----		-----	
012		Biwa Stroke	1 [Pro] +	Biwa Stroke	1 +	-----		-----	
013		Biwa Tremolo	1 [Pro] +	Biwa Tremolo	1 +	-----		-----	
016		A.Bs.Nz Menu	1	-----		-----		-----	
017		D.Gt.Nz Menu	1	-----		-----		-----	
018		E. Gt.NzMenu1	1	-----		-----		-----	
019		E. Gt.NzMenu2	1	-----		-----		-----	
020		G.StrokeMenu	1	-----		-----		-----	
021		Gt.SlideMenu	1	-----		-----		-----	
022		A.Bs.Mute Nz	1 +	-----		-----		-----	
023		A.Bs.TouchNz	1 +	-----		-----		-----	
024		A.Bs.AtackNz	1 +	-----		-----		-----	
025		TC Up Nz	1 +	-----		-----		-----	
026		TC DownMt.Nz	1 +	-----		-----		-----	
027		TC UpMt.Nz	1 +	-----		-----		-----	
028		TC Down Nz	1 +	-----		-----		-----	
029		DstGT.Up Nz	1 +	-----		-----		-----	
030		DstGT.DwnNz1	1 +	-----		-----		-----	
031		DstGT.DwnNz2	1 +	-----		-----		-----	
032		DstGT.MuteNz	1 +	-----		-----		-----	
034		Gt.StrokeNz5	1 +	-----		-----		-----	
035		StlGt.SldNz1	1 +	-----		-----		-----	
036		StlGt.SldNz2	1 +	-----		-----		-----	
037		StlGt.SldNz3	1 +	-----		-----		-----	
038		StlGt.SldNz4	1 +	-----		-----		-----	
039		Gt.StrokeNz1	1 +	-----		-----		-----	
040		Gt.StrokeNz2	1 +	-----		-----		-----	
041		Gt.StrokeNz3	1 +	-----		-----		-----	
042		Gt.StrokeNz4	1 +	-----		-----		-----	
000	122	Breath Noise	1 [Pro]	Breath Noise	1 [88]	BreathNoise	1 [55]	BreathNoise	1
001		Fl.Key Click	1 [Pro] +	Fl.Key Click	1 [88] +	Fl.KeyClick	1 [55] +	Fl.KeyClick	1 +
002		Brth Nz Menu	1	-----		-----		-----	
003		Fl.Breath 1	1 +	-----		-----		-----	
004		Fl.Breath 2	1 +	-----		-----		-----	
005		Fl.Breath 3	1 +	-----		-----		-----	
006		Vox Breath 1	1 +	-----		-----		-----	
007		Vox Breath 2	1 +	-----		-----		-----	
008		Trombone Nz	1 +	-----		-----		-----	
009		Trumpet Nz	1 +	-----		-----		-----	
000	123	Seashore	1 [Pro] +	Seashore	1 [88] +	Seashore	1 [55] +	Seashore	1 +
001		Rain	1 [Pro] +	Rain	1 [88] +	Rain	1 [55] +	Rain	1 +
002		Thunder	1 [Pro] +	Thunder	1 [88] +	Thunder	1 [55] +	Thunder	1 +
003		Wind	1 [Pro] +	Wind	1 [88] +	Wind	1 [55] +	Wind	1 +
004		Stream	2 [Pro] +	Stream	2 [88] +	Stream	2 [55] +	Stream	2 +
005		Bubble	2 [Pro] +	Bubble	2 [88] +	Bubble	2 [55] +	Bubble	2 +
006		Wind 2	1 [Pro] +	Wind 2	1 +	-----		-----	
007		Cricket	1 +	-----		-----		-----	
016		Pink Noise	1 [Pro]	Pink Noise	1	-----		-----	
017		White Noise	1 [Pro]	White Noise	1	-----		-----	
000	124	Bird	2 [Pro] +	Bird	2 [88] +	Bird	2 [55] +	Bird	2 +
001		Dog	1 [Pro] +	Dog	1 [88] +	Dog	1 [55] +	Dog	1 +
002		Horse-Gallop	1 [Pro] +	Horse-Gallop	1 [88] +	HorseGallop	1 [55] +	HorseGallop	1 +
003		Bird 2	1 [Pro] +	Bird 2	1 [88] +	Bird 2	1 [55] +	Bird 2	1 +
004		Kitty	1 [Pro] +	Kitty	1 [88] +	Kitty	1 +	-----	
005		Growl	1 [Pro] +	Growl	1 [88] +	Growl	1 +	-----	
006		Growl 2	1 +	-----		-----		-----	
007		Fancy Animal	1 +	-----		-----		-----	
008		Seal	1 +	-----		-----		-----	

## SFX

CC00	PC	SC-8820 Map	Voices	SC-88Pro Map	Voices	SC-88 Map	Voices	SC-55 Map	Voices
<b>000</b>	<b>125</b>	<b>Telephone 1</b>	1 [Pro] +	<b>Telephone 1</b>	1 [88] +	<b>Telephone 1</b>	1 [55] +	<b>Telephone 1</b>	1 +
001		Telephone 2	1 [Pro] +	Telephone 2	1 [88] +	Telephone 2	1 [55] +	Telephone 2	1 +
002		DoorCreaking	1 [Pro] +	DoorCreaking	1 [88] +	Creaking	1 [55] +	Creaking	1 +
003		Door	1 [Pro] +	Door	1 [88] +	Door	1 [55] +	Door	1 +
004		Scratch	1 [Pro] +	Scratch	1 [88] +	Scratch	1 [55] +	Scratch	1 +
005		Wind Chimes	2 [Pro] +	Wind Chimes	2 [88] +	Wind Chimes	2 [55] +	Wind Chimes	2 +
007		Scratch 2	1 [Pro] +	Scratch 2	1 [88] +	Scratch 2	1 +	----	----
008		ScratchKey	2 [Pro] +	ScratchKey	2 +	----	----	----	----
009		TapeRewind	1 [Pro] +	TapeRewind	1 +	----	----	----	----
010		Phono Noise	1 [Pro] +	Phono Noise	1 +	----	----	----	----
011		MC-500 Beep	1 [Pro]	MC-500 Beep	1	----	----	----	----
012		Scratch 3	1 +	----	----	----	----	----	----
013		Scratch 4	1 +	----	----	----	----	----	----
014		Scratch 5	1 +	----	----	----	----	----	----
015		Scratch 6	1 +	----	----	----	----	----	----
016		Scratch 7	1 +	----	----	----	----	----	----
<b>000</b>	<b>126</b>	<b>Helicopter</b>	1 [Pro] +	<b>Helicopter</b>	1 [88] +	<b>Helicopter</b>	1 [55] +	<b>Helicopter</b>	1 +
001		Car-Engine	1 [Pro] +	Car-Engine	1 [88] +	Car-Engine	1 [55] +	Car-Engine	1 +
002		Car-Stop	1 [Pro] +	Car-Stop	1 [88] +	Car-Stop	1 [55] +	Car-Stop	1 +
003		Car-Pass	1 [Pro] +	Car-Pass	1 [88] +	Car-Pass	1 [55] +	Car-Pass	1 +
004		Car-Crash	2 [Pro] +	Car-Crash	2 [88] +	Car-Crash	2 [55] +	Car-Crash	2 +
005		Siren	1 [Pro] +	Siren	1 [88] +	Siren	1 [55] +	Siren	1 +
006		Train	1 [Pro] +	Train	1 [88] +	Train	1 [55] +	Train	1 +
007		Jetplane	2 [Pro] +	Jetplane	2 [88] +	Jetplane	2 [55] +	Jetplane	2 +
008		Starship	2 [Pro] +	Starship	2 [88] +	Starship	2 [55] +	Starship	2 +
009		Burst Noise	2 [Pro] +	Burst Noise	2 [88] +	Burst Noise	2 [55] +	Burst Noise	2 +
010		Calculating	2 [Pro] +	Calculating	2 +	----	----	----	----
011		Perc. Bang	2 [Pro] +	Perc. Bang	2 +	----	----	----	----
012		Burner	2 +	----	----	----	----	----	----
013		Glass & Glam	1 +	----	----	----	----	----	----
014		Ice Ring	1 +	----	----	----	----	----	----
015		Over Blow	2 +	----	----	----	----	----	----
016		Crack Bottle	1 +	----	----	----	----	----	----
017		Pour Bottle	1 +	----	----	----	----	----	----
018		Soda	1 +	----	----	----	----	----	----
019		Open CD Tray	1 +	----	----	----	----	----	----
020		Audio Switch	1 +	----	----	----	----	----	----
021		Key Typing	1	----	----	----	----	----	----
022		SL 1	1 +	----	----	----	----	----	----
023		SL 2	1 +	----	----	----	----	----	----
024		Car Engine 2	1 +	----	----	----	----	----	----
025		Car Horn	1 +	----	----	----	----	----	----
026		Boeeeen	1 +	----	----	----	----	----	----
027		R.Crossing	1 +	----	----	----	----	----	----
028		Compressor	1 +	----	----	----	----	----	----
029		Sword Boom!	1 +	----	----	----	----	----	----
030		Sword Cross	1 +	----	----	----	----	----	----
031		Stab! 1	1 +	----	----	----	----	----	----
032		Stab! 2	1 +	----	----	----	----	----	----
<b>000</b>	<b>127</b>	<b>Applause</b>	2 [Pro] +	<b>Applause</b>	2 [88] +	<b>Applause</b>	2 [55] +	<b>Applause</b>	2 +
001		Laughing	1 [Pro] +	Laughing	1 [88] +	Laughing	1 [55] +	Laughing	1 +
002		Screaming	1 [Pro] +	Screaming	1 [88] +	Screaming	1 [55] +	Screaming	1 +
003		Punch	1 [Pro] +	Punch	1 [88] +	Punch	1 [55] +	Punch	1 +
004		Heart Beat	1 [Pro]	Heart Beat	1 [88]	Heart Beat	1 [55]	Heart Beat	1
005		Footsteps	1 [Pro] +	Footsteps	1 [88] +	Footsteps	1 [55] +	Footsteps	1 +
006		Applause 2	2 [Pro] +	Applause 2	2 [88] +	Applause 2	2 +	----	----
007		Small Club	2 [Pro] +	Small Club	2 +	----	----	----	----
008		ApplauseWave	2 [Pro] +	ApplauseWave	2 +	----	----	----	----
009		BabyLaughing	1 +	----	----	----	----	----	----
016		Voice One	1 [Pro] +	Voice One	1 +	----	----	----	----
017		Voice Two	1 [Pro] +	Voice Two	1 +	----	----	----	----
018		Voice Three	1 [Pro] +	Voice Three	1 +	----	----	----	----
019		Voice Tah	1 [Pro] +	Voice Tah	1 +	----	----	----	----
020		Voice Whey	1 [Pro] +	Voice Whey	1 +	----	----	----	----
022		Voice Kikit	1 +	----	----	----	----	----	----
023		Voice ComeOn	1 +	----	----	----	----	----	----
024		Voice Aou	1 +	----	----	----	----	----	----
025		Voice Oou	1 +	----	----	----	----	----	----
026		Voice Hie	1 +	----	----	----	----	----	----
<b>000</b>	<b>128</b>	<b>Gun Shot</b>	1 [Pro] +	<b>Gun Shot</b>	1 [88] +	<b>Gun Shot</b>	1 [55] +	<b>Gun Shot</b>	1 +
001		Machine Gun	1 [Pro] +	Machine Gun	1 [88] +	Machine Gun	1 [55] +	Machine Gun	1 +
002		Lasergun	1 [Pro] +	Lasergun	1 [88] +	Lasergun	1 [55] +	Lasergun	1 +
003		Explosion	2 [Pro] +	Explosion	2 [88] +	Explosion	2 [55] +	Explosion	2 +
004		Eruption	1 [Pro] +	Eruption	1 +	----	----	----	----
005		Big Shot	2 [Pro] +	Big Shot	2 +	----	----	----	----
006		Explosion 2	2 +	----	----	----	----	----	----

## CM-64 MAP(PCM / LA)

CM-64 MAP(PCM)				CM-64 MAP(LA)							
PC	CC00	Instrument	Voices	PC	CC00	Instrument	Voices	PC	CC00	Instrument	Voices
001	126	Piano 2	1	001	127	Acou Piano1	1	065	127	Acou Bass 1	1
002	126	Piano 2	1	002	127	Acou Piano2	1	066	127	Acou Bass 2	1
003	126	Piano 2	1	003	127	Acou Piano3	1	067	127	Elec Bass 1	1
004	126	Honky-tonk	2	004	127	Elec Piano1	1	068	127	Elec Bass 2	1
005	126	Piano 1	1	005	127	Elec Piano2	1	069	127	Slap Bass 1	1
006	126	Piano 2	1	006	127	Elec Piano3	1	070	127	Slap Bass 2	1
007	126	Piano 2	1	007	127	Elec Piano4	1	071	127	Fretless 1	1
008	126	E.Piano 1	1	008	127	Honkytonk	2	072	127	Fretless 2	1
009	126	Detuned EP1	2	009	127	Elec Org 1	1	073	127	Flute 1	1
010	126	E.Piano 2	1	010	127	Elec Org 2	2	074	127	Flute 2	1
011	126	Steel Gt.	1	011	127	Elec Org 3	1	075	127	Piccolo 1	1
012	126	Steel Gt.	1	012	127	Elec Org 4	1	076	127	Piccolo 2	2
013	126	12-str.Gt	2	013	127	Pipe Org 1	2	077	127	Recorder	1
014	126	Funk Gt.	1	014	127	Pipe Org 2	2	078	127	Pan Pipes	1
015	126	Muted Gt.	1	015	127	Pipe Org 3	2	079	127	Sax 1	1
016	126	Slap Bass 1	1	016	127	Accordion	2	080	127	Sax 2	1
017	126	Slap Bass 1	1	017	127	Harpsi 1	1	081	127	Sax 3	1
018	126	Slap Bass 1	1	018	127	Harpsi 2	2	082	127	Sax 4	1
019	126	Slap Bass 1	1	019	127	Harpsi 3	1	083	127	Clarinet 1	1
020	126	Slap Bass 2	1	020	127	Clavi 1	1	084	127	Clarinet 2	1
021	126	Slap Bass 2	1	021	127	Clavi 2	1	085	127	Oboe	1
022	126	Slap Bass 2	1	022	127	Clavi 3	1	086	127	Engl Horn	1
023	126	Slap Bass 2	1	023	127	Celesta 1	1	087	127	Bassoon	1
024	126	Fingered Bs	1	024	127	Celesta 2	1	088	127	Harmonica	1
025	126	Fingered Bs	1	025	127	Syn Brass 1	2	089	127	Trumpet 1	1
026	126	Picked Bass	1	026	127	Syn Brass 2	2	090	127	Trumpet 2	1
027	126	Picked Bass	1	027	127	Syn Brass 3	2	091	127	Trombone 1	2
028	126	Fretless Bs	1	028	127	Syn Brass 4	2	092	127	Trombone 2	2
029	126	Acoustic Bs	1	029	127	Syn Bass 1	1	093	127	Fr Horn 1	2
030	126	Choir Aahs	1	030	127	Syn Bass 2	2	094	127	Fr Horn 2	2
031	126	Choir Aahs	1	031	127	Syn Bass 3	2	095	127	Tuba	1
032	126	Choir Aahs	1	032	127	Syn Bass 4	1	096	127	Brs Sect 1	1
033	126	Choir Aahs	1	033	127	Fantasy	2	097	127	Brs Sect 2	2
034	126	SlowStrings	1	034	127	Harmo Pan	2	098	127	Vibe 1	1
035	126	Strings	1	035	127	Chorale	1	099	127	Vibe 2	1
036	126	SynStrings3	2	036	127	Glasses	2	100	127	Syn Mallet	1
037	126	SynStrings3	2	037	127	Soundtrack	2	101	127	Windbell	2
038	126	Organ 1	1	038	127	Atmosphere	2	102	127	Glock	1
039	126	Organ 1	1	039	127	Warm Bell	2	103	127	Tube Bell	1
040	126	Organ 1	1	040	127	Funny Vox	1	104	127	Xylophone	1
041	126	Organ 2	1	041	127	Echo Bell	2	105	127	Marimba	1
042	126	Organ 1	1	042	127	Ice Rain	2	106	127	Koto	1
043	126	Organ 1	1	043	127	Oboe 2001	2	107	127	Sho	2
044	126	Organ 2	1	044	127	Echo Pan	2	108	127	Shakuhachi	2
045	126	Organ 2	1	045	127	Doctor Solo	2	109	127	Whistle 1	2
046	126	Organ 2	1	046	127	School Daze	1	110	127	Whistle 2	1
047	126	Trumpet	1	047	127	Bellsinger	1	111	127	Bottleblow	2
048	126	Trumpet	1	048	127	Square Wave	2	112	127	Breathpipe	1
049	126	Trombone	1	049	127	Str Sect 1	1	113	127	Timpani	1
050	126	Trombone	1	050	127	Str Sect 2	1	114	127	Melodic Tom	1
051	126	Trombone	1	051	127	Str Sect 3	1	115	127	Deep Snare	1 +
052	126	Trombone	1	052	127	Pizzicato	1	116	127	Elec Perc 1	1 +
053	126	Trombone	1	053	127	Violin 1	1	117	127	Elec Perc 2	1 +
054	126	Trombone	1	054	127	Violin 2	1	118	127	Taiko	1 +
055	126	Alto Sax	1	055	127	Cello 1	1	119	127	Taiko Rim	1
056	126	Tenor Sax	1	056	127	Cello 2	1	120	127	Cymbal	1
057	126	BaritoneSax	1	057	127	Contrabass	1	121	127	Castanets	1 +
058	126	Alto Sax	1	058	127	Harp 1	1	122	127	Triangle	1 +
059	126	Brass 1	1	059	127	Harp 2	1	123	127	Orche Hit	1
060	126	Brass 1	1	060	127	Guitar 1	1	124	127	Telephone	1 +
061	126	Brass 2	2	061	127	Guitar 2	1	125	127	Bird Tweet	1 +
062	126	Brass 2	2	062	127	Elec Gtr 1	1	126	127	OneNote Jam	1 +
063	126	Brass 1	1	063	127	Elec Gtr 2	1	127	127	Water Bell	2
064	126	Orchest.Hit	2	064	127	Sitar	2	128	127	Jungle Tune	2



## Drum Set List

PC	SC-8820 map	SC-88Pro map	SC-88 map	SC-55 map
001	STANDARD 1	STANDARD 1	STANDARD 1	STANDARD
002	STANDARD 2 [Pro]	STANDARD 2 [88]	STANDARD 2	---
003	STANDARD L/R	STANDARD 3	---	---
009	ROOM	ROOM [88]	ROOM	ROOM
010	HIP HOP	HIP HOP	---	---
011	JUNGLE	JUNGLE	---	---
012	TECHNO	TECHNO	---	---
013	ROOM L/R	---	---	---
014	HOUSE	---	---	---
017	POWER [Pro]	POWER	POWER	POWER
025	ELECTRONIC [Pro]	ELECTRONIC [88]	ELECTRONIC	ELECTRONIC
026	TR-808 [Pro]	TR-808	TR-808/909	TR-808
027	DANCE	DANCE	DANCE	---
028	CR-78 [Pro]	CR-78	---	---
029	TR-606 [Pro]	TR-606	---	---
030	TR-707 [Pro]	TR-707	---	---
031	TR-909 [Pro]	TR-909	---	---
033	JAZZ	JAZZ	JAZZ	JAZZ
034	JAZZ L/R	---	---	---
041	BRUSH [Pro]	BRUSH	BRUSH	BRUSH
042	BRUSH 2	---	---	---
043	BRUSH 2 L/R	---	---	---
049	ORCHESTRA [Pro]	ORCHESTRA [88]	ORCHESTRA	ORCHESTRA
050	ETHNIC [Pro]	ETHNIC [88]	ETHNIC	---
051	KICK & SNARE [Pro]	KICK & SNARE [88]	KICK & SNARE	---
052	KICK & SNARE 2	---	---	---
053	ASIA	ASIA	---	---
054	CYMBAL&CLAPS [Pro]	CYMBAL&CLAPS	---	---
055	GAMELAN 1	---	---	---
056	GAMELAN 2	---	---	---
057	SFX [Pro]	SFX	SFX	SFX
058	RHYTHM FX [Pro]	RHYTHM FX [88]	RHYTHM FX	---
059	RHYTHM FX 2 [Pro]	RHYTHM FX 2	---	---
060	RHYTHM FX 3	---	---	---
061	SFX 2	---	---	---
062	VOICE	---	---	---
063	CYM&CLAPS 2	---	---	---
128	---	---	---	CM-64/32L

PC : Program Number (Drum Set Number)

[88] : Same as the SC-88 map drum sets

[Pro] : Same as the SC-88Pro map drum sets

\* Sounds in such as the drum set of STANDARD L/R and STANDARD 3 etc. that have "RND" appended to their name (such as Kick, Snare, and Hi-Hat) in the list on the next page are sounds which will change randomly with each note played (these changes affect the timbre and timing). The purpose of this is to create a more natural sounding performance—even if all note messages for percussive instruments are sent with absolute precision, subtle fluctuations will be applied so the performance sounds less mechanical. Note, however, that you may not always

## SC-8820 Drum Set (1)

	PC1 STANDARD 1	PC2 STANDARD 2	[ Pro ]	PC3 STANDARD L/R	PC9 ROOM	PC10 HIP HOP
	22	MC-500 Beep 1	<	<	<	<
23		MC-500 Beep 2	<	<	<	<
C1		Concert SD	<	<	<	<
24		Snare Roll	<	<	<	<
25		Finger Snap 2	Finger Snap	<	Finger Snap	<
26		High Q	<	<	<	<
27		Slap	<	<	<	<
28		Scratch Push [EXC7]	<	<	<	Scratch Push 2 [EXC7]
29		Scratch Pull [EXC7]	<	<	<	Scratch Pull 2 [EXC7]
30		Sticks	<	<	<	<
31		Square Click	<	<	<	<
32		Metronome Click	<	<	<	<
33		Metronome Bell	<	<	<	<
34		Standard 1 Kick 2 *	Standard 2 Kick 2	[RND] Standard Kick 2	Room Kick 2	Hip-Hop Kick 2
35		Standard 1 Kick 1 *	Standard 2 Kick 1	[RND] Standard Kick 1	Room Kick 1 *	Hip-Hop Kick 1
C2		Side Stick	<	<	<	TR-808 Rim Shot
36		Standard 1 Snare 1 *	Standard 2 Snare 1	[RND] Standard Snare 1	Room Snare 1	LoFi Snare 1
37		TR-909 Hand Clap	Hand Clap	<	Hand Clap	TR-707 Claps
38		Standard 1 Snare 2	Standard 2 Snare 2	[RND] Standard Snare 2	Room Snare 2	LoFi Snare 2
39		Low Tom 2	<	[RND] Low Tom 2	Room Low Tom 2 *	Jazz Low Tom 2
40		Closed Hi-Hat 1 [EXC1]	Closed Hi-Hat [EXC1]	[RND] Closed Hi-Hat [EXC1]	Room Closed Hi-Hat 3 [EXC1]	Room Closed Hi-Hat [EXC1]
41		Low Tom 1	<	<	Room Low Tom 1 *	Jazz Low Tom 1
42		Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	<	[EXC1] Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]
43		Mid Tom 2	<	<	Room Mid Tom 2 *	Jazz Mid Tom 2
44		Open Hi-Hat 1 [EXC1]	Open Hi-Hat [EXC1]	[RND] Open Hi-Hat [EXC1]	Room Open Hi-Hat 3 [EXC1]	Room Open Hi-Hat [EXC1]
45		Mid Tom 1	<	<	Room Mid Tom 1 *	Jazz Mid Tom 1
46		High Tom 2	<	<	Room High Tom 2 *	Jazz High Tom 2
C3		Crash Cymbal 1 *	<	[RND] Crash Cymbal	Room Crash Cymbal	TR-909 Crash Cymbal
47		High Tom 1	<	<	Room High Tom 1 *	Jazz High Tom 1
48		Ride Cymbal 1	<	[RND] Ride Cymbal 1	Room Ride Cymbal	<
49		Chinese Cymbal	<	<	<	Reverse Cymbal
50		Ride Bell	<	[RND] Ride Bell 1	Room Ride Bell	Ride Bell
51		Tambourine	<	<	<	Shake Tambourine
52		Splash Cymbal	<	<	<	<
53		Cowbell	<	<	<	TR-808 Cowbell
54		Crash Cymbal 2	<	<	<	<
55		Vibra-slap	<	<	<	<
56		Ride Cymbal 2	<	<	<	<
57		High Bongo	<	<	<	<
58		Low Bongo	<	<	<	<
C4		Mute High Conga	<	<	<	<
59		Open High Conga	<	<	<	<
60		Low Conga	<	<	<	<
61		High Timbale	<	<	<	<
62		Low Timbale	<	<	<	<
63		High Agogo	<	<	<	<
64		Low Agogo	<	<	<	<
65		Cabasa	<	<	<	<
66		Maracas	<	<	<	TR-808 Maracas
67		Short High Whistle [EXC2]	<	<	<	<
68		Long Low Whistle [EXC2]	<	<	<	<
69		Short Guiro [EXC3]	<	<	<	<
70		Long Guiro [EXC3]	<	<	<	CR-78 Guiro [EXC3]
71		Claves	<	<	<	TR-808 Claves
72		High Wood Block	<	<	<	<
73		Low Wood Block	<	<	<	<
74		Mute Cuica [EXC4]	<	<	<	High Hoo [EXC4]
75		Open Cuica [EXC4]	<	<	<	Low Hoo [EXC4]
76		Mute Triangle [EXC5]	<	<	<	Electric Mute Triangle [EXC5]
77		Open Triangle [EXC5]	<	<	<	Electric Open Triangle [EXC5]
78		Shaker	<	<	<	Shaker 2
79		Jingle Bell	<	<	<	<
80		Bell Tree	Bar Chimes	<	<	<
81		Castanets	<	<	<	<
82		Mute Surdo [EXC6]	<	<	<	<
83		Open Surdo [EXC6]	<	<	<	<
84		Applause 2 *	<	<	<	Small Club 1 *
85		---	---	---	---	Hip-Hop Snare 2
86		---	---	---	---	LoFi Snare Rim
87		---	---	---	---	Hip-Hop Claps
88		---	---	---	---	Standard 1 Snare 1
89		---	---	---	---	Standard 1 Snare 2
90		---	---	---	---	Room Snare 1
91		---	---	---	---	Room Snare 2
92		Room Snare 1	---	[L] Standard Kick 2 *	Standard 1 Snare 1 *	Room Snare 2
93		Room Snare 2	---	[L] Standard Kick 1 *	Standard 1 Snare 2	Dance Snare
C7						

**SC-8820 Drum Set (2)**

	PC 11 JUNGLE	PC 12 TECHNO	PC 13 ROOM L/R	PC 14 HOUSE	PC 17 POWER	[ Pro ]
	22	<	<	<	<	
	23	<	<	<	<	
C1	24	<	<	<	<	
	25	<	<	<	<	
	26	<	Finger Snap	<	<	
	27	<	<	<	<	
	28	<	<	<	<	
	29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	< [EXC7]	Scratch Push 2 [EXC7]	< [EXC7]
	30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	< [EXC7]	Scratch Pull 2 [EXC7]	< [EXC7]
	31	<	<	<	<	
	32	<	<	<	<	
	33	<	<	<	<	
	34	<	<	<	<	
	35	Jungle Kick 2	TR-808 Kick	[RND] Room Kick 2	TR-909 Kick 2	Power Kick 2
C2	36	Jungle Kick 1	TR-909 Kick 1	[RND] Room Kick 1	TR-909 Kick 1	Power Kick 1
	37	Jungle Snare Rim	TR-909 Snare Rim	<	House Snare Rim	<
	38	HipHop Snare 1	TR-606 Snare 2	[RND] Room Snare 1	House Snare 1	Power Snare 1
	39	R&B Claps	TR-909 Claps	Hand Clap	TR-909 Claps	Hand Clap
	40	Jungle Snare	Techno Snare	[RND] Room Snare 2	House Snare 2	Power Snare 2
	41	TR-909 Low Tom 2	TR-606 Low Tom 2	Room Low Tom 2	TR-909 Low Tom 2	Power Low Tom 2 *
	42	TR-606 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	[RND] Room Closed Hi-Hat [EXC1]	Room Closed Hi-Hat [EXC1]	<
	43	TR-909 Low Tom 1	TR-606 Low Tom 1	Room Low Tom 1	TR-909 Low Tom 1	Power Low Tom 1 *
	44	Jungle Hi-Hat [EXC1]	CR-78 Closed Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	<
	45	TR-909 Mid Tom 2	TR-606 Mid Tom 2	Room Mid Tom 2	TR-909 Mid Tom 2	Power Mid Tom 2 *
	46	TR-606 Open Hi-Hat [EXC1]	TR-909 Open Hi-Hat [EXC1]	[RND] Room Open Hi-Hat [EXC1]	Room Open Hi-Hat [EXC1]	<
	47	TR-909 Mid Tom 1	TR-606 Mid Tom 1	Room Mid Tom 1	TR-909 Mid Tom 1	Power Mid Tom 1 *
C3	48	TR-909 High Tom 2	TR-606 High Tom 2	Room High Tom 2	TR-909 High Tom 2	Power High Tom 2 *
	49	Jungle Crash	TR-909 Crash Cymbal	[RND] Room Crash Cymbal	TR-909 Crash Cymbal	<
	50	TR-909 High Tom 1	TR-606 High Tom 1	Room High Tom 1	TR-909 High Tom 1	Power High Tom 1 *
	51	Ride Cymbal 1	Ride Cymbal 1	[RND] Room Ride Cymbal	TR-909 Ride Cymbal	<
	52	Reverse Cymbal	Reverse Cymbal	<	Reverse Cymbal	<
	53	Ride Bell	Ride Bell	[RND] Room Ride Bell	Ride Bell	<
	54	Shake Tambourine	Shake Tambourine	<	Shake Tambourine	<
	55	<	<	Splash Cymbal	<	<
	56	TR-808 Cowbell	TR-808 Cowbell	<	TR-808 Cowbell	<
	57	<	TR-909 Crash Cymbal	<	TR-909 Crash Cymbal	<
	58	<	<	<	<	<
	59	<	<	<	<	<
C4	60	<	CR-78 High Bongo	<	CR-78 High Bongo	<
	61	<	CR-78 Low Bongo	<	CR-78 Low Bongo	<
	62	<	TR-808 High Conga	<	TR-808 High Conga	<
	63	<	TR-808 Mute Conga	<	TR-808 Mute Conga	<
	64	<	TR-808 Low Conga	<	TR-808 Low Conga	<
	65	<	<	<	<	<
	66	<	<	<	<	<
	67	<	<	<	<	<
	68	<	<	<	<	<
	69	<	<	<	<	<
	70	TR-808 Maracas	TR-808 Maracas	<	TR-808 Maracas	<
	71	<	<	<	<	<
	72	<	<	<	<	<
C5	73	<	<	<	<	<
	74	CR-78 Guiro [EXC3]	CR-78 Guiro [EXC3]	<	CR-78 Guiro [EXC3]	<
	75	TR-808 Claves	TR-808 Claves	<	TR-808 Claves	<
	76	<	<	<	<	<
	77	<	<	<	<	<
	78	High Hoo [EXC4]	High Hoo [EXC4]	<	High Hoo [EXC4]	<
	79	Low Hoo [EXC4]	Low Hoo [EXC4]	<	Low Hoo [EXC4]	<
	80	Electric Mute Triangle [EXC5]	Electric Mute Triangle [EXC5]	<	Electric Mute Triangle [EXC5]	<
	81	Electric Open Triangle [EXC5]	Electric Open Triangle [EXC5]	<	Electric Open Triangle [EXC5]	<
	82	Jungle Shaker	TR-626 Shaker	<	TR-626 Shaker	<
	83	<	<	<	<	<
	84	<	<	<	<	<
C6	85	<	<	<	<	<
	86	<	<	<	<	<
	87	<	<	<	<	<
	88	Small Club 1 *	<	<	Small Club 1	<
	89	Jungle Kick Roll	Dance Snare	---	TR-606 Snare 2	---
	90	Jungle Snare Roll	House Snare	---	Dance Snare	---
	91	TR-606 Snare 2	Rock Snare Dry	---	Techno Snare	---
	92	Dance Snare	Jungle Snare	---	Rock Snare Dry	---
	93	Techno Snare	LoFi Snare 1	---	Hip-Hop Snare 1	---
	94	House Snare	LoFi Snare 2	---	LoFi Snare 1	---
	95	Rock Snare Dry	HipHop Snare 1	[L] Room Kick 2	LoFi Snare 2	---
C7	96	LoFi Snare 1	HipHop Snare 2	[L] Room Kick 1 *	Jungle Snare	---

**SC-8820 Drum Set (3)**

	PC 25 ELECTRONIC	[ Pro ]	PC 26 TR-808	[ Pro ]	PC 27 DANCE	PC 28 CR-78	[ Pro ]	PC 29 TR-606	[ Pro ]	
22	<-		<-		<-	<-		<-		
23	<-		<-		<-	<-		<-		
C1 24	<-		<-		<-	<-		<-		
25	<-		<-		<-	<-		<-		
26	Finger Snap 2		<-		Finger Snap 2	<-		<-		
27	<-		<-		<-	<-		<-		
28	<-		<-		<-	<-		<-		
29	Scratch Push 2	[EXC7]	Scratch Push 2	[EXC7]	Scratch Push 2	[EXC7]	Scratch Push 2	[EXC7]	Scratch Push 2	[EXC7]
30	Scratch Pull 2	[EXC7]	Scratch Pull 2	[EXC7]	Scratch Pull 2	[EXC7]	Scratch Pull 2	[EXC7]	Scratch Pull 2	[EXC7]
31	<-		<-		<-	<-		<-		
32	<-		<-		<-	<-		<-		
33	<-		<-		<-	<-		<-		
34	<-		<-		<-	<-		<-		
35	<-		<-		<-	<-		<-		
C2 36	Electric Kick 2		TR-808 Kick 2		Fat Kick	CR-78 Kick 2		CR-78 Kick 2		
37	Electric Kick 1	*	TR-808 Kick 1		Dance Kick	CR-78 Kick 1		TR-606 Kick 1		
38	<-		TR-808 Rim Shot		Dance Rim Shot	CR-78 Rim Shot		CR-78 Rim Shot		
39	Electric Snare 1		TR-808 Snare 1		Dance Snare	CR-78 Snare 1		TR-606 Snare 1		
40	Hand Clap		Hand Clap		Comp Claps 2	TR-707 Hand Clap		TR-707 Hand Clap		
41	Electric Snare 2		TR-808 Snare 2		Rock SD Dry	CR-78 Snare 2		TR-606 Snare 2		
42	Electric Low Tom 2	*	TR-808 Low Tom 2	*	Electric Low Tom 2	CR-78 Low Tom 2	*	TR-606 Low Tom 2		
43	Closed Hi-Hat 2	[EXC1]	TR-808 Closed Hi-Hat 2	[EXC1]	CR-78 Closed Hi-Hat	[EXC1]	CR-78 Closed Hi-Hat	[EXC1]	TR-606 Closed Hi-Hat	[EXC1]
44	Electric Low Tom 1	*	TR-808 Low Tom 1	*	Electric Low Tom 1	CR-78 Low Tom 1	*	TR-606 Low Tom 1		
45	Pedal Hi-Hat	[EXC1]	TR-808 Closed Hi-Hat	[EXC1]	TR-808 Closed Hi-Hat 2	[EXC1]	TR-606 Closed Hi-Hat	[EXC1]	TR-606 Closed Hi-Hat	[EXC1]
46	Electric Mid Tom 2	*	TR-808 Mid Tom 2	*	Electric Mid Tom 2	CR-78 Mid Tom 2	*	TR-606 Mid Tom 2		
47	Open Hi-Hat 2	[EXC1]	TR-808 Open Hi-Hat	[EXC1]	CR-78 Open Hi-Hat	[EXC1]	CR-78 Open Hi-Hat	[EXC1]	TR-606 Open Hi-Hat	[EXC1]
C3 48	Electric Mid Tom 1	*	TR-808 Mid Tom 1	*	Electric Mid Tom 1	CR-78 Mid Tom 1	*	TR-606 Mid Tom 1		
49	Electric High Tom 2	*	TR-808 High Tom 2	*	Electric High Tom 2	CR-78 High Tom 2	*	TR-606 High Tom 2		
50	<-		TR-808 Crash Cymbal		TR-808 Crash Cymbal	TR-808 Crash Cymbal		TR-808 Crash Cymbal		
51	Electric High Tom 1	*	TR-808 High Tom 1	*	Electric High Tom 1	CR-78 High Tom 1	*	TR-606 High Tom 1		
52	<-		TR-606 Ride Cymbal		TR-606 Ride Cymbal	TR-606 Ride Cymbal		TR-606 Ride Cymbal		
53	Reverse Cymbal		<-		Reverse Cymbal	<-		<-		
54	<-		CR-78 Tambourine		Shake Tambourine	CR-78 Tambourine		CR-78 Tambourine		
55	<-		<-		<-	<-		<-		
56	<-		TR-808 Cowbell		TR-808 Cowbell	CR-78 Cowbell		CR-78 Cowbell		
57	<-		TR-909 Crash Cymbal		<-	TR-909 Crash Cymbal		TR-909 Crash Cymbal		
58	<-		<-		<-	<-		<-		
59	<-		Ride Cymbal 2		<-	Ride Cymbal Edge		Ride Cymbal Edge		
C4 60	<-		CR-78 High Bongo		<-	CR-78 High Bongo		CR-78 High Bongo		
61	<-		CR-78 Low Bongo		<-	CR-78 Low Bongo		CR-78 Low Bongo		
62	<-		TR-808 High Conga		<-	TR-808 High Conga		TR-808 High Conga		
63	<-		TR-808 Mute Conga		<-	TR-808 Mute Conga		TR-808 Mute Conga		
64	<-		TR-808 Low Conga		<-	TR-808 Low Conga		TR-808 Low Conga		
65	<-		<-		<-	<-		<-		
66	<-		<-		<-	<-		<-		
67	<-		<-		<-	<-		<-		
68	<-		<-		<-	<-		<-		
69	<-		<-		<-	<-		<-		
70	<-		TR-808 Maracas		<-	CR-78 Maracas		CR-78 Maracas		
71	<-		<-		<-	<-		<-		
C5 72	<-		<-		<-	<-		<-		
73	<-		<-		<-	<-		<-		
74	<-		CR-78 Guiro	[EXC3]	<-	CR-78 Guiro	[EXC3]	CR-78 Guiro	[EXC3]	
75	<-		TR-808 Claves		<-	CR-78 Claves		CR-78 Claves		
76	<-		<-		<-	<-		<-		
77	<-		<-		<-	<-		<-		
78	<-		High Hoo	[EXC4]	High Hoo	[EXC4]	High Hoo	[EXC4]	High Hoo	[EXC4]
79	<-		Low Hoo	[EXC4]	Low Hoo	[EXC4]	Low Hoo	[EXC4]	Low Hoo	[EXC4]
80	<-		Electric Mute Triangle		Electric Mute Triangle	[EXC5]	CR-78 Metallic Beat 1	[EXC5]	CR-78 Metallic Beat 1	[EXC5]
81	<-		Electric Open Triangle		Electric Open Triangle	[EXC5]	CR-78 Metallic Beat 2	[EXC5]	CR-78 Metallic Beat 2	[EXC5]
82	<-		TR-626 Shaker		TR-626 Shaker	TR-626 Shaker		TR-626 Shaker		
83	<-		<-		<-	<-		<-		
C6 84	<-		<-		<-	<-		<-		
85	<-		<-		<-	<-		<-		
86	<-		<-		<-	<-		<-		
87	<-		<-		<-	<-		<-		
88	Small Club 1	*	Small Club 1	*	Small Club 1	*	Small Club 1	*	Small Club 1	*
89	---		---		TR-606 Snare 2	---		---		
90	---		---		Techno Snare	---		---		
91	---		---		House Snare	---		---		
92	---		---		Jungle Snare	---		---		
93	---		---		LoFi Snare 1	---		---		
94	---		---		LoFi Snare 2	---		---		
95	---		---		HipHop Snare 1	---		---		
C7 96	---		---		Hip-Hop Snare 2	---		---		

## SC-8820 Drum Set (4)

	PC 30 TR-707 [ Pro ]	PC 31 TR-909 [ Pro ]	PC 33 JAZZ	PC 34 JAZZ L/R	PC 41 BRUSH [ Pro ]
22	<	<	<	<	<
23	<	<	<	<	<
C1 24	<	<	<	<	<
25	<	<	<	<	<
26	<	<	Finger Snap 2	Finger Snap 2	Finger Snap 2
27	<	<	<	<	<
28	<	<	<	<	<
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	<	<	<
30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	<	<	<
31	<	<	<	<	<
32	<	<	<	<	<
33	<	<	<	<	<
34	<	<	<	<	<
35	TR-707 Kick 2	TR-909 Kick 2	Jazz Kick 2	[RND] Jazz Kick 2	Jazz Kick 2
C2 36	TR-707 Kick 1	TR-909 Kick 1 *	Jazz Kick 1	[RND] Jazz Kick 1	Jazz Kick 1
37	TR-707 Rim Shot	TR-909 Rim	<	<	<
38	TR-707 Snare 1	TR-909 Snare 1	Jazz Snare 1	[RND] Jazz Snare 1	Brush Tap 1
39	TR-707 Hand Clap	<	Hand Clap 2	Hand Clap 2	Brush Slap 1
40	TR-707 Snare 2	TR-909 Snare2	Jazz Snare 2	[RND] Jazz Snare 2	Brush Swirl 1
41	TR-707 Low Tom 2 *	TR-909 Low Tom 2	Jazz Low Tom 2	<	Brush Low Tom 2 *
42	TR-707 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	Closed Hi-Hat 2 [EXC1]	[RND] Jazz Closed Hi-Hat [EXC1]	Brush Closed Hi-Hat [EXC1]
43	TR-707 Low Tom 1 *	TR-909 Low Tom 1	Jazz Low Tom 1	<	Brush Low Tom 1 *
44	TR-707 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]
45	TR-707 Mid Tom 2 *	TR-909 Mid Tom 2	Jazz Mid Tom 2	<	Brush Mid Tom 2 *
46	TR-707 Open Hi-Hat [EXC1]	TR-909 Open Hi-Hat [EXC1]	Open Hi-Hat 2 [EXC1]	[RND] Jazz Open Hi-Hat [EXC1]	Brush Open Hi-Hat [EXC1]
47	TR-707 Mid Tom 1 *	TR-909 Mid Tom 1	Jazz Mid Tom 1	<	Brush Mid Tom 1 *
C3 48	TR-707 High Tom 2 *	TR-909 High Tom 2	Jazz High Tom 2	<	Brush High Tom 2 *
49	TR-909 Crash Cymbal	TR-909 Crash Cymbal	Jazz Crash Cymbal	[RND] Jazz Crash Cymbal	Brush Crash Cymbal
50	TR-707 High Tom 1 *	TR-909 High Tom 1	Jazz High Tom 1	<	Brush High Tom 1 *
51	TR-909 Ride Cymbal *	TR-909 Ride Cymbal *	Jazz Ride Cymbal	[RND] JAZZ Ride Cymbal	Ride Cymbal Inner
52	<	<	<	<	<
53	<	<	Jazz Ride Bell	[RND] Jazz Ride Bell	Brush Ride Bell
54	Tambourine 2	Tambourine 2	<	<	<
55	<	<	<	<	<
56	TR-808 Cowbell	TR-808 Cowbell	<	<	<
57	<	<	<	<	<
58	<	<	<	<	<
59	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge
C4 60	<	<	<	<	<
61	<	<	<	<	<
62	<	<	<	<	<
63	<	<	<	<	<
64	<	<	<	<	<
65	<	<	<	<	<
66	<	<	<	<	<
67	<	<	<	<	<
68	<	<	<	<	<
69	<	<	<	<	<
70	TR-808 Maracas	TR-808 Maracas	<	<	<
71	<	<	<	<	<
C5 72	<	<	<	<	<
73	<	<	<	<	<
74	<	CR-78 Guiro [EXC3]	<	<	<
75	<	TR-808 Claves	<	<	<
76	<	<	<	<	<
77	<	<	<	<	<
78	High Hoo [EXC4]	High Hoo [EXC4]	<	<	<
79	Low Hoo [EXC4]	Low Hoo [EXC4]	<	<	<
80	Electric Mute Triangle	Electric Mute Triangle	<	<	<
81	Electric Open Triangle	Electric Open Triangle	<	<	<
82	TR-626 Shaker	TR-626 Shaker	<	<	<
83	<	<	<	<	<
C6 84	<	<	<	<	<
85	<	<	<	<	<
86	<	<	<	<	<
87	<	<	<	<	<
88	Small Club 1 *	<	Applause *	Applause	Applause *
89	---	---	---	---	---
90	---	---	---	---	---
91	---	---	---	---	---
92	---	---	---	---	---
93	---	---	---	---	---

**SC-8820 Drum Set (5)**

	PC 42 BRUSH 2	PC 43 BRUSH 2 L/R	PC 49 ORCHESTRA	[ Pro ]	PC 50 ETHNIC	[ Pro ]	PC 51 KICK & SNARE	[ Pro ]
22	<	<	<		---		---	
23	<	<	<		---		---	
C1 24	<	<	<		---		---	
25	<	<	<		Finger Snap		CR-78 Kick 1	
26	Finger Snap 2	Finger Snap 2	Finger Snap		Tambourine		CR-78 Kick 2	
27	<	<	Closed Hi-Hat 2	[EXC1]	Castanets		TR-606 Kick	
28	<	<	Pedal Hi-Hat	[EXC1]	Crash Cymbal 1		TR-707 Kick	*
29	<	<	Open Hi-Hat 2	[EXC1]	Snare Roll		TR-808 Kick 1	
30	<	<	Ride Cymbal 1		Concert SD		TR-909 Kick 1	
31	<	<	<		Concert Cymbal		TR-909 Kick 2	
32	<	<	<		Concert BD 1		Hip-Hop Kick 2	
33	<	<	<		Jingle Bell		Hip-Hop Kick 1	
34	<	<	<		Bell Tree		Jungle Kick 2	
35	Brush Kick 2	[RND] Brush Kick 2	Jazz Kick 1		Bar Chimes		Jungle Kick 1	
C2 36	Brush Kick 1	* [RND] Brush Kick 1	Concert BD 1		Wadaiko	*	Techno Kick 2	
37	<	<	<		Wadaiko Rim	*	Techno Kick 1	
38	Brush Tap 2	[RND] Brush Tap 2	Concert SD		Shime Taiko		Standard 1 Kick 2	
39	Brush Slap 2	[RND] Brush Slap 2	Castanets		Atarigane		Standard 1 Kick 1	
40	Brush Swirl 1	Brush Swirl 1	Concert SD		Hyoushigi		[88] Standard 1 Kick 1	
41	Brush Low Tom 2	<	Timpani F		Ohkawa		[88] Standard 1 Kick 2	
42	Brush Closed Hi-Hat	[EXC1] [RND] Brush Closed Hi-Hat	[EXC1] Timpani F#		High Kotsuzumi		[88] Standard 2 Kick 1	
43	Brush Low Tom 1	<	Timpani G		Low Kotsuzumi		[88] Standard 2 Kick 2	
44	Pedal Hi-Hat	[EXC1] Pedal Hi-Hat	[EXC1] Timpani G#		Ban Gu		[55] Kick Drum 1	
45	Brush Mid Tom 2	Brush Mid Tom 2	Timpani A		Big Gong		[55] Kick Drum 2	
46	Brush Open Hi-Hat	[EXC1] [RND] Brush Open Hi-Hat	[EXC1] Timpani A#		Small Gong		[88] Soft Kick	
47	Brush Mid Tom 1	<	Timpani B		Bend Gong		[88] Jazz Kick 1	
C3 48	Brush High Tom 2	<	Timpani c		Thai Gong		[88] Jazz Kick 2	
49	Brush Crash Cymbal	[RND] Brush Crash Cymbal	Timpani c#		Rama Cymbal		[55] Concert BD 1	
50	Brush High Tom 1	<	Timpani d		Gamelan Gong		[88] Room Kick 1	
51	Brush Ride Cymbal	[RND] Brush Ride Cymbal	Timpani d#		Udo Short	[EXC1]	[88] Room Kick 2	
52	<	<	Timpani e		Udo Long	[EXC1]	[88] Power Kick 1	*
53	Brush Ride Bell	[RND] Brush Ride Bell	Timpani f		Udo Slap		[88] Power Kick 2	
54	<	<	<		Bendir		[88] Electric Kick 2	
55	<	<	<		Req Dum		[88] Electric Kick 1	
56	<	<	<		Req Tik		[55] Electric Kick	
57	<	<	Concert Cymbal 2		Tabla Te		[88] TR-808 Kick	
58	<	<	<		Tabla Na		[88] TR-909 Kick	
59	Ride Cymbal Edge	Ride Cymbal Edge	Concert Cymbal 1		Tabla Tun		[88] Dance Kick	
C4 60	<	<	<		Tabla Ge		[88] Standard 1 Snare 1	
61	<	<	<		Tabla Ge Hi		[88] Standard 1 Snare 2	
62	<	<	<		Talking Drum	*	[88] Standard 2 Snare 1	
63	<	<	<		Bend Talking Drum	*	[88] Standard 2 Snare 2	
64	<	<	<		Caxixi		[55] Tight Snare	
65	<	<	<		Djembe		[55] Concert Snare	
66	<	<	<		Djembe Rim		[88] Jazz Snare 1	
67	<	<	<		Timbales Low		[88] Jazz Snare 2	
68	<	<	<		Timbales Paila		[88] Room Snare 1	
69	<	<	<		Timbales High		[88] Room Snare 2	
70	<	<	<		Cowbell		[88] Power Snare 1	
71	<	<	<		High Bongo		[88] Power Snare 2	
C5 72	<	<	<		Low Bongo		[55] Gated Snare	
73	<	<	<		Mute High Conga		[88] Dance Snare 1	
74	<	<	<		Open High Conga		[88] Dance Snare 2	*
75	<	<	<		Mute Low Conga		[88] Disco Snare	
76	<	<	<		Conga Slap		[88] Electric Snare 2	*
77	<	<	<		Open Low Conga		[88] House Snare	
78	<	<	<		Conga Slide	*	[55] Electric Snare 1	*
79	<	<	<		Mute Pandiero		[88] Electric Snare 3	
80	<	<	<		Open Pandiero		[88] TR-808 Snare 1	
81	<	<	<		Open Surdo	[EXC2]	[88] TR-808 Snare 2	
82	<	<	<		Mute Surdo	[EXC2]	[88] TR-909 Snare 1	
83	<	<	<		Tamborim		[88] TR-909 Snare 2	
C6 84	<	<	<		High Agogo		[88] Brush Tap 1	
85	<	<	<		Low Agogo		[88] Brush Tap 2	
86	<	<	<		Shaker		[88] Brush Slap 1	
87	<	<	<		High Whistle	[EXC3]	[88] Brush Slap 2	
88	Applause	Applause	Applause		Low Whistle	[EXC3]	[88] Brush Slap 3	
89	---	---	---		Mute Cuica	[EXC4]	[88] Brush Swirl 1	
90	---	---	---		Open Cuica	[EXC4]	[88] Brush Swirl 2	
91	---	---	---		Mute Triangle	[EXC5]	[88] Brush Long Swirl	
92	---	---	---		Open Triangle	[EXC5]	Standard 1 Snare 1	
93	---	---	---		Short Guiro	[EXC6]	Standard 1 Snare 2	
94	---	---	---		Long Guiro	[EXC6]	Standard 1 Snare 3	
95	---	[L] Brush Kick 2	---		Cabasa Up		Rap Snare	
C7 96	---	[L] Brush Kick 1	---		Cabasa Down		Hip-Hop Snare 2	



## SC-8820 Drum Set (6)

	PC 52 KICK & SNARE 2	PC 53 ASIA	PC 54 CYMBAL&CLAPS	[ Pro ]	PC55 GAMELAN 1	PC56 GAMELAN 2
	22	---	---	---	---	---
	23	---	---	---	---	---
C1	24	[Pro] CR-78 Kick 1	Gamelan Gong 1	---	---	---
	25	[Pro] CR-78 Kick 2	Gamelan Gong 2	---	---	---
	26	[Pro] TR-606 Kick	Gamelan Gong 3	---	---	---
	27	[Pro] TR-707 Kick	Gamelan Gong 4	---	---	---
	28	[Pro] TR-808 Kick 1	Gamelan Gong 5	---	---	---
	29	[Pro] TR-909 Kick 1	Gamelan Gong 6	---	---	---
	30	[Pro] TR-909 Kick 2	Gamelan Gong 7	---	---	---
	31	[Pro] Hip-Hop Kick 2	Gamelan Gong 8	Reverse Open Hi-Hat	---	---
	32	[Pro] Hip-Hop Kick 1	Gamelan Gong 9	Reverse Closed Hi-Hat 1	---	---
	33	[Pro] Jungle Kick 2	Gamelan Gong 10	Reverse Closed Hi-Hat 2	---	---
	34	[Pro] Jungle Kick 1	Gender 1	Jungle Hi-Hat	[EXC1] ---	---
C2	35	[Pro] Techno Kick 2	Gender 2	[55] Closed Hi-Hat	[EXC1] Kendang Wadon	Kendang Wadon
	36	[Pro] Techno Kick 1	Gender 3	[88] Closed Hi-Hat 2	[EXC1] Kendang Lanang	Kendang Lanang
	37	[Pro] Standard 1 Kick 2	Gender 4	[88] Closed Hi-Hat 3	[EXC1] Bebarongan	Bebarongan
	38	[Pro] Standard 1 Kick 1	Gender 5	Closed Hi-Hat 4	[EXC1] Pelegongan	Pelegongan
	39	Standard 1 Kick 2	* Bonang 1	Closed Hi-Hat	[EXC1] Kelontuk	[EXC1] Kelontuk [EXC1]
	40	Standard 1 Kick 1	* Bonang 2	TR-707 Closed Hi-Hat	[EXC1] Kelontuk Mute	[EXC1] Kelontuk Mute [EXC1]
	41	Brush Kick 2	Bonang 3	TR-606 Closed Hi-Hat	[EXC1] Kelontuk Side	[EXC1] Kelontuk Side [EXC1]
	42	Brush Kick 1	* Bonang 4	[88] TR-808 Closed Hi-Hat	[EXC1] Gamelan Gong Wadon	Gamelan Gong Wadon
	43	Jazz Kick 2	Bonang 5	TR-808 Closed Hi-Hat	[EXC1] Gamelan Gong Lanang	Gamelan Gong Lanang
	44	Jazz Kick 1	Rama Cymbal Low	CR-78 Closed Hi-Hat	[EXC1] Ceng-Ceng *	Ceng-Ceng *
	45	Hip-Hop Kick 2	Rama Cymbal High	[55] Pedal Hi-Hat	[EXC1] Kopyak Open	[EXC2] Kopyak Open [EXC2]
	46	Hip-Hop Kick 1	Sagat Open [EXC7]	[88] Pedal Hi-Hat	[EXC1] Kopyak Mute	[EXC2] Kopyak Mute [EXC2]
C3	47	Concert BD 1 Mute	[EXC1] Sagat Closed [EXC7]	Pedal Hi-Hat	[EXC1] Kajar	Kajar
	48	[55] Concert BD 1	[EXC1] Jaws Harp	Half-Open Hi-Hat 1	[EXC1] Kempur *	Kempur *
	49	Room Kick 2	Wadaiko *	Half-Open Hi-Hat 2	[EXC1] Jegogan *	Jegogan *
	50	Room Kick 1	* Wadaiko Rim *	[55] Open Hi Hat	[EXC1] Jegogan *	Jegogan *
	51	Jungle Kick 2	Small Taiko	[88] Open Hi-Hat 2	[EXC1] Jegogan *	Jegogan *
	52	Jungle Kick 1	Shimetaiko	[88] Open Hi-Hat 3	[EXC1] Jegogan *	Jegogan *
	53	Jungle Kick Roll	Atarigane	Open Hi-Hat 2	[EXC1] Jegogan *	Jegogan *
	54	Fat Kick	Hyoushigi	TR-909 Open Hi-Hat	[EXC1] Jublag	Jublag
	55	Dance Kick	Ohkawa	TR-707 Open Hi-Hat	[EXC1] Jublag	Jublag
	56	TR-808 Kick	High Kotsuzumi	TR-606 Open Hi-Hat	[EXC1] Jublag	Jublag
	57	TR-909 Kick 2	Low Kotsuzumi	[88] TR-808 Open Hi-Hat	[EXC1] Jublag	Jublag
	58	TR-909 Kick 1	Yyoo Dude	TR-808 Open Hi-Hat	[EXC1] Jublag	Jublag
C4	59	Standard 1 Snare 1	* Buk	CR-78 Open Hi-Hat	[EXC1] Penyacah	Penyacah
	60	Standard 1 Snare 2	Buk Rim	Crash Cymbal 1	[EXC3] Penyacah	Penyacah
	61	[88] Standard 2 Snare 1	Gengari p [EXC1]	Crash Cymbal 2	[EXC4] Penyacah	Penyacah
	62	[88] Standard 2 Snare 2	Gengari Mute Low [EXC1]	Crash Cymbal 3	Penyacah	Penyacah
	63	[55] Tight Snare	Gengari f [EXC2]	Brush Crash Cymbal	Penyacah	Penyacah
	64	[55] Concert Snare	Gengari Mute High [EXC2]	Hard Crash Cymbal *	Penyacah	Penyacah
	65	Jazz Snare 1	Gengari Samll	TR-909 Crash Cymbal	Penyacah	Penyacah
	66	Jazz Snare 2	Jang-Gu Che	TR-808 Crash Cymbal	Pemade	Pemade
	67	Room Snare 1	Jang-Gu Kun	Mute Crash Cymbal 1 [EXC3]	Pemade	Pemade
	68	Room Snare 2	Jang-Gu Rim	Mute Crash Cymbal 2 [EXC4]	Pemade	Pemade
	69	LoFi Snare 1	Jing p [EXC3]	Reverse Crash Cymbal 1	Pemade	Pemade
	70	LoFi Snare 2	Jing f [EXC3] *	Reverse Crash Cymbal 2	Pemade	Pemade
	71	[55] Gated Snare	Jing Mute [EXC3]	Reverse Crash Cymbal 3	Pemade	Pemade
C5	72	LoFi Snare Rim	Asian Gong	Reverse TR-909 Crash Cymbal	Pemade	Pemade
	73	[88] Dance Snare 2	Big Gong	[55] Splash Cymbal	Pemade	Pemade
	74	HipHop Snare 1	Small Gong	Splash Cymbal	Pemade	Pemade
	75	HipHop Snare 2	Pai Ban	[88] Ride Bell	Pemade	Pemade
	76	Dance Snare	Ban Gu	[88] Brush Ride Bell	Reyong	Reyong
	77	TR-606 Snare 2	Tang Gu [EXC4]	[88] Ride Cymbal 1	Reyong	Reyong
	78	Techno Snare	Tang Gu Mute [EXC4]	[88] Ride Cymbal 2	Reyong	Reyong
	79	House Snare	Shou Luo *	[88] Brush Ride Cymbal	Reyong	Reyong
	80	Rock Snare Dry	Bend Gong	Ride Cymbal Low Inner	Reyong	Reyong
	81	Jungle Snare	Hu Yin Luo Low *	Ride Cymbal Mid Inner	Reyong	Reyong
	82	Jungle Snare Roll	Hu Yin Luo Mid [EXC5]	Ride Cymbal High Inner	Reyong	Reyong
C6	83	[88] Brush Tap 1	Hu Yin Luo Mid 2 [EXC5]	Ride Cymbal Low Edge	Reyong	Reyong
	84	[88] Brush Tap 2	Hu Yin Luo High [EXC6]	Ride Cymbal Mid Edge	Reyong	Reyong
	85	Brush Tap 2	Hu Yin Luo High 2 [EXC6]	Ride Cymbal High Edge	Reyong	Reyong
	86	Brush Slap 2	Nao Bo	TR-606 Ride Cymbal	Reyong	Reyong
	87	[88] Brush Slap 3	Xiao Bo	TR-808 Ride Cymbal	Reyong	Reyong
	88	[88] Brush Swirl 1	Dholak 1	Chinese Cymbal	---	---
	89	[88] Brush Swirl 2	Dholak 2	Chinese Cymbal 2	---	---
	90	[88] Brush Long Swirl	---	[55] Hand Clap	---	---
	91	[Pro] Standard 1 Snare 1	---	[88] Hand Clap 2	---	---
	92	[Pro] Standard 1 Snare 2	---	[88] Hand Clap	---	---
	93	[Pro] Standard 1 Snare 3	---	Hand Clap	---	---
	94	[Pro] Rap Snare	---	Hand Clap 2	---	---
C7	95	[Pro] Hip-Hop Snare 2	---	TR-707 Hand Clap	---	---
	96					

## SC-8820 Drum Set (7)

	PC 57 SFX	[ Pro ]	PC 58 RHYTHM FX	[ Pro ]	PC 59 RHYTHM FX 2	[ Pro ]	PC 60 RHYTHM FX 3
	22	MC-500 Beep 2	---	---	---	---	Reverse Clean Guitar Mute Up
		Guitar Slide	---	---	---	---	Reverse Clean Guitar Mute Down
		Guitar Wah	---	---	---	---	Reverse Distortion Guitar Cut Noise Up
C1	24	Guitar Slap	---	---	---	---	Reverse Distortion Guitar Cut Noise Down
	25	Chord Stroke Down	---	---	---	---	Reverse Distortion Guitar Stroke Noise
	26	Chord Stroke Up	---	---	---	---	Reverse Distortion Guitar Mute Noise
	27	Biwa FX	*	---	---	---	Reverse Steel Guitar Slide Noise 1
		Phonograph Noise	---	---	---	---	Reverse Steel Guitar Slide Noise 2
	29	Tape Rewind	---	---	---	---	Reverse Steel Guitar Slide Noise 3
	30	Scratch Push 2	[EXC1]	---	---	---	Reverse Steel Guitar Slide Noise 4
	31	Scratch Pull 2	[EXC1]	---	---	---	Reverse Steel Guitar Stroke Noise
	32	Cutting Noise 2 Up	---	---	---	---	Reverse Steel Guitar Stroke Noise Up 1
	33	Cutting Noise 2 Down	---	---	---	---	Reverse Steel Guitar Stroke Noise Down 1
	34	Distortion Guitar Cutting Noise Up	---	---	---	---	Reverse Steel Guitar Stroke Noise Up 2
		Distortion Guitar Cutting Noise Down	Reverse Kick 1	---	Reverse TR-707 Kick 1	---	Reverse Steel Guitar Stroke Noise Down 2
C2	36	Bass Slide	Reverse Concert Bass Drum	---	Reverse TR-909 Kick 1	---	Reverse Trombone Noise
	37	Pick Scrape	Reverse Power Kick1	---	Reverse Hip-Hop Kick 1	---	Reverse Trumpet Noise
	38	High Q	Reverse Electric Kick 1	---	Reverse Jungle Kick 2	---	Reverse Standard Kick 2
	39	Slap	Reverse Snare 1	---	Reverse Techno Kick 2	---	Reverse Standard Kick 1
	40	Scratch Push	[EXC7]	Reverse Snare 2	Reverse TR-606 Snare 2	---	Reverse Room Kick 2
	41	Scratch Pull	[EXC7]	Reverse Standard 1 Snare 1	Reverse CR-78 Snare 1	---	Reverse Room Kick 1
	42	Sticks	Reverse Tight Snare	---	Reverse CR-78 Snare 2	---	Reverse Jazz Kick 2
	43	Square Click	Reverse Dance Snare	---	Reverse Jungle Snare 2	---	Reverse Jazz Kick 1
	44	Metronome Click	Reverse 808 Snare	---	Reverse Techno Snare 2	---	Reverse Brush Kick 2
	45	Metronome Bell	Reverse Tom 1	---	Reverse TR-707 Snare	---	Reverse Brush Kick 1
	46	Guitar Fret Noise	Reverse Tom 2	---	Reverse TR-606 Snare 1	---	Reverse HipHop Kick 2
C3	47	Guitar Cutting Noise Up	Reverse Sticks	---	Reverse TR-909 Snare 1	---	Reverse HipHop Kick 1
	48	Guitar Cutting Noise Down	Reverse Slap	---	Reverse Hip-Hop Snare 2	---	Reverse Jungle Kick 2
	49	String Slap of Double Bass	Reverse Cymbal 1	---	Reverse Jungle Snare 1	---	Reverse Jungle Kick 1
	50	Flute Key Click Noise	Reverse Cymbal 2	---	Reverse House Snare	---	Reverse TR-808 Kick
	51	Laughing	Reverse Open Hi-Hat	---	Reverse Closed Hi-Hat	---	Reverse TR-909 Kick 2
	52	Screaming	Reverse Ride Cymbal	---	Reverse TR-606 Closed Hi-Hat	---	Reverse TR-909 Kick 1
	53	Punch	Reverse CR-78 Open Hi-Hat	---	Reverse TR-707 Closed Hi-Hat	---	Reverse Fat Kick
	54	Heart Beat	Reverse Closed Hi-Hat	---	Reverse TR-808 Closed Hi-Hat	---	Reverse Dance Kick
	55	Footsteps 1	Reverse Gong	---	Reverse Jungle Hi-Hat	---	Reverse Standard Snare 1
	56	Footsteps 2	Reverse Bell Tree	---	Reverse Tambourine 2	---	Reverse Standard Snare 2
	57	Applause	*	Reverse Guiro	Reverse Shake Tambourine	---	Reverse Room Snare 1
	58	Door Creaking	Reverse Bendir	---	Reverse TR-808 Open Hi-Hat	---	Reverse Room Snare 2
C4	59	Door	Reverse Gun Shot	---	Reverse TR-707 Open Hi-Hat	---	Reverse Jazz Snare 1
	60	Scratch	Reverse Scratch	---	Reverse Open Hi-Hat	---	Reverse Jazz Snare 2
	61	Wind Chimes	*	Reverse Laser Gun	Reverse TR-606 Open Hi-Hat	---	Reverse Brush Snare 1
	62	Car - Engine	Key Click	---	Reverse Hu Yin Luo	---	Reverse Brush Snare 2
	63	Car - Stop	Techno Thip	---	Reverse TR-707 Crash Cymbal	---	Reverse Lo-Fi Snare 1
	64	Car - Passing	Pop Drop	---	Voice One	---	Reverse Lo-Fi Snare 2
	65	Car - Crash	*	Woody Slap	Reverse Voice One	---	Reverse HipHop Snare 1
	66	Siren	Distortion Kick	*	Voice Two	---	Reverse HipHop Snare 2
	67	Train	Syn. Drops	---	Reverse Voice Two	---	Reverse House Snare 1
	68	Jetplane	*	Reverse Hi Q	Voice Three	---	Reverse Jungle Snare
	69	Helicopter	Pipe	---	Reverse Voice Three	---	Reverse 606 Snare 2
	70	Starship	*	Ice Block	Voice Tah	---	Reverse Techno Snare
C5	71	Gun Shot	Digital Tambourine	*	Reverse Voice Tah	---	Reverse Dance Snare
	72	Machine Gun	Alias	---	Voice Ou	---	Reverse Rock Snare Dry
	73	Laser Gun	Modulated Bell	---	Voice Au	---	Reverse Lo-Fi Snare Rim
	74	Explosion	Spark	---	Voice Whey	---	Reverse 909 Snare Rim
	75	Dog	Metallic Percussion	---	Frog Vpoce	---	Reverse Jungle Snare Rim
	76	Horse-Gallop	Velocity Noise FX	---	Reverse Yyoo Dude	---	Reverse Dance Snare Rim
	77	Birds	*	Stereo Noise Clap	Douby	---	Reverse House Snare Rim
	78	Rain	Swish	---	Reverse Douby	---	Reverse Brush Tom 1
	79	Thunder	Slappy	*	Baert High	---	Reverse Brush Tom 2
	80	Wind	Voice Ou	---	Baert Low	---	Reverse Brush Tom 3
	81	Seashore	Voice Au	---	Bounce	---	Reverse 606 Tom
	82	Stream	*	Hoo	Reverse bounce	---	Reverse Jungle Crash Cymbal
C6	83	Bubble	*	Tape Stop 1	*	Distortion Knock	Reverse Standard Closed Hi-Hat
	84	Kitty	*	Tape Stop 2	*	Guitar Slide	Reverse Room Closed Hi-Hat
	85	Bird 2	Missile	*	Sub Marine	---	Reverse Jazz Closed Hi-Hat
	86	Growl	Space Birds	---	Noise Attack	---	Reverse Brush Closed Hi-Hat
	87	<-	Flying Monster	---	Space Worms	---	Reverse 707 Claps
	88	Telephone 1	---	---	Emergency !	---	Reverse 909 Claps
	89	Telephone 2	---	---	Calculating...	---	Reverse R&B Claps 1
	90	Small Club 1	*	---	Saw LFO Saw	---	Reverse HipHop Claps
	91	Small Club 2	*	---	---	---	Reverse Comp Claps 2
	92	Applause Wave	*	---	---	---	Reverse Shaker 2
	93	Eruption	---	---	---	---	Reverse Jungle Shaker
	94	Big Shot	*	---	---	---	Reverse Clap Hit
C7	95	Percussion Bang	*	---	---	---	Reverse Boeeeen

## SC-8820 Drum Set (8)

	PC 61 SFX 2	PC 62 VOICE	PC 63 CYM&CLAPS 2	
	22	---	---	
23	---	---	---	
C1 24	---	---	---	
	25	---	---	
26	---	---	---	
	27	---	---	
28	---	---	---	
	29	---	---	
	30	---	---	
31	Acoustic Bass Mute Noise	---	---	
	32	Acoustic Bass Touch Noise	Reverse Standard Closed Hi-Hat	
33	Acoustic Bass Attack Noise	---	Reverse Room Closed Hi-Hat	
	34	Distortion Guitar Mute Noise	Reverse Jazz Closed Hi-Hat	
35	Steel Guitar Slide Noise 1	---	Reverse Brush Closed Hi-Hat	
C2 36	Steel Guitar Slide Noise 2	Reverse Breath Slow	Standard 1 Closed Hi-Hat	
	37	Steel Guitar Slide Noise 3	Reverse Breath Short	Room Closed Hi-Hat
38	Steel Guitar Slide Noise 4	Reverse Breath Strong	Jazz Closed Hi-Hat	
	39	Guitar Stroke Noise 1	Reverse Woman's Breath	Brush Closed Hi-Hat
40	Guitar Stroke Noise 2	Reverse Man's Breath	TR-707 Closed Hi-Hat	
	41	Guitar Stroke Noise 3	Reverse Voice One	TR-606 Closed Hi-Hat
	42	Guitar Stroke Noise 4	Reverse Voice Two	TR-808 Closed Hi-Hat
43	Guitar Stroke Noise 5	Reverse Voice Three	CR-78 Closed Hi-Hat	
	44	Open CD Tray	Reverse Voice Tah	Pedal Hi-Hat
45	Audio Switch	Reverse Voice Come On	Pedal Hi-Hat	
	46	Keyboard Typing 1	Reverse Voice Kikit	Pedal Hi-Hat
47	Keyboard Typing 2	Reverse Voice Aou	Half-Open Hi-Hat 1	
C3 48	Keyboard Typing 3	Reverse Voice Oou	Half-Open Hi-Hat 2	
	49	Keyboard Typing 4	Reverse Voice Hie 2	Standard 1 Open Hi-Hat
50	Keyboard Typing 5	Reverse Baby Laughing	Room Open Hi-Hat	
	51	Keyboard Typing 6	Reverse Yyohh	Jazz Open Hi-Hat
52	Baby Laughing	Reverse Japanese Female Voice Lan	Brush Open Hi-Hat	
	53	Clap Hit	Reverse Oou!	TR-909 Open Hi-Hat
	54	Stab! 1	Flute Breath 1	TR-707 Open Hi-Hat
55	Stab! 2	Flute Breath 2	TR-606 Open Hi-Hat	
	56	Bounce Hit	Flute Breath 3	TR-808 Open Hi-Hat
57	Boeeeen	Voice Breath 1	CR-78 Open Hi-Hat	
	58	Glass Stir	Voice Breath 2	Standard 1 Crash Cymbal
59	Ice Ring	Voice One	Room Crash Cymbal	
C4 60	Crack Bottle	Voice Two	Jazz Crash Cymbal	
	61	Pour Bottle	Voice Three	Brush Crash Cymbal
62	Soda	Voice Tah	Hard Crash Cymbal	
	63	Car Engine 2	Voice ComeOn	TR-909 Crash Cymbal
64	Car - Horn	Voice Kikit	Jungle Crash Cymbal	
	65	Railroad Crossing	Voice Aou	TR-808 Crash Cymbal
	66	SL 1	Voice Oou	Standard 1 Mute Crash Cymbal
67	SL 2	Punch	Room Mute Crash Cymbal	
	68	Over Blow	Screaming	Jazz Mute Crash Cymbal
69	Sword Boom!	Laughing	Brush Mute Crash Cymbal	
	70	Sword Cross	Voice Hie	Mute Crash Cymbal 1
71	Industry Hit	Baby Laughing	Mute Crash Cymbal 2	
C5 72	Drill Hit	Frog Vpoce	Reverse Standard 1 Crash Cymbal	
	73	Compressor	Yyohh Dude	Reverse Room Crash Cymbal
74	Thrill Hit	Voice Ou	Reverse Jazz Crash Cymbal	
	75	Explosion 2	Voice Au	Reverse Brush Crash Cymbal
76	Seal	Jazz Voice Thum	Splash Cymbal	
	77	Fancy Animal	Jazz Voice Bap	Standard Ride Bell
	78	Cricket	Jazz Voice Dat	Room Ride Bell
79	Bear	Jazz Voice Dow	Jazz Ride Bell	
	80	Frog Vpoce	Voice Oohs 2	Brush Ride Bell
81	Wind 2	Voice Oohs Chord Maj7 A	Standard Ride Cymbal	
	82	Scratch 3	Voice Oohs Chord Maj7 B	Room Ride Cymbal
83	Scratch 4	Voice Oohs Chord Sus4 A	Jazz Ride Cymbal	
C6 84	Scratch 5	Voice Oohs Chord Sus4 B	Brush Ride Cymbal	
	85	Scratch 6	Japanese Female Voice Lah	TR-606 Ride Cymbal
86	Scratch 7	Japanese Female Voice Lan	TR-808 Ride Cymbal	
	87	Noise Attack	Japanese Male Voice Wah	Chinese Cymbal
88	Bounce	Japanese Male Voice Woh	Chinese Cymbal 2	
	89	Dist Knock	---	TR-707 Claps
	90	Bound	---	Hip-Hop Claps
91	---	---	R&B Claps	
	92	---	TR-909 Claps	
93	---	---	Comp Claps 2	
	94	---	Hand Clap	
95	---	---	[Pro] Hand Clap 2	
C7 96	---	---	[Pro] TR-707 Hand Clap	



**SC-8820 Drum Set (10)**

	PC 11 JUNGLE	PC 12 TECHNO	PC 13 ROOM L/R	PC 14 HOUSE	PC 25 ELECTRONIC PC 26 TR-808	[ Pro ] [ Pro ]
C-1 0	[88] Electric Kick 2	[88] Electric Kick 2	---	[88] Electric Kick 2	[88] Electric Kick 2	
1	[88] Electric Kick 1 *	[88] Electric Kick 1 *	---	[88] Electric Kick 1 *	[88] Electric Kick 1 *	
2	[Pro] CR-78 Kick 1	[Pro] CR-78 Kick 1	---	[Pro] CR-78 Kick 1	CR-78 Kick 1	
3	[Pro] CR-78 Kick 2	[Pro] CR-78 Kick 2	---	[Pro] CR-78 Kick 2	CR-78 Kick 2	
4	[Pro] TR-606 Kick1	[Pro] TR-606 Kick1	---	[Pro] TR-606 Kick1	TR-606 Kick1	
5	[Pro] TR-707 Kick 1	[Pro] TR-707 Kick 1	---	[Pro] TR-707 Kick 1	TR-707 Kick 1	
6	[55] TR-808 Kick	[55] TR-808 Kick	---	[55] TR-808 Kick	[55] TR-808 Kick	
7	[88] TR-808 Kick	[88] TR-808 Kick	---	[88] TR-808 Kick	[88] TR-808 Kick	
8	[Pro] TR-808 Kick 2	[Pro] TR-808 Kick 2	---	[Pro] TR-808 Kick 2	TR-808 Kick 2	
9	[88] TR-909 Kick	[88] TR-909 Kick	---	[88] TR-909 Kick	[88] TR-909 Kick	
10	[88] Dance Kick	[88] Dance Kick	---	[88] Dance Kick	[88] Dance Kick	
11	[Pro] Hip-Hop Kick 2	[Pro] Hip-Hop Kick 2	---	[Pro] Hip-Hop Kick 2	Hip-Hop Kick 2	
12	[Pro] TR-909 Kick 1 *	[Pro] TR-909 Kick 1 *	---	[Pro] TR-909 Kick 1 *	TR-909 Kick 1 *	
C0 13	[Pro] Hip-Hop Kick 3	[Pro] Hip-Hop Kick 3	---	[Pro] Hip-Hop Kick 3	Hip-Hop Kick 3	
14	[Pro] Jungle Kick 1	[Pro] Jungle Kick 1	---	[Pro] Jungle Kick 1	Jungle Kick 1	
15	[Pro] Techno Kick 1	[Pro] Techno Kick 1	---	[Pro] Techno Kick 1	Techno Kick 1	
16	[Pro] Bounce Kick	[Pro] Bounce Kick	---	[Pro] Bounce Kick	Bounce Kick	
17	<-	<-	<-	<-	<-	
18	<-	<-	<-	<-	<-	
19	<-	<-	<-	<-	<-	
20	HipHop Kick 2	TR-909 Kick 2	---	Fat Kick	---	
21	HipHop Kick 1	Fat Kick	---	Dance Kick	---	
:	:	:	:	:	:	
:	:	:	:	:	:	
:	:	:	:	:	:	
95	Rock Snare Dry	HipHop Snare 1	[L] Room Kick 2	LoFi Snare 2	---	
96	LoFi Snare 1	HipHop Snare 2	[L] Room Kick 1 *	Jungle Snare	---	
97	[Pro] Techno Hit	[Pro] Techno Hit	[L] Room Crash Cymbal	[Pro] Techno Hit	Techno Hit	
98	[Pro] Philly Hit *	[Pro] Philly Hit *	[L] Room Snare 1	[Pro] Philly Hit	Philly Hit *	
99	[Pro] Impact Hit *	[Pro] Impact Hit *	[L] Room Ride Cymbal	[Pro] Impact Hit	Impact Hit *	
100	[Pro] Lo-Fi Rave *	[Pro] Lo-Fi Rave *	[L] Room Snare 2	[Pro] Lo-Fi Rave	Lo-Fi Rave *	
101	[Pro] Bam Hit	[Pro] Bam Hit	[L] Room Low Tom	[Pro] Bam Hit	Bam Hit	
102	[Pro] Bim Hit	[Pro] Bim Hit	[L] Room Closed Hi-Hat [EXC8]	[Pro] Bim Hit	Bim Hit	
103	[Pro] Tape Rewind	[Pro] Tape Rewind	[L] Room Mid Tom	[Pro] Tape Rewind	Tape Rewind	
104	[Pro] Phonograph Noise	[Pro] Phonograph Noise	[L] Room Ride Bell	[Pro] Phonograph Noise	Phonograph Noise	
105	[88] Power Snare 1	[88] Power Snare 1	[L] Room High Tom	[88] Power Snare 1	[88] Power Snare 1	
106	[88] Dance Snare 1	[88] Dance Snare 1	[L] Room Open Hi-Hat [EXC8]	[88] Dance Snare 1	[88] Dance Snare 1	
107	[88] Dance Snare 2	[88] Dance Snare 2	[R] Room Kick 2	[88] Dance Snare 2	[88] Dance Snare 2	
C8 108	[88] Disco Snare	[88] Disco Snare	[R] Room Kick 1	[88] Disco Snare	[88] Disco Snare	
109	[88] Electric Snare 2	[88] Electric Snare 2	[R] Room Crash Cymbal	[88] Electric Snare 2	[88] Electric Snare 2	
110	[55] Electric Snare	[55] Electric Snare	[R] Room Snare 1	[55] Electric Snare	[55] Electric Snare	
111	[88] Electric Snare 3 *	[88] Electric Snare 3 *	[R] Room Ride Cymbal	[88] Electric Snare 3	[88] Electric Snare 3 *	
112	[Pro] TR-606 Snare 2	[Pro] TR-606 Snare 2	[R] Room Snare 2	[Pro] TR-606 Snare 2	TR-606 Snare 2	
113	[Pro] TR-707 Snare 1	[Pro] TR-707 Snare 1	[R] Room Low Tom *	[Pro] TR-707 Snare 1	TR-707 Snare 1	
114	[88] TR-808 Snare 2	[88] TR-808 Snare 2	[R] Room Closed Hi-Hat [EXC9]	[88] TR-808 Snare 2	[88] TR-808 Snare 2	
115	[88] TR-808 Snare 1 *	[88] TR-808 Snare 1 *	[R] Room Mid Tom *	[88] TR-808 Snare 1	[88] TR-808 Snare 1 *	
116	[Pro] TR-808 Snare 2	[Pro] TR-808 Snare 2	[R] Room Ride Bell	[Pro] TR-808 Snare 2	TR-808 Snare 2	
117	[88] TR-909 Snare 1	[88] TR-909 Snare 1	[R] Room High Tom	[88] TR-909 Snare 1	[88] TR-909 Snare 1	
118	[88] TR-909 Snare 2 *	[88] TR-909 Snare 2 *	[R] Room Open Hi-Hat [EXC9]	[88] TR-909 Snare 2	[88] TR-909 Snare 2 *	
119	[Pro] TR-909 Snare 1	[Pro] TR-909 Snare 1	---	[Pro] TR-909 Snare 1	TR-909 Snare 1	
C9 120	[Pro] TR-909 Snare 2	[Pro] TR-909 Snare 2	---	[Pro] TR-909 Snare 2	TR-909 Snare 2	
121	[Pro] Rap Snare	[Pro] Rap Snare	---	[Pro] Rap Snare	Rap Snare	
122	[Pro] Jungle Snare	[Pro] Jungle Snare	---	[Pro] Jungle Snare	Jungle Snare	
123	[Pro] House Snare 1	[Pro] House Snare 1	---	[Pro] House Snare 1	House Snare 1	
124	[88] House Snare *	[88] House Snare *	---	[88] House Snare	[88] House Snare *	
125	[Pro] House Snare 2	[Pro] House Snare 2	---	[Pro] House Snare 2	House Snare 2	
126	[Pro] Voice Tah	[Pro] Voice Tah	---	[Pro] Voice Tah	Voice Tah	
127	[88] Slappy *	[88] Slappy *	---	[88] Slappy	[88] Slappy *	

**SC-8820 Drum Set (11)**

		PC 27	PC 28	PC 29	PC 30	PC 31	PC 33	PC 34	PC 41	
		DANCE	TR-909	JAZZ	JAZZ L/R	BRUSH				[ Pro ]
C-1	0	[88] Electric Kick 2	[88] Electric Kick 2	<	<	<	<	<	<	
	1	[88] Electric Kick 1 *	[88] Electric Kick 1 *	<	<	<	<	<	<	
	2	[Pro] CR-78 Kick 1	CR-78 Kick 1	<	<	<	<	<	<	
	3	[Pro] CR-78 Kick 2	CR-78 Kick 2	<	<	<	<	<	<	
	4	[Pro] TR-606 Kick1	TR-606 Kick1	<	<	<	<	<	<	
	5	TR-707 Kick 1	TR-707 Kick 1	<	<	<	<	<	<	
	6	[55] TR-808 Kick	[55] TR-808 Kick	<	<	<	<	<	<	
	7	[88] TR-808 Kick	[88] TR-808 Kick	<	<	<	<	<	<	
	8	TR-808 Kick 2	TR-808 Kick 2	<	<	<	<	<	<	
	9	[88] TR-909 Kick	[88] TR-909 Kick	<	<	<	<	<	<	
	10	[88] Dance Kick	[88] Dance Kick	<	<	<	<	<	<	
	11	[Pro] Hip-Hop Kick 2	Hip-Hop Kick 2	<	<	<	<	<	<	
	12	[Pro] TR-909 Kick 1 *	TR-909 Kick 1 *	<	<	<	<	<	<	
	13	[Pro] Hip-Hop Kick 3	Hip-Hop Kick 3	<	<	<	<	<	<	
	14	[Pro] Jungle Kick 1	Jungle Kick 1	<	<	<	<	<	<	
	15	[Pro] Techno Kick 1	Techno Kick 1	<	<	<	<	<	<	
	16	[Pro] Bounce Kick	Bounce Kick	<	<	<	<	<	<	
	17	<	<	<	<	<	<	<	<	
	18	<	<	<	<	<	<	<	<	
	19	<	<	<	<	<	<	<	<	
	20	TR-909 Kick 2	---	Brush Kick 2	---	---	---	---	---	
	21	TR-909 Kick 1	---	Brush Kick 1	*	---	---	---	---	
	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	
	95	HipHop Snare 1	---	---	[L] Jazz Kick 2	---	---	---	---	
	96	Hip-Hop Snare 2	---	---	[L] Jazz Kick 1	---	---	---	---	
	97	[Pro] Techno Hit	Techno Hit	---	[L] Jazz Crash Cymbal	---	---	---	---	
	98	[Pro] Philly Hit *	Philly Hit *	Brush Tap 2	[L] Jazz Snare 1	---	---	---	---	
	99	[Pro] Impact Hit *	Impact Hit *	Brush Slap 2	[L] Jazz Ride Cymbal	---	---	---	---	
	100	[Pro] Lo-Fi Rave *	Lo-Fi Rave *	[88] Brush Tap 1	[L] Jazz Snare 2	[88] Brush Tap 1	---	---	---	
	101	[Pro] Bam Hit	Bam Hit	[88] Brush Tap 2	[L] Jazz Low Tom	[88] Brush Tap 2	---	---	---	
	102	[Pro] Bim Hit	Bim Hit	[88] Brush Slap 1	[L] Jazz Closed Hi-Hat [EXC8]	[88] Brush Slap 1	---	---	---	
	103	[Pro] Tape Rewind	Tape Rewind	[88] Brush Slap 2	[L] Jazz Mid Tom	[88] Brush Slap 2	---	---	---	
	104	[Pro] Phonograph Noise	Phonograph Noise	[88] Brush Slap 3	[L] Jazz Ride Bell	[88] Brush Slap 3	---	---	---	
	105	[88] Power Snare 1	[88] Power Snare 1	[88] Brush Swirl 1	[L] Jazz High Tom	[88] Brush Swirl 1	---	---	---	
	106	[88] Dance Snare 1	[88] Dance Snare 1	[88] Brush Swirl 2	[L] Jazz Open Hi-Hat [EXC8]	[88] Brush Swirl 2	---	---	---	
	107	[88] Dance Snare 2	[88] Dance Snare 2	[88] Brush Long Swirl	[R] Jazz Kick 2	[88] Brush Long Swirl	---	---	---	
C8	108	[88] Disco Snare	[88] Disco Snare	[88] Jazz Snare 1	[R] Jazz Kick 1	[88] Jazz Snare 1	---	---	---	
	109	[88] Electric Snare 2	[88] Electric Snare 2	[88] Jazz Snare 2	[R] Jazz Crash Cymbal	[88] Jazz Snare 2	---	---	---	
	110	[55] Electric Snare	[55] Electric Snare	[88] Standard 1 Snare1	[R] Jazz Snare 1	[88] Standard 1 Snare1	---	---	---	
	111	[88] Electric Snare 3 *	[88] Electric Snare 3 *	[88] Standard 1 Snare2	[R] Jazz Ride Cymbal	[88] Standard 1 Snare2	---	---	---	
	112	[Pro] TR-606 Snare 2	TR-606 Snare 2	[88] Standard 2 Snare1	[R] Jazz Snare 2	[88] Standard 2 Snare1	---	---	---	
	113	[Pro] TR-707 Snare 1	TR-707 Snare 1	[88] Standard 2 Snare2	[R] Jazz Low Tom	[88] Standard 2 Snare2	---	---	---	
	114	[88] TR-808 Snare 2	[88] TR-808 Snare 2	[55] Snare Drum 2	[R] Jazz Closed Hi-Hat [EXC9]	[55] Snare Drum 2	---	---	---	
	115	[88] TR-808 Snare 1 *	[88] TR-808 Snare 1 *	[Pro] Standard 1 Snare 1	[R] Jazz Mid Tom	Standard 1 Snare 1	---	---	---	
	116	[Pro] TR-808 Snare 2	TR-808 Snare 2	[Pro] Standard 1 Snare 2	[R] Jazz Ride Bell	Standard 1 Snare 2	---	---	---	
	117	[88] TR-909 Snare 1	[88] TR-909 Snare 1	[Pro] Standard 1 Snare 3	[R] Jazz High Tom	Standard 1 Snare 3	---	---	---	
	118	[88] TR-909 Snare 2 *	[88] TR-909 Snare 2 *	[88] Room Snare 1	[R] Jazz Open Hi-Hat [EXC9]	[88] Room Snare 1	---	---	---	
	119	[Pro] TR-909 Snare 1	TR-909 Snare 1	[88] Room Snare 2	---	[88] Room Snare 2	---	---	---	
C9	120	[Pro] TR-909 Snare 2	TR-909 Snare 2	[88] Power Snare 1	---	[88] Power Snare 1	---	---	---	
	121	[Pro] Rap Snare	Rap Snare	[88] Power Snare 2	---	[88] Power Snare 2	---	---	---	
	122	[Pro] Jungle Snare	Jungle Snare	[88] Gated Snare	---	[88] Gated Snare	---	---	---	
	123	[Pro] House Snare 1	House Snare 1	[88] Dance Snare 1	---	[88] Dance Snare 1	---	---	---	
	124	[88] House Snare *	[88] House Snare *	[88] Dance Snare 2	---	[88] Dance Snare 2	---	---	---	
	125	[Pro] House Snare 2	House Snare 2	[88] Disco Snare	---	[88] Disco Snare	---	---	---	
	126	[Pro] Voice Tah	Voice Tah	[88] Electric Snare 2	---	[88] Electric Snare 2	---	---	---	
	127	[88] Slappy *	[88] Slappy *	[88] Electric Snare 3	*	[88] Electric Snare 3 *	---	---	---	

**SC-8820 Drum Set (12)**

	PC 42 BRUSH 2	PC 43 BRUSH 2 L/R	PC 49 ORCHESTRA	[ Pro ]	PC 50 ETHNIC	[ Pro ]	PC 51 KICK & SNARE PC 52 KICK & SNARE 2	[ Pro ]
C-1 0	<	---	<		---		---	
1	<	---	<		---		---	
2	<	---	<		---		---	
3	<	---	<		---		---	
4	<	---	<		---		---	
5	<	---	<		---		---	
6	<	---	<		---		---	
7	<	---	<		---		---	
8	<	---	<		---		---	
9	<	---	<		---		---	
10	<	---	<		---		---	
11	<	---	<		---		---	
C0 12	<	---	<		---		---	
13	<	---	<		---		---	
14	<	---	<		---		---	
15	<	---	<		---		---	
16	<	---	<		---		---	
17	<	<	<		---		---	
18	<	<	<		---		---	
19	<	<	<		---		---	
20	Jazz Kick 2	---	---		---		---	
21	Jazz Kick 1	---	---		---		---	
:	:	:	:		:		:	
:	:	:	:		:		:	
95	---	[L] Brush Kick 2	---		Cabasa Up		[Pro] Rap Snare	
96	---	[L] Brush Kick 1	---	*	Cabasa Down		[Pro] Hip-Hop Snare 2	
97	---	[L] Brush Crash Cymbal	Applause 2	*	Claves		[Pro] Jungle Snare 1	
98	Jazz Snare 1	[L] Brush Tap 2	Small Club 1	*	High Wood Block		[Pro] Jungle Snare 2	
99	Jazz Snare 2	[L] Brush Ride Cymbal	[55] Timpani D#		Low Wood Block		[Pro] Techno Snare 1	
100	[88] Brush Tap 1	[L] Brush Slap 2	[55] Timpani E		---		[Pro] Techno Snare 2	
101	[88] Brush Tap 2	[L] Brush Low Tom	[55] Timpani F		---		[Pro] House Snare 2	
102	[88] Brush Slap 1	[L] Brush Closed Hi-Hat	[EXC8] [55] Timpani F#		---		[Pro] CR-78 Snare 1	
103	[88] Brush Slap 2	[L] Brush Mid Tom	[55] Timpani G		---		[Pro] CR-78 Snare 2	
104	[88] Brush Slap 3	[L] Brush Ride Bell	[55] Timpani G#		---		[Pro] TR-606 Snare 1	
105	[88] Brush Swirl 1	[L] Brush High Tom	[55] Timpani A		---		[Pro] TR-606 Snare 2	
106	[88] Brush Swirl 2	[L] Brush Open Hi-Hat	[EXC8] [55] Timpani A#		---		[Pro] TR-707 Snare 1	
107	[88] Brush Long Swirl	[R] Brush Kick 2	[55] Timpani B		---		[Pro] TR-707 Snare 2	
C8 108	[88] Jazz Snare 1	[R] Brush Kick 1	[55] Timpani c		---		[Pro] Standard 3 Snare 2	
109	[88] Jazz Snare 2	[R] Brush Crash Cymbal	[55] Timpani c#		---		[Pro] TR-808 Snare 2	
110	[88] Standard 1 Snare1	[R] Brush Tap 2	[55] Timpani d		---		[Pro] TR-909 Snare 1	
111	[88] Standard 1 Snare2	[R] Brush Ride Cymbal	[55] Timpani d#		---		[Pro] TR-909 Snare 2	
112	[88] Standard 2 Snare1	[R] Brush Slap 2	[55] Timpani e		---		---	
113	[88] Standard 2 Snare2	[R] Brush Low Tom	[55] Timpani f		---		---	
114	[55] Snare Drum 2	[R] Brush Closed Hi-Hat	[EXC9] ---		---		---	
115	[Pro] Standard 1 Snare 1	[R] Brush Mid Tom	---		---		---	
116	[Pro] Standard 1 Snare 2	[R] Brush Ride Bell	---		---		---	
117	[Pro] Standard 1 Snare 3	[R] Brush High Tom	---		---		---	
118	[88] Room Snare 1	[R] Brush Open Hi-Hat	[EXC9] ---		---		---	
119	[88] Room Snare 2	---	---		---		---	
C9 120	[88] Power Snare 1	---	---		---		---	
121	[88] Power Snare 2	---	---		---		---	
122	[88] Gated Snare	---	---		---		---	
123	[88] Dance Snare 1	---	---		---		---	
124	[88] Dance Snare 2	---	---		---		---	
125	[88] Disco Snare	---	---		---		---	
126	[88] Electric Snare 2	---	---		---		---	
127	[88] Electric Snare 3	*	---		---		---	



## SC-8820 Drum Set (13)

	PC 57 SFX	[ Pro ]	PC 60 RHYTHM FX 3
C-1 0	---		---
1	---		---
2	---		---
3	---		---
4	---		---
5	---		---
6	---		---
7	---		---
8	---		---
9	---		---
10	---		---
11	---		---
C0 12	---		---
13	---		---
14	---		---
15	---		---
16	---		---
17	---		Reverse Bass Mute Noise
18	---		Reverse Bass Touch Noise
19	---		Reverse Bass Attack Noise
20	---		Reverse Clean Guitar Cut Noise Up
21	MC-500 Beep 1		Reverse Clean Guitar Cut Noise Down
:	:		:
:	:		:
:	:		:
95	Big Shot	*	Reverse Clap Hit
96	Percussion Bang	*	Reverse Boeeeen
97	---		Reverse Bounce
98	---		Reverse CD Tray
99	---		Reverse Drill
100	---		Reverse Glass Stir
101	---		Reverse Ice Ring
102	---		Reverse Industry Hit
103	---		Reverse Scratch 4
104	---		Reverse Scratch 5
105	---		Reverse Scratch 6
106	---		Reverse Scratch 7
107	---		Reverse Seal
C8 108	---		Reverse Stabl 1
109	---		Reverse Stabl 2
110	---		Reverse Sword Boom
111	---		Reverse Sword Cross
112	---		Reverse Thrill Hit
113	---		Reverse Audio Switch
114	---		Reverse Keyboard Typing 1
115	---		Reverse Keyboard Typing 2
116	---		Reverse Keyboard Typing 3
117	---		Reverse Keyboard Typing 4
118	---		Reverse Keyboard Typing 5
119	---		Reverse Keyboard Typing 6
C9 120	---		---
121	---		---
122	---		---
123	---		---
124	---		---
125	---		---
126	---		---
127	---		---

**SC-88Pro Drum Set (1)**

	PC1 STANDARD 1	PC2 STANDARD 2	[88]	PC3 STANDARD 3	PC9 ROOM	[88]	PC10 Hip-Hop
21	MC-500 Beep 1	<	<	<	<	<	<
22	MC-500 Beep 2	<	<	<	<	<	<
23	Concert SD	<	<	<	<	<	<
	Snare Roll	<	<	<	<	<	<
C1 24	Finger Snap 2	Finger Snap	<	<	Finger Snap	<	<
26	High Q	<	<	<	<	<	<
27	Slap	<	<	<	<	<	<
28	Scratch Push	[EXC7] <	<	<	<	<	Scratch Push 2 [EXC7]
	Scratch Pull	[EXC7] <	<	<	<	<	Scratch Pull 2 [EXC7]
30	Sticks	<	<	<	<	<	<
31	Square Click	<	<	<	<	<	<
32	Metronome Click	<	<	<	<	<	<
33	Metronome Bell	<	<	<	<	<	<
34	Standard 1 Kick 2	Standard 2 Kick 2	Standard 3 Kick 2	Room Kick 2	Hip-Hop Kick 2		
35	Standard 1 Kick 1	Standard 2 Kick 1	[RND] Kick	Room Kick 1	Hip-Hop Kick 1		
	Side Stick	<	<	<	TR-808 Rim Shot		
C2 36	Standard 1 Snare 1	Standard 2 Snare 1	[RND] Snare	Room Snare 1	Rap Snare		
38	TR-909 Hand Clap	Hand Clap	[RND] Hand Clap *	Hand Clap	<		
39	Standard 1 Snare 2	Standard 2 Snare 2	Standard 3 Snare 2	Room Snare 2	Hip-Hop Snare 2		
40	Low Tom 2	<	<	Room Low Tom 2	TR-909 Low Tom 2		
	Closed Hi-Hat	[EXC1] Closed Hi-Hat [EXC1]	[RND] Closed Hi-Hat [EXC1]	Closed Hi-Hat 3 [EXC1]	Room Closed Hi-Hat [EXC1]		
41	Low Tom 1	*	<	Room Low Tom 1	TR-909 Low Tom 1		
43	Pedal Hi-Hat	[EXC1] Pedal Hi-Hat [EXC1]	[RND] Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]		
44	Mid Tom 2	*	<	Room Mid Tom 2 *	TR-909 Mid Tom 2		
45	Open Hi-Hat	[EXC1] Open Hi-Hat [EXC1]	[RND] Open Hi-Hat [EXC1]	Open Hi-Hat 3 [EXC1]	Room Open Hi-Hat [EXC1]		
46	Mid Tom 1	*	<	Room Mid Tom 1 *	TR-909 Mid Tom 1		
47	High Tom 2	*	<	Room High Tom 2 *	TR-909 High Tom 2		
	Crash Cymbal1	<	[RND] Crash Cymbal	<	TR-909 Crash Cymbal		
C3 48	High Tom 1	*	<	Room High Tom 1 *	TR-909 High Tom 1		
50	Ride Cymbal 1	<	[RND] Ride Cymbal 1 *	<	<		
51	Chinese Cymbal	<	<	<	Reverse Cymbal		
52	Ride Bell	<	[RND] Ride Bell 1	<	<		
	Tambourine	<	<	<	Shake Tambourine		
53	Splash Cymbal	<	<	<	<		
54	Cowbell	<	<	<	TR-808 Cowbell		
56	Crash Cymbal 2	<	<	<	<		
57	Vibra-slap	<	<	<	<		
58	Ride Cymbal 2	<	[RND] Ride Cymbal 2 *	<	<		
59	High Bongo	<	<	<	<		
C4 60	Low Bongo	<	<	<	<		
61	Mute High Conga	<	<	<	<		
62	Open High Conga	<	<	<	<		
63	Low Conga	<	<	<	<		
64	High Timbale	<	<	<	<		
	Low Timbale	<	<	<	<		
65	High Agogo	<	<	<	<		
67	Low Agogo	<	<	<	<		
68	Cabasa	<	<	<	<		
69	Maracas	<	<	<	<	TR-808 Maracas	
70	Short High Whistle	[EXC2] <	<	<	<		
71	Long Low Whistle	[EXC2] <	<	<	<		
	Short Guiro	[EXC3] <	<	<	<		
C5 72	Long Guiro	[EXC3] <	<	<	<	CR-78 Guiro [EXC3]	
74	Claves	<	<	<	<	TR-808 Claves	
75	High Wood Block	<	<	<	<	<	
76	Low Wood Block	<	<	<	<	<	
	Mute Cuica	[EXC4] <	<	<	<	High Hoo [EXC4]	
77	Open Cuica	[EXC4] <	<	<	<	Low Hoo [EXC4]	
79	Mute Triangle	[EXC5] <	<	<	<	Mute Triangle	
80	Open Triangle	[EXC5] <	<	<	<	Open Triangle	
81	Shaker	<	<	<	<	TR-626 Shaker	
82	Jingle Bell	<	<	<	<	<	
83	Bell Tree	Bar Chimes	<	<	<	<	
	Castanets	<	<	<	<	<	
C6 84	Mute Surdo	[EXC6] <	<	<	<	<	
86	Open Surdo	[EXC6] <	<	<	<	<	
87	Applause 2	* <	<	<	<	Small Club 1 *	
88	---	---	---	---	---	---	---
89	---	---	---	---	---	---	---
90	---	---	---	---	---	---	---
91	---	---	---	---	---	---	---
92	---	---	---	---	---	---	---
93	---	---	---	---	---	---	---
94	---	---	---	---	---	---	---
95	---	---	---	---	---	---	---
C7 96	---	---	---	---	---	---	---

## SC-88Pro Drum Set (2)

	PC 11 JUNGLE	PC 12 TECHNO	PC 17 POWER	PC 25 ELECTRONIC	[88]	PC 26 TR-808
	22	<	<	<	<	<
23	<	<	<	<	<	<
C1 24	<	<	<	<	<	<
	25	<	<	<	<	<
26	<	<	<	Finger Snap 2	<	<
27	<	<	<	<	<	<
28	<	<	<	<	<	<
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	<	[EXC7] Scratch Push 2	[EXC7]	Scratch Push 2 [EXC7]
	30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	<	[EXC7] Scratch Pull 2	[EXC7] Scratch Pull 2 [EXC7]
31	<	<	<	<	<	<
	32	<	<	<	<	<
33	<	<	<	<	<	<
	34	<	<	<	<	<
35	Jungle Kick 2	Techno Kick 2	Power Kick 2	Electric Kick 2		TR-808 Kick 2
C2 36	Jungle Kick 1	Techno Kick 1	Power Kick 1	Electric Kick 1 *		TR-808 Kick 1
	37	TR-808 Rim Shot	<	<		TR-808 Rim Shot
38	Jungle Snare 1	Techno Snare 1	Power Snare 1	Electric Snare 1		TR-808 Snare 1
	39	Hand Clap 2	TR-707 Hand Clap	Hand Clap		Hand Clap
40	Jungle Snare 2	Techno Snare 2	Power Snare 2	Electric Snare 2		TR-808 Snare 2
41	TR-909 Low Tom 2	TR-808 Low Tom 2 *	Power Low Tom 2 *	Electric Low Tom 2 *		TR-808 Low Tom 2 *
	42	TR-606 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]	<	Closed Hi-Hat 2 [EXC1]	TR-808 Closed Hi-Hat 2 [EXC1]
43	TR-909 Low Tom 1	TR-808 Low Tom 1 *	Power Low Tom 1 *	Electric Low Tom 1 *		TR-808 Low Tom 1 *
	44	Jungle Hi-Hat [EXC1]	CR-78 Closed Hi-Hat [EXC1]	<	Pedal Hi-Hat [EXC1]	TR-808 Closed Hi-Hat [EXC1]
45	TR-909 Mid Tom 2	TR-808 Mid Tom 2 *	Power Mid Tom 2 *	Electric Mid Tom 2 *		TR-808 Mid Tom 2 *
	46	TR-606 Open Hi-Hat [EXC1]	TR-909 Open Hi-Hat [EXC1]	<	Open Hi-Hat 2 [EXC1]	TR-808 Open Hi-Hat [EXC1]
47	TR-909 Mid Tom 1	TR-808 Mid Tom 1 *	Power Mid Tom 1 *	Electric Mid Tom 1 *		TR-808 Mid Tom 1 *
C3 48	TR-909 High Tom 2	TR-808 High Tom 2 *	Power High Tom 2 *	Electric High Tom 2 *		TR-808 High Tom 2 *
	49	TR-808 Crash Cymbal	TR-909 Crash Cymbal	<	<	TR-808 Crash Cymbal
50	TR-909 High Tom 1	TR-808 High Tom 1 *	Power High Tom 1 *	Electric High Tom 1 *		TR-808 High Tom 1 *
	51	<	<	<	<	TR-606 Ride Cymbal
52	Reverse Cymbal	Reverse Cymbal	<	Reverse Cymbal	<	<
53	<	<	<	<	<	<
	54	Shake Tambourine	Shake Tambourine	<	<	CR-78 Tambourine
55	<	<	<	<	<	<
	56	TR-808 Cowbell	TR-808 Cowbell	<	<	TR-808 Cowbell
57	<	TR-909 Crash Cymbal	<	<	<	TR-909 Crash Cymbal
	58	<	<	<	<	<
59	<	<	<	<	<	Ride Cymbal 2
C4 60	<	CR-78 High Bongo	<	<	<	CR-78 High Bongo
	61	<	CR-78 Low Bongo	<	<	CR-78 Low Bongo
62	<	TR-808 High Conga	<	<	<	TR-808 High Conga
	63	<	TR-808 Mute Conga	<	<	TR-808 Mute Conga
64	<	TR-808 Low Conga	<	<	<	TR-808 Low Conga
	65	<	<	<	<	<
66	<	<	<	<	<	<
67	<	<	<	<	<	<
	68	<	<	<	<	<
69	<	<	<	<	<	<
	70	TR-808 Maracas	TR-808 Maracas	<	<	TR-808 Maracas
71	<	<	<	<	<	<
C5 72	<	<	<	<	<	<
	73	<	<	<	<	<
74	CR-78 Guiro [EXC3]	CR-78 Guiro [EXC3]	<	<	<	CR-78 Guiro [EXC3]
	75	TR-808 Claves	TR-808 Claves	<	<	TR-808 Claves
76	<	<	<	<	<	<
	77	<	<	<	<	<
77	High Hoo [EXC4]	High Hoo [EXC4]	<	<	<	High Hoo [EXC4]
	78	Low Hoo [EXC4]	Low Hoo [EXC4]	<	<	Low Hoo [EXC4]
79	Mute Triangle	Mute Triangle	<	<	<	Mute Triangle
	80	Open Triangle	Open Triangle	<	<	Open Triangle
81	TR-626 Shaker	TR-626 Shaker	<	<	<	TR-626 Shaker
82	<	<	<	<	<	<
C6 84	<	<	<	<	<	<
	85	<	<	<	<	<
86	<	<	<	<	<	<
	87	<	<	<	<	<
88	Small Club 1 *	<	<	Small Club 1 *		Small Club 1 *
89	---	---	---	---	---	---
	90	---	---	---	---	---
91	---	---	---	---	---	---
	92	---	---	---	---	---
93	---	---	---	---	---	---
	94	---	---	---	---	---
95	---	---	---	---	---	---
C7 96	---	---	---	---	---	---

**SC-88Pro Drum Set (3)**

	PC 27 DANCE	PC 28 CR-78	PC 29 TR-606	PC 30 TR-707
22	<-	<-	<-	<-
23	<-	<-	<-	<-
C1 24	<-	<-	<-	<-
25	<-	<-	<-	<-
26	Finger Snap 2	<-	<-	<-
27	<-	<-	<-	<-
28	<-	<-	<-	<-
29	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]	Scratch Push 2 [EXC7]
30	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]	Scratch Pull 2 [EXC7]
31	<-	<-	<-	<-
32	<-	<-	<-	<-
33	<-	<-	<-	<-
34	<-	<-	<-	<-
35	TR-909 Comp Kick	CR-78 Kick 2	CR-78 Kick 2	TR-707 Kick 2
C2 36	Electric Kick 2	CR-78 Kick 1	TR-606 Kick 1	TR-707 Kick 1
37	<-	CR-78 Rim Shot	CR-78 Rim Shot	TR-707 Rim Shot
38	House Snare	CR-78 Snare 1	TR-606 Snare 1	TR-707 Snare 1
39	<-	TR-707 Hand Clap	TR-707 Hand Clap	TR-707 Hand Clap
40	Dance Snare 2	CR-78 Snare 2	TR-606 Snare 2	TR-707 Snare 2
41	Electric Low Tom 2 *	CR-78 Low Tom 2 *	TR-606 Low Tom 2	TR-707 Low Tom 2 *
42	CR-78 Closed Hi-Hat [EXC1]	CR-78 Closed Hi-Hat [EXC1]	TR-606 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]
43	Electric Low Tom 1 *	CR-78 Low Tom 1 *	TR-606 Low Tom 1	TR-707 Low Tom 1 *
44	TR-808 Closed Hi-Hat 2 [EXC1]	TR-606 Closed Hi-Hat [EXC1]	TR-606 Closed Hi-Hat [EXC1]	TR-707 Closed Hi-Hat [EXC1]
45	Electric Mid Tom 2 *	CR-78 Mid Tom 2 *	TR-606 Mid Tom 2	TR-707 Mid Tom 2 *
46	CR-78 Open Hi-Hat [EXC1]	CR-78 Open Hi-Hat [EXC1]	TR-606 Open Hi-Hat [EXC1]	TR-707 Open Hi-Hat [EXC1]
47	Electric Mid Tom 1 *	CR-78 Mid Tom 1 *	TR-606 Mid Tom 1	TR-707 Mid Tom 1 *
C3 48	Electric High Tom 2 *	CR-78 High Tom 2 *	TR-606 High Tom 2	TR-707 High Tom 2 *
49	TR-808 Crash Cymbal	TR-808 Crash Cymbal	TR-808 Crash Cymbal	TR-909 Crash Cymbal
50	Electric High Tom 1 *	CR-78 High Tom 1 *	TR-606 High Tom 1	TR-707 High Tom 1 *
51	TR-606 Ride Cymbal	TR-606 Ride Cymbal	TR-606 Ride Cymbal	TR-909 Ride Cymbal *
52	Reverse Cymbal	<-	<-	<-
53	<-	<-	<-	<-
54	Shake Tambourine	CR-78 Tambourine	CR-78 Tambourine	Tambourine 2
55	<-	<-	<-	<-
56	TR-808 Cowbell	CR-78 Cowbell	CR-78 Cowbell	TR-808 Cowbell
57	<-	TR-909 Crash Cymbal	TR-909 Crash Cymbal	<-
58	<-	<-	<-	<-
59	<-	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge
C4 60	<-	CR-78 High Bongo	CR-78 High Bongo	<-
61	<-	CR-78 Low Bongo	CR-78 Low Bongo	<-
62	<-	TR-808 High Conga	TR-808 High Conga	<-
63	<-	TR-808 Mute Conga	TR-808 Mute Conga	<-
64	<-	TR-808 Low Conga	TR-808 Low Conga	<-
65	<-	<-	<-	<-
66	<-	<-	<-	<-
67	<-	<-	<-	<-
68	<-	<-	<-	<-
69	<-	<-	<-	<-
70	<-	CR-78 Maracas	CR-78 Maracas	TR-808 Maracas
71	<-	<-	<-	<-
C5 72	<-	<-	<-	<-
73	<-	<-	<-	<-
74	<-	CR-78 Guiro [EXC3]	CR-78 Guiro [EXC3]	<-
75	<-	CR-78 Claves	CR-78 Claves	<-
76	<-	<-	<-	<-
77	<-	<-	<-	<-
78	High Hoo [EXC4]	High Hoo [EXC4]	High Hoo [EXC4]	High Hoo [EXC4]
79	Low Hoo [EXC4]	Low Hoo [EXC4]	Low Hoo [EXC4]	Low Hoo [EXC4]
80	Mute Triangle	CR-78 Metallic Beat 1 [EXC5]	CR-78 Metallic Beat 1 [EXC5]	Mute Triangle
81	Open Triangle	CR-78 Metallic Beat 2 [EXC5]	CR-78 Metallic Beat 2 [EXC5]	Open Triangle
82	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker	TR-626 Shaker
83	<-	<-	<-	<-
C6 84	<-	<-	<-	<-
85	<-	<-	<-	<-
86	<-	<-	<-	<-
87	<-	<-	<-	<-
88	Small Club 1 *	Small Club 1 *	Small Club 1 *	Small Club 1 *
89	---	---	---	---
90	---	---	---	---
91	---	---	---	---
92	---	---	---	---
93	---	---	---	---
94	---	---	---	---
95	---	---	---	---
C7 96	---	---	---	---

## SC-88Pro Drum Set (4)

	PC 31 TR-909	PC 33 JAZZ	PC 41 BRUSH	PC 49 ORCHESTRA	[88]
	22	<	<	<	
23	<	<	<	<	
C1 24	<	<	<	<	
	25	<	<	<	
26	<	Finger Snap 2	Finger Snap 2	Finger Snap	
	27	<	<	Closed Hi-Hat 2	[EXC1]
28	<	<	<	Pedal Hi-Hat	[EXC1]
	29	Scratch Push 2 [EXC7]	<	Open Hi-Hat 2	[EXC1]
	30	Scratch Pull 2 [EXC7]	<	Ride Cymbal 1	
31	<	<	<	<	
	32	<	<	<	
33	<	<	<	<	
	34	<	<	<	
35	TR-909 Kick 2	Jazz Kick 2	Jazz Kick 2	Jazz Kick 1	
C2 36	TR-909 Kick 1 *	Jazz Kick 1	Jazz Kick 1	Concert BD 1	
	37	TR-909 Rim	<	<	
38	TR-909 Snare 1	Jazz Snare 1	Brush Tap 1	Concert SD	
	39	<	Brush Slap 1	Castanets	
40	TR-909 Snare2	Jazz Snare 2	Brush Swirl 1	Concert SD	
	41	TR-909 Low Tom 2	<	Brush Low Tom 2 *	Timpani F
	42	TR-707 Closed Hi-Hat [EXC1]	Closed Hi-Hat 2 [EXC1]	Brush Closed Hi-Hat [EXC1]	Timpani F#
43	TR-909 Low Tom 1	<	Brush Low Tom 1 *	Timpani G	
	44	TR-707 Closed Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Pedal Hi-Hat [EXC1]	Timpani G#
45	TR-909 Mid Tom 2	<	Brush Mid Tom 2 *	Timpani A	
	46	TR-909 Open Hi-Hat [EXC1]	Open Hi-Hat 2 [EXC1]	Brush Open Hi-Hat [EXC1]	Timpani A#
47	TR-909 Mid Tom 1	<	Brush Mid Tom 1 *	Timpani B	
C3 48	TR-909 High Tom 2	<	Brush High Tom 2 *	Timpani c	
	49	TR-909 Crash Cymbal	<	Brush Crash Cymbal	Timpani c#
50	TR-909 High Tom 1	<	Brush High Tom 1 *	Timpani d	
	51	TR-909 Ride Cymbal *	Ride Cymbal Inner	Ride Cymbal Inner	Timpani d#
52	<	<	<	Timpani e	
	53	<	Brush Ride Bell	Timpani f	
	54	Tambourine 2	<	<	
55	<	<	<	<	
	56	TR-808 Cowbell	<	<	
57	<	<	<	Concert Cymbal 2	
	58	<	<	<	
59	Ride Cymbal Edge	Ride Cymbal Edge	Ride Cymbal Edge	Concert Cymbal 1	
C4 60	<	<	<	<	
	61	<	<	<	
62	<	<	<	<	
	63	<	<	<	
64	<	<	<	<	
	65	<	<	<	
	66	<	<	<	
67	<	<	<	<	
	68	<	<	<	
69	<	<	<	<	
	70	TR-808 Maracas	<	<	
71	<	<	<	<	
	72	<	<	<	
C5 73	<	<	<	<	
	74	CR-78 Guiro [EXC3]	<	<	
	75	TR-808 Claves	<	<	
76	<	<	<	<	
	77	<	<	<	
	78	High Hoo [EXC4]	<	<	
79	Low Hoo [EXC4]	<	<	<	
	80	Mute Triangle	<	<	
81	Open Triangle	<	<	<	
	82	TR-626 Shaker	<	<	
83	<	<	<	<	
	84	<	<	<	
C6 85	<	<	<	<	
	86	<	<	<	
	87	<	<	<	
88	<	Applause *	Applause *	Applause *	*
89	---	---	---	---	---
	90	---	---	---	---
91	---	---	---	---	---
	92	---	---	---	---
93	---	---	---	---	---
	94	---	---	---	---
95	---	---	---	---	---
C7 96	---	---	---	---	---

## SC-88Pro Drum Set (5)

	PC 50 ETHNIC	[88]	PC 51 KICK & SNARE	[88]	PC 53 ASIA	PC 54 CYMBAL&CLAPS
	25	Finger Snap	CR-78 Kick 1		Gamelan Gong 1	---
26		Tambourine	CR-78 Kick 2		Gamelan Gong 2	---
	27	Castanets	TR-606 Kick		Gamelan Gong 3	---
28		Crash Cymbal 1	TR-707 Kick		Gamelan Gong 4	---
		Snare Roll	TR-808 Kick 1		Gamelan Gong 5	---
29		Concert SD	TR-909 Kick 1		Gamelan Gong 6	---
31		Concert Cymbal	TR-909 Kick 2	*	Gamelan Gong 7	---
	32	Concert BD 1	Hip-Hop Kick 2		Gamelan Gong 8	Reverse Open Hi-Hat
33		Jingle Bell	Hip-Hop Kick 1		Gamelan Gong 9	Reverse Closed Hi-Hat 1
	34	Bell Tree	Jungle Kick 2		Gamelan Gong 10	Reverse Closed Hi-Hat 2
35		Bar Chimes	Jungle Kick 1		Gender 1	Jungle Hi-Hat [EXC1]
C2		Wadaiko	Techno Kick 2		Gender 2	[55] Closed Hi-Hat [EXC1]
	37	Wadaiko Rim	Techno Kick 1		Gender 3	[88] Closed Hi-Hat 2 [EXC1]
38		Shime Taiko	Standard 1 Kick 2		Gender 4	[88] Closed Hi-Hat 3 [EXC1]
	39	Atarigane	Standard 1 Kick 1		Gender 5	Closed Hi-Hat 4 [EXC1]
40		Hyoushigi	[88] Standard 1 Kick 1		Bonang 1	Closed Hi-Hat [EXC1]
		Ohkawa	[88] Standard 1 Kick 2		Bonang 2	TR-707 Closed Hi-Hat [EXC1]
41		42 High Kotsuzumi	[88] Standard 2 Kick 1		Bonang 3	TR-606 Closed Hi-Hat [EXC1]
43		Low Kotsuzumi	[88] Standard 2 Kick 2		Bonang 4	[88] TR-808 Closed Hi-Hat [EXC1]
	44	Ban Gu	[55] Kick Drum 1		Bonang 5	TR-808 Closed Hi-Hat [EXC1]
45		Big Gong	[55] Kick Drum 2		Rama Cymbal Low	CR-78 Closed Hi-Hat [EXC1]
	46	Small Gong	[88] Soft Kick		Rama Cymbal High	[55] Pedal Hi-Hat [EXC1]
47		Bend Gong	[88] Jazz Kick 1		Sagat Open	[88] Pedal Hi-Hat [EXC1]
		Thai Gong	[88] Jazz Kick 2		Sagat Closed	[EXC7] Pedal Hi-Hat [EXC1]
C3		49 Rama Cymbal	[55] Concert BD 1		Jaws Harp	Half-Open Hi-Hat 1 [EXC1]
50		Gamelan Gong	[88] Room Kick 1		Wadaiko	Half-Open Hi-Hat 2 [EXC1]
	51	Udo Short	[EXC1] [88] Room Kick 2		Wadaiko Rim	[55] Open Hi-Hat [EXC1]
52		Udo Long	[EXC1] [88] Power Kick1		Small Taiko	[88] Open Hi-Hat 2 [EXC1]
		Udo Slap	[88] Power Kick2		Shimedaiko	[88] Open Hi-Hat 3 [EXC1]
53		54 Bendir	[88] Electric Kick 2		Atarigane	Open Hi-Hat 2 [EXC1]
55		Req Dum	[88] Electric Kick 1	*	Hyoushigi	TR-909 Open Hi-Hat [EXC1]
	56	Req Tik	[55] Electric Kick		Ohkawa	TR-707 Open Hi-Hat [EXC1]
57		Tabla Te	[88] TR-808 Kick		High Kotsuzumi	TR-606 Open Hi-Hat [EXC1]
	58	Tabla Na	[88] TR-909 Kick		Low Kotsuzumi	[88] TR-808 Open Hi-Hat [EXC1]
59		Tabla Tun	[88] Dance Kick		Yyoo Dude	TR-808 Open Hi-Hat [EXC1]
C4		Tabla Ge	[88] Standard 1 Snare 1		Buk	CR-78 Open Hi-Hat [EXC1]
	61	Tabla Ge Hi	[88] Standard 1 Snare 2		Buk Rim	Crash Cymbal 1 [EXC3]
62		Talking Drum	[88] Standard 2 Snare 1		Gengari p	[EXC1] Crash Cymbal 2 [EXC4]
	63	Bend Talking Drum	[88] Standard 2 Snare 2		Gengari Mute Low	[EXC1] Crash Cymbal 3
64		Caxixi	[55] Tight Snare		Gengari f	[EXC2] Brush Crash Cymbal
65		Djembe	[55] Concert Snare		Gengari Mute High	[EXC2] Hard Crash Cymbal *
	66	Djembe Rim	[88] Jazz Snare 1		Gengari Samll	TR-909 Crash Cymbal
67		Timbales Low	[88] Jazz Snare 2		Jang-Gu Che	TR-808 Crash Cymbal
	68	Timbales Paila	[88] Room Snare 1		Jang-Gu Kun	Mute Crash Cymbal 1 [EXC3]
69		Timbales High	[88] Room Snare 2		Jang-Gu Rim	Mute Crash Cymbal 2 [EXC4]
	70	Cowbell	[88] Power Snare 1		Jing p	[EXC3] Reverse Crash Cymbal 1
71		High Bongo	[88] Power Snare 2		Jing f	[EXC3] Reverse Crash Cymbal 2
C5		Low Bongo	[55] Gated Snare		Jing Mute	[EXC3] Reverse Crash Cymbal 3
	73	Mute High Conga	[88] Dance Snare 1		Asian Gong	Reverse TR-909 Crash Cymbal
74		Open High Conga	[88] Dance Snare 2		Big Gong	[55] Splash Cymbal
	75	Mute Low Conga	[88] Disco Snare		Small Gong	Splash Cymbal
76		Conga Slap	[88] Electric Snare 2		Pai Ban	[88] Ride Bell
		Open Low Conga	[88] House Snare	*	Ban Gu	[88] Brush Ride Bell
77		78 Conga Slide	[55] Electric Snare 1		Tang Gu	[EXC4] [88] Ride Cymbal 1
79		Mute Pandiero	[88] Electric Snare 3	*	Tang Gu Mute	[EXC4] [88] Ride Cymbal 2
	80	Open Pandiero	[88] TR-808 Snare 1		Shou Luo	[88] Brush Ride Cymbal
81		Open Surdo	[EXC2] [88] TR-808 Snare 2	*	Bend Gong	Ride Cymbal Low Inner
	82	Mute Surdo	[EXC2] [88] TR-909 Snare 1		Hu Yin Luo Low	[88] Ride Cymbal Mid Inner
83		Tamborim	[88] TR-909 Snare 2	*	Hu Yin Luo Mid	[EXC5] Ride Cymbal High Inner
C6		High Agogo	[88] Brush Tap 1		Hu Yin Luo Mid 2	[EXC5] Ride Cymbal Low Edge
	85	Low Agogo	[88] Brush Tap 2		Hu Yin Luo High	[EXC6] Ride Cymbal Mid Edge
86		Shaker	[88] Brush Slap 1		Hu Yin Luo High 2	[EXC6] Ride Cymbal High Edge
	87	High Whistle	[EXC3] [88] Brush Slap 2		Nao Bo	TR-606 Ride Cymbal
88		Low Whistle	[EXC3] [88] Brush Slap 3		Xiao Bo	TR-808 Ride Cymbal
		Mute Cuica	[EXC4] [88] Brush Swirl 1		---	Chinese Cymbal
89		Open Cuica	[EXC4] [88] Brush Swirl 2		---	Chinese Cymbal 2
91		Mute Triangle	[EXC5] [88] Brush Long Swirl		---	[55] Hand Clap
	92	Open Triangle	[EXC5] Standard 1 Snare 1		---	[88] Hand Clap 2
93		Short Guiro	[EXC6] Standard 1 Snare 2		---	[88] Hand Clap
	94	Long Guiro	[EXC6] Standard 1 Snare 3		---	Hand Clap
95		Cabasa Up	Rap Snare		---	Hand Clap 2
C7		Cabasa Down	Hip-Hop Snare 2		---	TR-707 Hand Clap
	97	Claves	Jungle Snare 1		---	---
98		High Wood Block	Jungle Snare 2		---	---
	99	Low Wood Block	Techno Snare 1		---	---

## SC-88Pro Drum Set (6)

	PC 57 SFX	PC 58 RHYTHM FX	PC 59 RHYTHM FX 2		
21	MC-500 Beep 1	---	---		
22	MC-500 Beep 2	---	---		
23	Guitar Slide	---	---		
	Guitar Wah	---	---		
C1 24	Guitar Slap	---	---		
26	Chord Stroke Down	---	---		
27	Chord Stroke Up	---	---		
28	Biwa FX	*	---		
	Phonograph Noise	---	---		
29	Tape Rewind	---	---		
31	Scratch Push 2	[EXC1] ---	---		
32	Scratch Pull 2	[EXC1] ---	---		
33	Cutting Noise 2 Up	---	---		
34	Cutting Noise 2 Down	---	---		
35	Distortion Guitar Cutting Noise Up	---	---		
	Distortion Guitar Cutting Noise Down	Reverse Kick 1	Reverse TR-707 Kick 1		
C2 36	Bass Slide	Reverse Concert Bass Drum	Reverse TR-909 Kick 1		
38	Pick Scrape	Reverse Power Kick1	Reverse Hip-Hop Kick 1		
39	High Q	Reverse Electric Kick 1	Reverse Jungle Kick 2		
40	Slap	Reverse Snare 1	Reverse Techno Kick 2		
	Scratch Push	Reverse Snare 2	Reverse TR-606 Snare 2		
41	Scratch Pull	[EXC7] Reverse Standard 1 Snare 1	Reverse CR-78 Snare 1		
43	Sticks	Reverse Tight Snare	Reverse CR-78 Snare 2		
44	Square Click	Reverse Dance Snare	Reverse Jungle Snare 2		
45	Metronome Click	Reverse 808 Snare	Reverse Techno Snare 2		
46	Metronome Bell	Reverse Tom 1	Reverse TR-707 Snare		
47	Guitar Fret Noise	Reverse Tom 2	Reverse TR-606 Snare 1		
C3 48	Guitar Cutting Noise Up	Reverse Sticks	Reverse TR-909 Snare 1		
49	Guitar Cutting Noise Down	Reverse Slap	Reverse Hip-Hop Snare 2		
50	String Slap of Double Bass	Reverse Cymbal 1	Reverse Jungle Snare 1		
51	Flute Key Click Noise	Reverse Cymbal 2	Reverse House Snare		
52	Laughing	Reverse Open Hi-Hat	Reverse Closed Hi-Hat		
	Screaming	Reverse Ride Cymbal	Reverse TR-606 Closed Hi-Hat		
53	Punch	Reverse CR-78 Open Hi-Hat	Reverse TR-707 Closed Hi-Hat		
54	Heart Beat	Reverse Closed Hi-Hat	Reverse TR-808 Closed Hi-Hat		
55	Footsteps 1	Reverse Gong	Reverse Jungle Hi-Hat		
56	Footsteps 2	Reverse Bell Tree	Reverse Tambourine 2		
57	Applause	*	Reverse Shake Tambourine		
59	Door Creaking	Reverse Bendir	Reverse TR-808 Open Hi-Hat		
C4 60	Door	Reverse Gun Shot	Reverse TR-707 Open Hi-Hat		
61	Scratch	Reverse Scratch	Reverse Open Hi-Hat		
62	Wind Chimes	*	Reverse Laser Gun		
63	Car - Engine	Key Click	Reverse Hu Yin Luo		
64	Car - Stop	Techno Thip	Reverse TR-707 Crash Cymbal *		
	Car - Passing	Pop Drop	Voice One		
65	Car - Crash	*	Woody Slap		
	Siren	Distortion Kick	*	Reverse Voice One	
67	Train	Syn. Drops	Voice Two		
68	Jetplane	*	Reverse Voice Two		
69	Helicopter	Reverse Hi Q	Voice Three		
70	Starship	Pipe	Reverse Voice Three		
71	Gun Shot	Ice Block	Voice Tah		
C5 72	Machine Gun	Digital Tambourine	*	Reverse Voice Tah	
73	Laser Gun	Alias	Voice Ou		
74	Explosion	Modulated Bell	Voice Au		
75	Dog	Spark	Voice Whey		
76	Horse-Gallop	Metallic Percussion	Frog Vpocce *		
77	Birds	Velocity Noise FX	Reverse Yyoo Dude		
78	Rain	Stereo Noise Clap	*	Douby	
79	Thunder	Swish	Reverse Douby		
80	Wind	Slappy	*	Baert High	
81	Seashore	Voice Ou	Baert Low		
82	Stream	Voice Au	Bounce		
83	Bubble	Hoo	Reverse bounce		
C6 84	Kitty	*	Tape Stop 1	*	Distortion Knock
85	Bird 2	Tape Stop 2	*	Guitar Slide	
86	Growl	Missile	*	Sub Marine	
87	<	Space Birds	Noise Attack		
88	Telephone 1	Flying Monster	Space Worms		
89	Telephone 2	---	Emergency !	*	
90	Small Club 1	---	Calculating...	*	
91	Small Club 2	*	Saw LFO		
92	Applause Wave	*	---		
93	Eruption	*	---		
94	Big Shot	*	---		
C7 95	Percussion Bang	*	---		





**SC-88 Drum Set (1)**

	PC 1 STANDARD 1	PC 2 STANDARD 2	PC 9 ROOM	PC 17 POWER	PC 25 ELECTRONIC
25	Snare Roll	<	<	<	<
26	Finger Snap	<	<	<	<
27	High Q	<	<	<	<
28	Slap	<	<	<	<
29	Scratch Push [EXC7]	<	<	<	Scratch Push2 [EXC7]
30	Scratch Pull [EXC7]	<	<	<	Scratch Pull2 [EXC7]
31	Sticks	<	<	<	<
32	Square Click	<	<	<	<
33	Metronome Click	<	<	<	<
34	Metronome Bell	<	<	<	<
35	Standard 1 Kick 2	Standard 2 Kick 2	Room Kick 2	Power Kick 2	Electric Kick 2
C2 36	Standard 1 Kick 1	Standard 2 Kick 1	Room Kick 1	Power Kick 1	Electric Kick 1
37	Side Stick	<	<	<	<
38	Standard 1 Snare 1	Standard 2 Snare 1	Room Snare 1	Power Snare 1	Electric Snare 1
39	Hand Clap	<	<	<	<
40	Standard 1 Snare 2	Standard 2 Snare 2	Room Snare 2	Power Snare 2	Electric Snare 2
41	Low Tom2 *	<	Room Low Tom2 *	Power Low Tom2 *	Electric Low Tom2 *
42	Closed Hi-hat1 [EXC1]	Closed Hi-hat2 [EXC1]	Closed Hi-hat3 [EXC1]	Closed Hi-hat3 [EXC1]	Closed Hi-hat2 [EXC1]
43	Low Tom1 *	<	Room Low Tom1 *	Power Low Tom1 *	Electric Low Tom1 *
44	Pedal Hi-hat [EXC1]	<	<	<	<
45	Mid Tom2 *	<	Room Mid Tom2 *	Power Mid Tom2 *	Electric Mid Tom2 *
46	Open Hi-hat1 [EXC1]	Open Hi-hat2 [EXC1]	Open Hi-hat3 [EXC1]	Open Hi-hat3 [EXC1]	Open Hi-hat2 [EXC1]
47	Mid Tom1 *	<	Room Mid Tom1 *	Power Mid Tom1 *	Electric Mid Tom1 *
C3 48	High Tom2 *	<	Room Hi Tom2 *	Power Hi Tom2 *	Electric Hi Tom2 *
49	Crash Cymbal1	<	<	<	<
50	High Tom1 *	<	Room Hi Tom1 *	Power Hi Tom1 *	Electric Hi Tom1 *
51	Ride Cymbal1	<	<	<	<
52	Chinese Cymbal	<	<	<	Reverse Cymbal
53	Ride Bell	<	<	<	<
54	Tambourine	<	<	<	<
55	Splash Cymbal	<	<	<	<
56	Cowbell	<	<	<	<
57	Crash Cymbal2	<	<	<	<
58	Vibra-slap	<	<	<	<
59	Ride Cymbal2	<	<	<	<
C4 60	High Bongo	<	<	<	<
61	Low Bongo	<	<	<	<
62	Mute High Conga	<	<	<	<
63	Open High Conga	<	<	<	<
64	Low Conga	<	<	<	<
65	High Timbale	<	<	<	<
66	Low Timbale	<	<	<	<
67	High Agogo	<	<	<	<
68	Low Agogo	<	<	<	<
69	Cabasa	<	<	<	<
70	Maracas	<	<	<	<
71	Short Hi Whistle [EXC2]	<	<	<	<
C5 72	Long Low Whistle [EXC2]	<	<	<	<
73	Short Guiro [EXC3]	<	<	<	<
74	Long Guiro [EXC3]	<	<	<	<
75	Claves	<	<	<	<
76	High Wood Block	<	<	<	<
77	Low Wood Block	<	<	<	<
78	Mute Cuica [EXC4]	<	<	<	<
79	Open Cuica [EXC4]	<	<	<	<
80	Mute Triangle [EXC5]	<	<	<	<
81	Open Triangle [EXC5]	<	<	<	<
82	Shaker	<	<	<	<
83	Jingle Bell	<	<	<	<
C6 84	Bell Tree	Bar Chimes	<	<	<
85	Castanets	<	<	<	<
86	Mute Surdo [EXC6]	<	<	<	<
87	Open Surdo [EXC6]	<	<	<	<
88	----	----	----	----	----
89	----	----	----	----	----
90	----	----	----	----	----
91	----	----	----	----	----
92	----	----	----	----	----
93	----	----	----	----	----
94	----	----	----	----	----
95	----	----	----	----	----
C7 96	----	----	----	----	----
97	----	----	----	----	----
98	----	----	----	----	----
99	----	----	----	----	----

**SC-88 Drum Set (2)**

	PC 26 TR-808/909	PC 27 DANCE	PC 33 JAZZ	PC 41 BRUSH	PC 49 ORCHESTRA
	25	<	<	<	<
26	<	<	<	<	<
	27	<	<	<	Closed Hi-hat2 [EXC1]
28	<	<	<	<	Pedal Hi-hat [EXC1]
	Scratch Push2	[EXC7] Scratch Push2	[EXC7] <	<	Open Hi-hat2 [EXC1]
29	30	Scratch Pull2 [EXC7]	Scratch Pull2 [EXC7] <	<	Ride Cymbal1
31	<	<	<	<	<
	32	<	<	<	<
33	<	<	<	<	<
	34	<	<	<	<
35	909 Bass Drum	Dance Kick	Jazz Kick 2	Jazz Kick 2	Jazz Kick 1
C2	36	808 Bass Drum	Electric Kick 2	Jazz Kick 1	Concert BD1
	37	808 Rim Shot	<	<	<
38	808 Snare 1	Dance Snare 1	Jazz Snare 1	Brush Tap1	Concert SD
	39	<	Hand Clap2	Brush Slap1	Castanets
40	909 Snare 1	Dance Snare 2	Jazz Snare 2	Brush Swirl1	Concert SD
41	808 Low Tom2 *	Electric Low Tom2 *	<	Brush Low Tom2 *	Timpani F
	42	808 CHH [EXC1]	CR-78 CHH [EXC1]	Closed Hi-hat2 [EXC1]	Brush Closed Hi-hat [EXC1] Timpani F#
43	808 Low Tom1 *	Electric Low Tom1 *	<	Brush Low Tom1 *	Timpani G
	44	808 CHH [EXC1]	808 CHH [EXC1]	<	Timpani G#
45	808 Mid Tom2 *	Electric Mid Tom2 *	<	Brush Mid Tom2 *	Timpani A
	46	808 OHH [EXC1]	CR-78 OHH [EXC1]	Open Hi-hat2 [EXC1]	Brush Open Hi-hat [EXC1] Timpani A#
47	808 Mid Tom1 *	Electric Mid Tom1 *	<	Brush Mid Tom1 *	Timpani B
C3	48	808 Hi Tom2 *	Electric High Tom2 *	<	Brush Hi Tom2 * Timpani c
	49	808 Cymbal	<	Brush Crash Cymbal	Timpani c#
50	808 Hi Tom1	Electric High Tom1 *	<	Brush Hi Tom1 *	Timpani d
	51	<	<	Brush Ride Cymbal	Timpani d#
52	<	Reverse Cymbal	<	<	Timpani e
	53	<	<	Brush Ride Bell	Timpani f
	54	<	<	<	<
55	<	<	<	<	<
	56	808 Cowbell	<	<	<
57	<	<	<	<	Concert Cymbal2
	58	<	<	<	<
59	<	<	<	<	Concert Cymbal1
C4	60	<	<	<	<
	61	<	<	<	<
62	808 High Conga	<	<	<	<
	63	808 Mid Conga	<	<	<
64	808 Low Conga	<	<	<	<
	65	<	<	<	<
	66	<	<	<	<
67	<	<	<	<	<
	68	<	<	<	<
69	<	<	<	<	<
	70	808 Maracas	<	<	<
71	<	<	<	<	<
C5	72	<	<	<	<
	73	<	<	<	<
74	<	<	<	<	<
	75	808 Claves	<	<	<
76	<	<	<	<	<
	77	<	<	<	<
	78	High Hoo	[EXC4] <	<	<
79	<	Low Hoo	[EXC4] <	<	<
	80	Electric Mute Triangle	[EXC5] <	<	<
81	<	Electric Open Triangle	[EXC5] <	<	<
	82	<	<	<	<
83	<	<	<	<	<
C6	84	<	<	<	<
	85	<	<	<	<
86	<	<	<	<	<
	87	<	<	<	<
88	----	----	----	----	Applause *
89	----	----	----	----	----
	90	----	----	----	----
91	----	----	----	----	----
	92	----	----	----	----
93	----	----	----	----	----
	94	----	----	----	----
95	----	----	----	----	----
C7	96	----	----	----	----
	97	----	----	----	----
98	----	----	----	----	----

## SC-88 Drum Set (3)

	PC 50 ETHNIC	PC 51 KICK&SNARE	PC 57 SFX	PC 58 RHYTHM FX
25	Finger Snap	----	----	----
26	Tambourine	----	----	----
27	Castanets	----	----	----
28	Crash Cymbal1	----	----	----
29	Snare Roll	----	----	----
30	Concert Snare Drum	----	----	----
31	Concert Cymbal	----	Scratch Push2	[EXC1] ----
32	Concert BD1	----	Scratch Pull2	[EXC1] ----
33	Jingle Bell	----	Cutting Noise 2 Up	----
34	Bell Tree	----	Cutting Noise 2 Down	----
35	Bar Chimes	----	Distortion Guitar Cutting Noise Up	----
C2 36	Wadaiko *	----	Distortion Guitar Cutting Noise Down	Reverse Kick 1
37	Wadaiko Rim *	----	Bass Slide	Reverse Concert BD 1
38	Shime Taiko	----	Pick Scrape	Reverse Power Kick 1
39	Atarigane	----	High Q	Reverse Electric Kick 1
40	Hyoushigi	Standard 1 Kick 1	Slap	Reverse Snare 1
41	Ohkawa	Standard 1 Kick 2	Scratch Push	[EXC7] Reverse Snare 2
42	High Kotsuzumi	Standard 2 Kick 1	Scratch Pull	[EXC7] Reverse Standard set1 Snare 1
43	Low Kotsuzumi	Standard 2 Kick 2	Sticks	Reverse Tight Snare
44	Ban Gu	Kick 1	Square Click	Reverse Dance Snare
45	Big Gong	Kick 2	Metronome Click	Reverse 808 Snare
46	Small Gong	Soft Kick	Metronome Bell	Reverse Tom1
47	Bend Gong	Jazz Kick 1	Guitar Fret Noise	Reverse Tom2
48	Thai Gong	Jazz Kick 2	Guitar Cutting Noise Up	Reverse Sticks
C3 49	Rama Cymbal	Concert BD	Guitar Cutting Noise Down	Reverse Slap
50	Gamelan Gong	Room Kick 1	String Slap of Double Bass	Reverse Cymbal1
51	Udo Short [EXC1]	Room Kick 2	Fl.Key Click	Reverse Cymbal2
52	Udo Long [EXC1]	Power Kick 1	Laughing	Reverse Open Hi-hat
53	Udo Slap	Power Kick 2	Scream	Reverse Ride Cymbal
54	Bendir	Electric Kick 2	Punch	Reverse CR-78 OHH
55	Req Dum	Electric Kick 1	* Heart Beat	Reverse Closed Hi-hat
56	Req Tik	Electric Kick	Footsteps1	Reverse Gong
57	Tabla Te	808 Bass Drum	Footsteps2	Reverse Bell Tree
58	Tabla Na	909 Bass Drum	Applause *	Reverse Guiro
59	Tabla Tun	Dance Kick	Door Creaking	Reverse Bendir
C4 60	Tabla Ge	Standard 1 Snare 1	Door	Reverse Gun Shot
61	Tabla Ge Hi	Standard 1 Snare 2	Scratch	Reverse Scratch
62	Talking Drum *	Standard 2 Snare 1	Wind Chimes *	Reverse Laser
63	Bend Talking Drum *	Standard 2 Snare 2	Car-Engine	Key Click
64	Caxixi	Tight Snare	Car-Stop	Tekno Thip
65	Djembe	Concert Snare	Car-Pass	Pop Drop
66	Djembe Rim	Jazz Snare 1	Car-Crash *	Woody Slap
67	Timbales Low	Jazz Snare 2	Siren	Distortion Kick *
68	Timbales Paila	Room Snare 1	Train	Syn.Drop
69	Timbales High	Room Snare 2	Jetplane *	Reverse High Q
70	Cowbell	Power Snare 1	Helicopter	Pipe
71	Hi Bongo	Power Snare 2	Starship *	Ice Block
C5 72	Low Bongo	Gated Snare	Gun Shot	Digital Tambourine *
73	Mute Hi Conga	Dance Snare 1	Machine Gun	Alias
74	Open Hi Conga	Dance Snare 2	Lasergun	Modulated Bell
75	Mute Low Conga	Disco Snare	Explosion *	Spark
76	Conga Slap	Electric Snare2	Dog	Metalic Percussion
77	Open Low Conga	House Snare *	Horse-Gallop	Velocity Noise FX
78	Conga Slide *	Electric Snare 1	Birds *	Stereo Noise Clap *
79	Mute Pandiero	Electric Snare 3	* Rain	Swish
80	Open Pandiero	808 Snare 1	Thunder	Slappy *
81	Open Surdo [EXC2]	808 Snare 2	* Wind	Voice Ou
82	Mute Surdo [EXC2]	909 Snare 1	Seashore	Voice Au
83	Tamborim	909 Snare 2	* Stream	Hoo
C6 84	High Agogo	Brush Tap1	Bubble *	Tape Stop1 *
85	Low Agogo	Brush Tap2	Kitty	Tape Stop2 *
86	Shaker	Brush Slap1	Bird2	Missile *
87	High Whistle [EXC3]	Brush Slap2	Growl	Space Bird
88	Low Whistle [EXC3]	Brush Slap3	Applause2 *	Flying Monster
89	Mute Cuica [EXC4]	Brush Swirl1	Telephone1	----
90	Open Cuica [EXC4]	Brush Swirl2	Telephone2	----
91	Mute Triangle [EXC5]	Brush Long Swirl	----	----
92	Open Triangle [EXC5]	----	----	----
93	Short Guiro [EXC6]	----	----	----
94	Long Guiro [EXC6]	----	----	----
95	Cabasa Up	----	----	----
C7 96	Cabasa Down	----	----	----
97	Claves	----	----	----
98	High Wood Block	----	----	----
99	Low Wood Block	----	----	----

## SC-55 Drum Set (1)

	PC 1 / PC 33 STANDARD / JAZZ	PC 9 ROOM	PC 17 POWER	PC 25 ELECTRONIC	PC 26 TR-808	PC 41 BRUSH	PC 49 ORCHESTRA	
	25	----	----	----	----	----	----	
26	----	----	----	----	----	----	----	
27	High Q	<--	<--	<--	<--	<--	Closed Hi-hat	[EXC1]
28	Slap	<--	<--	<--	<--	<--	Pedal Hi-hat	[EXC1]
29	Scratch Push	<--	<--	<--	<--	<--	Open Hi-hat	[EXC1]
30	Scratch Pull	<--	<--	<--	<--	<--	Ride Cymbal1	
31	Sticks	<--	<--	<--	<--	<--	<--	
32	Square Click	<--	<--	<--	<--	<--	<--	
33	Metronome Click	<--	<--	<--	<--	<--	<--	
34	Metronome Bell	<--	<--	<--	<--	<--	<--	
35	Kick Drum2 / Jazz BD2	<--	<--	<--	<--	Jazz BD2	Concert BD2	
C2	Kick Drum1 / Jazz BD1	<--	MONDO Kick	Elec BD	808 Bass Drum	Jazz BD1	Concert BD1	
37	Side Stick	<--	<--	<--	808 Rim Shot	<--	<--	
38	Snare Drum1	<--	Gated SD	Elec SD	808 Snare Drum	Brush Tap	Concert SD	
39	Hand Clap	<--	<--	<--	<--	Brush Slap	Castanets	
40	Snare Drum2	<--	<--	Gated SD	<--	Brush Swirl	Concert SD	
41	Low Tom2	Room Low Tom2	Room Low Tom2	Elec Low Tom2	808 Low Tom2	<--	Timpani F	
42	Closed Hi-hat	[EXC1] <--	<--	<--	808 CHH	[EXC1] <--	Timpani F#	
43	Low Tom1	Room Low Tom1	Room Low Tom1	Elec Low Tom1	808 Low Tom1	<--	Timpani G	
44	Pedal Hi-hat	[EXC1] <--	<--	<--	808 CHH	[EXC1] <--	Timpani G#	
45	Mid Tom2	Room Mid Tom2	Room Mid Tom2	Elec Mid Tom2	808 Mid Tom2	<--	Timpani A	
46	Open Hi-hat	[EXC1] <--	<--	<--	808 OHH	[EXC1] <--	Timpani A#	
47	Mid Tom1	Room Mid Tom1	Room Mid Tom1	Elec Mid Tom1	808 Mid Tom1	<--	Timpani B	
C3	High Tom2	Room Hi Tom2	Room Hi Tom2	Elec Hi Tom2	808 Hi Tom2	<--	Timpani c	
49	Crash Cymbal1	<--	<--	<--	808 Cymbal	<--	Timpani c#	
50	High Tom1	Room Hi Tom1	Room Hi Tom1	Elec Hi Tom1	808 Hi Tom1	<--	Timpani d	
51	Ride Cymbal1	<--	<--	<--	<--	<--	Timpani d#	
52	Chinese Cymbal	<--	<--	Reverse Cymbal	<--	<--	Timpani e	
53	Ride Bell	<--	<--	<--	<--	<--	Timpani f	
54	Tambourine	<--	<--	<--	<--	<--	<--	
55	Splash Cymbal	<--	<--	<--	<--	<--	<--	
56	Cowbell	<--	<--	<--	808 Cowbell	<--	<--	
57	Crash Cymbal2	<--	<--	<--	<--	<--	Concert Cymbal2	
58	Vibra-slap	<--	<--	<--	<--	<--	<--	
59	Ride Cymbal2	<--	<--	<--	<--	<--	Concert Cymbal1	
C4	High Bongo	<--	<--	<--	<--	<--	<--	
60	Low Bongo	<--	<--	<--	<--	<--	<--	
62	Mute High Conga	<--	<--	<--	808 High Conga	<--	<--	
63	Open High Conga	<--	<--	<--	808 Mid Conga	<--	<--	
64	Low Conga	<--	<--	<--	808 Low Conga	<--	<--	
65	High Timbale	<--	<--	<--	<--	<--	<--	
66	Low Timbale	<--	<--	<--	<--	<--	<--	
67	High Agogo	<--	<--	<--	<--	<--	<--	
68	Low Agogo	<--	<--	<--	<--	<--	<--	
69	Cabasa	<--	<--	<--	<--	<--	<--	
70	Maracas	<--	<--	<--	808 Maracas	<--	<--	
71	Short Hi Whistle	[EXC2] <--	<--	<--	<--	<--	<--	
C5	Long Low Whistle	[EXC2] <--	<--	<--	<--	<--	<--	
73	Short Guiro	<--	<--	<--	<--	<--	<--	
74	Long Guiro	<--	<--	<--	<--	<--	<--	
75	Claves	<--	<--	<--	808 Claves	<--	<--	
76	High Wood Block	<--	<--	<--	<--	<--	<--	
77	Low Wood Block	<--	<--	<--	<--	<--	<--	
78	Mute Cuica	[EXC4] <--	<--	<--	<--	<--	<--	
79	Open Cuica	[EXC4] <--	<--	<--	<--	<--	<--	
80	Mute Triangle	[EXC5] <--	<--	<--	<--	<--	<--	
81	Open Triangle	[EXC5] <--	<--	<--	<--	<--	<--	
82	Shaker	<--	<--	<--	<--	<--	<--	
83	Jingle Bell	<--	<--	<--	<--	<--	<--	
C6	Bell Tree	<--	<--	<--	<--	<--	<--	
85	Castanets	<--	<--	<--	<--	<--	<--	
86	Mute Surdo	[EXC6] <--	<--	<--	<--	<--	<--	
87	Open Surdo	[EXC6] <--	<--	<--	<--	<--	<--	
88	----	----	----	----	----	----	Applause	*
89	----	----	----	----	----	----	----	
90	----	----	----	----	----	----	----	
91	----	----	----	----	----	----	----	
92	----	----	----	----	----	----	----	
93	----	----	----	----	----	----	----	
94	----	----	----	----	----	----	----	
95	----	----	----	----	----	----	----	
C7	96	----	----	----	----	----	----	
97	----	----	----	----	----	----	----	
98	----	----	----	----	----	----	----	
99	----	----	----	----	----	----	----	

**SC-55 Drum Set (2)**

	PC 57	PC 128
	SFX	CM-64/32L
	----	CM Kick Drum
	----	CM Kick Drum
C2	37	CM Rim Shot
	----	CM Snare Drum
	39	High Q
	----	CM Hand Clap
	40	Slap
	----	CM Electronic Snare Drum
	41	Scratch Push [EXC7]
	42	Scratch Pull [EXC7]
	----	CM Acoustic Low Tom
	43	Sticks
	44	Square Click
	----	CM Open Hi-Hat2
	45	Metronome Click
	46	Metronome Bell
	----	CM Acoustic Middle Tom
	47	Guitar Fret Noise
	----	CM Open Hi-Hat1 [EXC1]
	48	Guitar cutting noise/up
	49	Guitar cutting noise/down
	50	String slap of double bass
	51	Fl.Key Click
	----	CM Ride Cymbal
	52	Laughing
	53	Scream
	54	Punch
	55	Heart Beat
	56	Footsteps1
	57	Footsteps2
	58	Applause *
	59	Door Creaking
	60	Door
	61	Scratch
	62	Wind Chimes *
	63	Car-Engine
	64	Car-Stop
	65	Car-Pass
	66	Car-Crash *
	67	Siren
	68	Train
	69	Jetplane *
	70	Helicopter
	71	Starship *
	72	Gun Shot
	73	Machine Gun
	74	Lasergun
	75	Explosion *
	76	Dog
	77	Horse-Gallop
	78	Birds *
	79	Rain *
	80	Thunder
	81	Wind
	82	Seashore
	83	Stream *
	84	Bubble *
	85	Door
	86	Scratch
	87	Wind Chimes *
	88	Car-Engine
	89	Car-Stop
	90	Car-Pass
	91	Car-Crash *
	92	Siren
	93	Train
	94	Jetplane *
	95	Helicopter
	96	Starship *
	97	Gun Shot
	98	Machine Gun
	99	Lasergun
	100	Explosion *
	101	Dog
	102	Horse-Gallop
	103	Birds *
	104	Rain *
	105	Thunder
	106	Wind
	107	SeaShore
	108	Stream *
C8	108	Bubble *

## GM2 Map

PC#	CC32	Tone Name	Voices
<b>Piano</b>			
1	0	Piano 1	1
	1	Piano 1w	1
	2	European Pf	1
2	0	Piano 2	2
	1	Piano 2w	2
3	0	Piano 3	2
	1	Piano 3w	2
4	0	Honky-tonk	2
	1	Honky-tonk 2	2
5	0	E.Piano 1	1
	1	St.Soft EP	2
	2	FM+SA EP	2
	3	Wurly	2
6	0	E.Piano 2	2
	1	Detuned EP 2	2
	2	St.FM EP	2
	3	EP Legend	2
	4	EP Phase	2
7	0	Harpsichord	1
	1	Coupled Hps.	2
	2	Harpsi.w	1
	3	Harpsi.o	2
8	0	Clav.	1
	1	Pulse Clav	1

## Chromatic percussion

9	0	Celesta	1
10	0	Glockenspiel	1
11	0	Music Box	1
12	0	Vibraphone	1
	1	Vibraphone w	1
13	0	Marimba	1
	1	Marimba w	1
14	0	Xylophone	1
15	0	Tubular-bell	1
	1	Church Bell	1
	2	Carillon	1
16	0	Santur	1

## Organ

17	0	Organ 1	2
	1	Trem. Organ	2
	2	60's Organ 1	1
	3	70's E.Organ	2
18	0	Organ 2	2
	1	Chorus Or.2	2
	2	Perc. Organ	2
19	0	Organ 3	2
20	0	Church Org.1	1
	1	Church Org.2	2
	2	Church Org.3	2
21	0	Reed Organ	1
	1	Puff Organ	2
22	0	Accordion Fr	1
	1	Accordion It	1
23	0	Harmonica	1
24	0	Bandoneon	2

PC#	CC32	Tone Name	Voices
<b>Guitar</b>			
25	0	Nylon-str.Gt	2
	1	Ukulele	1
	2	Nylon Gt.o	2
	3	Nylon Gt.2	1
26	0	Steel-str.Gt	1
	1	12-str.Gt	2
	2	Mandolin	2
	3	Steel + Body	2
27	0	Jazz Gt.	1
	1	Pedal Steel	1
28	0	Clean Gt.	1
	1	Chorus Gt.	2
	2	Mid Tone GTR	1
29	0	Muted Gt.	1
	1	Funk Pop	1
	2	Funk Gt.2	1
	3	Jazz Man	2
30	0	Overdrive Gt	2
	1	Guitar Pinch	1
31	0	DistortionGt	2
	1	Feedback Gt.	2
	2	Dist Rtm GTR	1
32	0	Gt.Harmonics	1
	1	Gt. Feedback	1

## Bass

33	0	Acoustic Bs.	1
34	0	Fingered Bs.	1
	1	Finger Slap	2
35	0	Picked Bass	1
36	0	Fretless Bs.	1
37	0	Slap Bass 1	1
38	0	Slap Bass 2	2
39	0	Synth Bass 1	2
	1	SynthBass101	1
	2	Acid Bass	1
	3	Clavi Bass	2
	4	Hammer	2
40	0	Synth Bass 2	2
	1	Beef FM Bass	2
	2	RubberBass 2	2
	3	Attack Pulse	1

## Orchestra

41	0	Violin	:	2
	1	Slow Violin	:	1
42	0	Viola	:	2
43	0	Cello	:	2
44	0	Contrabass	:	1
45	0	Tremolo Str	:	1
46	0	PizzicatoStr	:	1
47	0	Harp	:	1
	1	Yang Qin	:	2
48	0	Timpani	:	1



PC#	CC32	Tone Name	Voices
<b>Ensemble</b>			
49	0	Strings	2
	1	Orchestra	2
	2	60s Strings	2
50	0	Slow Strings	1
51	0	Syn.Strings1	2
	1	Syn.Strings3	2
52	0	Syn.Strings2	2
53	0	Choir Aahs	1
	1	Chorus Aahs	2
54	0	Voice Oohs	1
	1	Humming	2
55	0	SynVox	1
	1	Analog Voice	1
56	0	OrchestraHit	2
	1	Bass Hit	2
	2	6th Hit	2
	3	Euro Hit	2
<b>Brass</b>			
57	0	Trumpet	1
	1	Dark Trumpet	1
58	0	Trombone	1
	1	Trombone 2	1
	2	Bright Tb	1
59	0	Tuba	1
60	0	MutedTrumpet	1
	1	MuteTrumpet2	1
61	0	French Horns	1
	1	Fr.Horn 2	2
62	0	Brass 1	2
	1	Brass 2	2
63	0	Synth Brass1	2
	1	Pro Brass	2
	2	Oct SynBrass	2
	3	Jump Brass	1
64	0	Synth Brass2	2
	1	SynBrass sfz	1
	2	Velo Brass 1	2
<b>Reed</b>			
65	0	Soprano Sax	1
66	0	Alto Sax	1
67	0	Tenor Sax	2
68	0	Baritone Sax	2
69	0	Oboe	1
70	0	English Horn	1
71	0	Bassoon	1
72	0	Clarinet	1
73	0	Piccolo	1
74	0	Flute	1
75	0	Recorder	1
76	0	Pan Flute	2
77	0	Bottle Blow	2
78	0	Shakuhachi	2
79	0	Whistle	1
80	0	Ocarina	1
<b>Synth Lead</b>			
81	0	Square Wave	2
	1	MG Square	1
	2	2600 Sine	1
82	0	Saw Wave	2
	1	OB2 Saw	1
	2	Doctor Solo	2
	3	Natural Lead	2
	4	SequencedSaw	2
83	0	Syn.Calliope	2
84	0	Chiffer Lead	2
85	0	Charang	2
	1	Wire Lead	2
86	0	Solo Vox	2
87	0	5th Saw Wave	2
88	0	Bass & Lead	2
	1	Delayed Lead	2

PC#	CC32	Tone Name	Voices
<b>Synth Pad</b>			
89	0	Fantasia	2
90	0	Warm Pad	1
	1	Sine Pad	2
91	0	Polysynth	2
92	0	Space Voice	1
	1	Itopia	2
93	0	Bowed Glass	2
94	0	Metal Pad	2
95	0	Halo Pad	2
96	0	Sweep Pad	1
<b>Synth SFX</b>			
97	0	Ice Rain	2
98	0	Soundtrack	2
99	0	Crystal	2
	1	Syn Mallet	1
100	0	Atmosphere	2
101	0	Brightness	2
102	0	Goblin	2
103	0	Echo Drops	1
	1	Echo Bell	2
	2	Echo Pan	2
104	0	Star Theme	2
<b>Ethnic misc</b>			
105	0	Sitar	1
	1	Sitar 2	2
106	0	Banjo	1
107	0	Shamisen	1
108	0	Koto	2
	1	Taisho Koto	1
109	0	Kalimba	1
110	0	Bagpipe	1
111	0	Fiddle	1
112	0	Shanai	1
<b>Percussive</b>			
113	0	Tinkle Bell	1
114	0	Agogo	1
115	0	Steel Drums	1
116	0	Woodblock	1
	1	Castanets	1
117	0	Taiko	1
	1	Concert BD	1
118	0	Melo. Tom 1	1
	1	Melo. Tom 2	1
119	0	Synth Drum	1
	1	808 Tom	2
	2	Elec Perc	1
120	0	Reverse Cym.	1

PC#	CC32	Tone Name	Voices
<b>SFX</b>			
121	0	Gt.FretNoise	1
	1	Gt.Cut Noise	1
	2	String Slap	1
122	0	Breath Noise	1
	1	Fl.Key Click	1
123	0	Seashore	1
	1	Rain	1
	2	Thunder	1
	3	Wind	1
	4	Stream	2
	5	Bubble	2
124	0	Bird	2
	1	Dog	1
	2	Horse-Gallop	1
	3	Bird 2	1
125	0	Telephone 1	1
	1	Telephone 2	1
	2	DoorCreaking	1
	3	Door	1
	4	Scratch	1
	5	Wind Chimes	2
126	0	Helicopter	1
	1	Car-Engine	1
	2	Car-Stop	1
	3	Car-Pass	1
	4	Car-Crash	2
	5	Siren	1
	6	Train	1
	7	Jetplane	2
	8	Starship	2
	9	Burst Noise	2
127	0	Applause	2
	1	Laughing	1
	2	Screaming	1
	3	Punch	1
	4	Heart Beat	1
	5	Footsteps	1
128	0	Gun Shot	1
	1	Machine Gun	1
	2	Lasergun	1
	3	Explosion	2

## GM 2 Drum Set List

The GM 2 Drum Set corresponds to that of the SC-8820 map as follows.

PC	GM2 Name	SC-8820 Name
1	STANDARD	STANDARD 1
9	ROOM	ROOM
17	POWER	POWER
25	ELECTRONIC	ELECTRONIC
26	ANALOG	TR-808
33	JAZZ	JAZZ
41	BRUSH	BRUSH
49	ORCHESTRA	ORCHESTRA
57	SFX	SFX

# MIDI Implementation

## 1. Receive data

### ■ Channel Voice Messages

#### ● Note off

Status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 kk = note number: 00H - 7FH (0 - 127)  
 vv = note off velocity: 00H - 7FH (0 - 127)

- \* For Drum Parts, these messages are received when Rx.NOTE OFF = ON for each Instrument.
- \* The velocity values of Note Off messages are ignored.

#### ● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 kk = note number: 00H - 7FH (0 - 127)  
 vv = note on velocity: 01H - 7FH (1 - 127)

- \* Not received when Rx.NOTE MESSAGE = OFF. (Initial value is ON)
- \* For Drum Parts, these messages are not received when Rx.NOTE ON = OFF for each Instrument.

#### ● Polyphonic Key Pressure

Status	2nd byte	3rd byte
AnH	kkH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 kk = note number: 00H - 7FH (0 - 127)  
 vv = key pressure: 00H - 7FH (0 - 127)

- \* Not received when Rx.POLY PRESSURE (PAf) = OFF. (Initial value is ON)
- \* The resulting effect is determined by System Exclusive messages. With the initial settings, there will be no effect.

#### ● Control Change

- \* When Rx.CONTROL CHANGE = OFF, all control change messages except for Channel Mode messages will be ignored.
- \* The value specified by a Control Change message will not be reset even by a Program Change, etc.

#### ○ Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm = Bank number MSB: 00H - 7FH (GS Variation number 0 - 127),  
 Initial value = 00H  
 ll = Bank number LSB: 00H - 04H (MAP), Initial value = 00H

- \* Not received when Rx.BANK SELECT = OFF.
- \* "Rx.BANK SELECT" is set to OFF by "GM1 System On," and Bank Select messages will be ignored.
- \* Rx.BANK SELECT is set to ON by "GM2 System On."
- \* Rx.BANK SELECT is set to ON by power-on reset or by receiving "GS Reset."
- \* When Rx.BANK SELECT LSB = OFF, Bank number LSB (llH) will be handled as 00H regardless of the received value. However, when sending Bank Select messages, you have to send both the MSB (mmH) and LSB (llH), the value should be 00H together.
- \* Bank Select processing will be suspended until a Program Change message is received.
- \* The GS format "Variation number" is the value of the Bank Select MSB (Controller number 0) expressed in decimal.

- \* The Sound Canvas VA recognizes the Bank Select LSB (Controller number 32) as a flag for switching between the SC-55MAP, the SC-88MAP, the SC-88ProMAP, and the SC-8820MAP. With a Bank Select LSB of 00H, the map selected by the front panel INST MAP button will be selected. With an LSB of 01H, the SC-55MAP and with an LSB of 02H, the SC-88MAP, and with an LSB of 03H, the SC-88Pro MAP, and with an LSB of 04H, the SC-8820MAP will be selected respectively.
- \* Some other GS devices do not recognize the Bank Select LSB (Controller number 32).

#### ○ Modulation (Controller number 1)

Status	2nd byte	3rd byte
BnH	01H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Modulation depth: 00H - 7FH (0 - 127)

- \* Not received when Rx.MODULATION = OFF (Initial value is ON)
- \* The resulting effect is determined by System Exclusive messages. With the initial settings, this is Pitch Modulation Depth.

#### ○ Portamento Time (Controller number 5)

Status	2nd byte	3rd byte
BnH	05H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Portamento Time: 00H - 7FH (0 - 127), Initial value = 00H (0)

- \* This adjusts the rate of pitch change when Portamento is ON or when using the Portamento Control. A value of 0 results in the fastest change.

#### ○ Data Entry (Controller number 6, 38)

Status	2nd byte	3rd byte
BnH	06H	mmH
BnH	26H	llH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm, ll = the value of the parameter specified by RPN/NRPN  
 mm = MSB, ll = LSB

#### ○ Volume (Controller number 7)

Status	2nd byte	3rd byte
BnH	07H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Volume: 00H - 7FH (0 - 127), Initial value = 64H (100)

- \* Volume messages are used to adjust the volume balance of each Part.
- \* Not received when Rx.VOLUME = OFF. (Initial value is ON)

#### ○ Pan (Controller number 10)

Status	2nd byte	3rd byte
BnH	0AH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = pan: 00H - 40H - 7FH (Left - Center - Right), Initial value = 40H (Center)

- \* For Rhythm Parts, this is a relative adjustment of each Instrument's pan setting.
- \* Not received when Rx.PANPOT = OFF. (Initial value is ON)

#### ○ Expression (Controller number 11)

Status	2nd byte	3rd byte
BnH	0BH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Expression: 00H - 7FH (0 - 127), Initial value = 7FH (127)

- \* This adjusts the volume of a Part. It can be used independently from Volume messages. Expression messages are used for musical expression within a performance; e.g., expression pedal movements, crescendo and decrescendo.
- \* Not received when Rx.EXPRESSION = OFF. (Initial value is ON)

## ○ Hold 1 (Controller number 64)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	40H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Control value: 00H - 7FH (0 - 127)

\* Not received when Rx.HOLD1 = OFF. (Initial value is ON)

## ○ Portamento (Controller number 65)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	41H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Control value: 00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON

\* Not received when Rx.PORTAMENTO = OFF. (Initial value is ON)

## ○ Sostenuto (Controller number 66)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	42H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Control value: 00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON

\* Not received when Rx.SOSTENUTO = OFF. (Initial value is ON)

## ○ Soft (Controller number 67)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	43H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Control value: 00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON

\* Not received when Rx.SOFT = OFF. (Initial value is ON)

## ○ Filter Resonance (Timbre/Harmonic Intensity) (Controller number 71)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	47H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Resonance value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value = 40H (no change)

## ○ Release Time (Controller number 72)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	48H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Release Time value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value = 40H (no change)

## ○ Attack time (Controller number 73)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	49H	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Attack time value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value=40H (no change)

## ○ Cutoff (Controller number 74)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	4AH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Cutoff value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value = 40H (no change)

## ○ Decay Time (Controller number 75)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	4BH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Decay Time value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value = 40H (no change)

## ○ Vibrato Rate (Controller number 76)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	4CH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Vibrato Rate value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value = 40H (no change)

## ○ Vibrato Depth (Controller number 77)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	4DH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Vibrato Depth Value (relative change): 00H - 7FH (-64 - 0 - +63)  
 Initial Value = 40H (no change)

## ○ Vibrato Delay (Controller number 78)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	4EH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Vibrato Delay value (relative change): 00H - 7FH (-64 - 0 - +63),  
 Initial value=40H (no change)

## ○ Portamento control (Controller number 84)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	54H	kkH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 kk = source note number: 00H - 7FH (0 - 127)

\* A Note-on received immediately after a Portamento Control message will change continuously in pitch, starting from the pitch of the Source Note Number.

\* If a voice is already sounding for a note number identical to the Source Note Number, this voice will continue sounding (i.e., legato) and will, when the next Note-on is received, smoothly change to the pitch of that Note-on.

\* The rate of the pitch change caused by Portamento Control is determined by the Portamento Time value.

<Example 1.>

<u>On MIDI</u>	<u>Description</u>	<u>Result</u>
90 3C 40	Note on C4	C4 on
B0 54 3C	Portamento Control from C4	no change
90 40 40	Note on E4	glide from C4 to E4
80 3C 40	Note off C4	no change
80 40 40	Note off E4	E4 off

<Example 2.>

<u>On MIDI</u>	<u>Description</u>	<u>Result</u>
B0 54 3C	Portamento Control from C4	no change
90 40 40	Note on E4	E4 is played with glide from C4 to E4
80 40 40	Note off E4	E4 off

## ○ Effect 1 (Reverb Send Level) (Controller number 91)

<u>Status</u>	<u>2nd byte</u>	<u>3rd byte</u>
BnH	5BH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Reverb Send Level: 00H - 7FH (0 - 127), Initial value = 28H (40)

This message adjusts the Reverb Send Level of each Part.

○ Effect 3 (Chorus Send Level) (Controller number 93)

Status	2nd byte	3rd byte
BnH	5DH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Chorus Send Level: 00H - 7FH (0 - 127), Initial value = 00H (0)

\* This message adjusts the Chorus Send Level of each Part.

○ Effect 4 (Delay Send Level) (Controller number 94)

Status	2nd byte	3rd byte
BnH	5EH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Delay Send Level: 00H - 7FH (0 - 127), Initial value = 00H (0)

\* This message adjusts the Delay Send Level of each Part.

\* Some other GS devices may not recognize this message.

○ NRPN MSB/LSB (Controller number 98, 99)

Status	2nd byte	3rd byte
BnH	63H	mmH
BnH	62H	llH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm = upper byte (MSB) of the parameter number specified by NRPN  
 ll = lower byte (LSB) of the parameter number specified by NRPN

Rx.NRPN is set to OFF by power-on reset or by receiving "GM1 System On" or "GM2 System On," and NRPN message will be ignored. NRPN message will be received when Rx.NRPN = ON, or by receiving "GS RESET."

The value set by NRPN will not be reset even if Program Change or Reset All Controllers is received.

\*\*NRPN\*\*

The NRPN (Non Registered Parameter Number) message allows an extended range of control changes to be used. On the Sound Canvas VA, NRPN messages can be used to modify sound parameters, etc.

To use these messages, you must first use NRPN messages (Controller number 98 and 99, their order does not matter) to specify the parameter to be controlled, and then use Data Entry messages (Controller number 6) to specify the value of the specified parameter. Once an NRPN parameter has been specified, all Data Entry messages received on that channel will modify the value of that parameter. To prevent accidents, it is recommended that you set RPN Null (RPN Number = 7FH 7FH) when you have finished setting the value of the desired parameter.

Refer to "3. Supplementary material," "Examples of actual MIDI messages (p. 108)" On the Sound Canvas VA, Data entry LSB (Controller number 38) of NRPN is ignored, so it is no problem to send Data entry MSB (Controller number 6) only (without Data entry LSB).

On the Sound Canvas VA, NRPN can be used to modify the following parameters.

NRPN	Data entry	Function and range
MSB LSB	MSB	
01H 08H	mmH	Vibrato Rate (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 09H	mmH	Vibrato Depth (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 0AH	mmH	Vibrato Delay (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 20H	mmH	TVF Cutoff Frequency (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 21H	mmH	TVF Resonance (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 63H	mmH	TVF&TVA Envelope Attack Time (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 64H	mmH	TVF&TVA Envelope Decay Time (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
01H 66H	mmH	TVF&TVA Envelope Release Time (relative change) mm: 00H - 40H - 7FH (-64 - 0 - +63)
18H rrH	mmH	Drum Instrument Pitch Coarse (relative change) rr: Drum Instrument note number mm: 00H - 40H - 7FH (-64 - 0 - +63 semitone)
1AH rrH	mmH	Drum Instrument TVA Level (absolute change) rr: Drum Instrument note number mm: 00H - 7FH (0 - max)
1CH rrH	mmH	Drum Instrument Panpot (absolute change) rr: Drum Instrument note number mm: 00H, 01H - 40H - 7FH (random, left - center - right)

1DH rrH	mmH	Drum Instrument Reverb Send Level (absolute change) rr: Drum Instrument note number mm: 00H - 7FH (0 - max)
1EH rrH	mmH	Drum Instrument Chorus Send Level (absolute change) rr: Drum Instrument note number mm: 00H - 7FH (0 - max)
1FH rrH	mmH	Drum Instrument Delay Send Level (absolute change) rr: Drum Instrument note number mm: 00H - 7FH (0 - max)

\* Parameters marked "relative change" will change relatively to the preset value (40H). Even among different GS devices, "relative change" parameters may sometimes differ in the way the sound changes or in the range of change.

\* Parameters marked "absolute change" will be set to the absolute value of the parameter, regardless of the preset value.

\* It is not possible to simultaneously use both Chorus Send Level and Delay Send Level on a single Drum Instrument.

\* Data entry LSB (llH) is ignored.

○ RPN MSB/LSB (Controller number 100, 101)

Status	2nd byte	3rd byte
BnH	65H	mmH
BnH	64H	llH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm = upper byte (MSB) of parameter number specified by RPN  
 ll = lower byte (LSB) of parameter number specified by RPN

\* Not received when Rx.RPN = OFF.

\* The value specified by RPN will not be reset even by messages such as Program Change or Reset All Controller.

\*\*RPN\*\*

The RPN (Registered Parameter Number) messages are expanded control changes, and each function of an RPN is described by the MIDI Standard.

To use these messages, you must first use RPN (Controller number 100 and 110, their order does not matter) to specify the parameter to be controlled, and then use Data Entry messages (Controller number 6, 38) to specify the value of the specified parameter. Once an RPN parameter has been specified, all Data Entry messages received on that channel will modify the value of that parameter. To prevent accidents, it is recommended that you set RPN Null (RPN Number = 7FH 7FH) when you have finished setting the value of the desired parameter.

Refer to "3. Supplementary material," "Examples of actual MIDI messages (p. 108)"

On the Sound Canvas VA, RPN can be used to modify the following parameters.

RPN	Data entry	Explanation
MSB LSB	MSB LSB	
00H 00H	mmH ---	Pitch Bend Sensitivity mm: 00H - 18H (0 - 24 semitones), Initial value = 02H (2 semitones) ll: ignored (processed as 00H) specify up to 2 octaves in semitone steps
00H 01H	mmH llH	Master Fine Tuning mm, ll: 00 00H - 40 00H - 7F 7FH (-100 - 0 - +99.99 cents), Initial value = 40 00H (+/- 0 cent)  * Refer to "3. Supplementary material," "About the Tuning (p. 109)"
00H 02H	mmH ---	Master Coarse Tuning mm: 28H - 40H - 58H (-24 - 0 - +24 semitones), Initial value = 40H (+/-0 semitone) ll: ignored (processed as 00H)
00H 05H	mmH llH	Modulation Depth Range mm: 00H - 04H (0 - 4 semitones) ll: 00H - 7FH (0 - 100 cents) 100/128 Cent/Value
7FH 7FH	--- ---	RPN null Set condition where RPN and NRPN are unspecified. The data entry messages after set RPN null will be ignored. (No Data entry messages are required after RPN null). Settings already made will not change. mm, ll: ignored

● Program Change

Status	2nd byte
CnH	ppH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 pp = Program number: 00H - 7FH (prog.1 - prog.128)

- \* Not received when Rx.PROGRAM CHANGE = OFF. (Initial value is ON)
- \* After a Program Change message is received, the sound will change beginning with the next Note-on. Voices already sounding when the Program Change message was received will not be affected.
- \* For Drum Parts, Program Change message will not be received on upper byte of the bank numbers (the value of Control Number 0 is other than 0 (00H)).

● Channel Pressure

Status	2nd byte
DnH	vvH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 vv = Channel Pressure: 00H - 7FH (0 - 127)

- \* Not received when Rx.CH PRESSURE (CAf) = OFF. (Initial value is ON)
- \* The resulting effect is determined by System Exclusive messages. With the initial settings there will be no effect.

● Pitch Bend Change

Status	2nd byte	3rd byte
EnH	llH	mmH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm, ll = Pitch Bend value: 00 00H - 40 00H - 7F 7FH (-8192 - 0 - +8191)

- \* Not received when Rx.PITCH BEND = OFF. (Initial value is ON)
- \* The resulting effect is determined by System Exclusive messages. With the initial settings the effect is Pitch Bend.

■ Channel Mode Messages

All Sounds Off (Controller number 120)

Status	2nd byte	3rd byte
BnH	78H	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* When this message is received, all currently sounding notes on the corresponding channel will be turned off immediately.

● Reset All Controllers (Controller number 121)

Status	2nd byte	3rd byte
BnH	79H	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* When this message is received, the following controllers will be set to their reset values.

Controller	Reset value
Pitch Bend Change	+/-0 (center)
Polyphonic Key Pressure	0 (off)
Channel Pressure	0 (off)
Modulation	0 (off)
Expression	127 (max)
Hold 1	0 (off)
Portamento	0 (off)
Sostenuto	0 (off)
Soft	0 (off)
RPN	unset; previously set data will not change
NRPN	unset; previously set data will not change

● All Notes Off (Controller number 123)

Status	2nd byte	3rd byte
BnH	7BH	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* When All Notes Off is received, all notes on the corresponding channel will be turned off. However, if Hold 1 or Sostenuto is ON, the sound will be continued until these are turned off.

● OMNI OFF (Controller number 124)

Status	2nd byte	3rd byte
BnH	7CH	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* The same processing will be carried out as when All Notes Off is received.

● OMNI ON (Controller number 125)

Status	2nd byte	3rd byte
BnH	7DH	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* The same processing will be carried out as when All Notes Off is received. OMNI ON will not be turned on.

MONO (Controller number 126)

Status	2nd byte	3rd byte
BnH	7EH	mmH

n = MIDI channel number: 0H - FH (Ch.1 - 16)  
 mm = mono number: 00H - 10H (0 - 16)

- \* The same processing will be carried out as when All Sounds Off and All Notes Off is received, and the corresponding channel will be set to Mode 4 (M = 1) regardless of the value of "mm (mono number)."

● POLY (Controller number 127)

Status	2nd byte	3rd byte
BnH	7FH	00H

n = MIDI channel number: 0H - FH (Ch.1 - 16)

- \* The same processing will be carried out as when All Sounds Off and All Notes Off is received, and the corresponding channel will be set to Mode 3.

## System Realtime Message

### Active Sensing

#### Status

FEH

\* When Active Sensing is received, the unit will begin monitoring the intervals of all further messages. While monitoring, if the interval between messages exceeds 420 ms, the same processing will be carried out as when All Sounds Off, All Notes Off and Reset All Controllers are received, and message interval monitoring will be halted.

### System Exclusive Message

#### Status

F0H

#### Data byte

iiH, ddH, ....., eeH

#### Status

F7H

F0H: System Exclusive Message status

ii = ID number: an ID number (manufacturer ID) to indicate the manufacturer whose Exclusive message this is. Roland's manufacturer ID is 41H. ID numbers 7EH and 7FH are extensions of the MIDI standard; Universal Non-realtime Messages (7EH) and Universal Realtime Messages (7FH).

dd, ....., ee = data: 00H - 7FH (0 - 127)

F7H: EOX (End Of Exclusive)

The System Exclusive Messages received by the Sound Canvas VA are; messages related to mode settings, Universal Realtime System Exclusive messages, Data Requests (RQ1), and Data Set (DT1).

### System Exclusive messages related to mode settings

These messages are used to initialize a device to GS or General MIDI mode, or change the operating mode. When creating performance data, a "GM1 System On" message should be inserted at the beginning of a General MIDI 1 score, a "GM2 System On" message at the beginning of a General MIDI 2 score, and a "GS Reset" message at the beginning of a GS music data. Each song should contain only one mode message as appropriate for the type of data. (Do not insert two or more mode setting messages in a single song.)

"GM System On" uses Universal Non-realtime Message format. "GS Reset" uses Roland system Exclusive format "Data Set 1 (DT1):"

#### GM1 System On

This is a command message that resets the internal settings of the unit to the General MIDI 1 initial state. After receiving this message, the Sound Canvas VA will automatically be set to the proper condition for correctly playing a General MIDI score.

#### Status

F0H

#### Data byte

7EH, 7FH, 09H, 01H

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

7EH

ID number (Universal Non-realtime Message)

7FH

Device ID (Broadcast)

09H

Sub ID#1 (General MIDI Message)

01H

Sub ID#2 (General MIDI 1 On)

F7H

EOX (End Of Exclusive)

\* When this message is received, Rx.BANK SELECT will be OFF and Rx.NRPN will be OFF.

\* There must be an interval of at least 50 ms between this message and the next message.

#### GM2 System On

#### Status

F0H

#### Data byte

7EH 7FH 09H 03H

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

7EH

ID number (Universal Non-realtime Message)

7FH

Device ID (Broadcast)

09H

Sub ID#1 (General MIDI Message)

03H

Sub ID#2 (General MIDI 2 On)

F7H

EOX (End Of Exclusive)

\* When this message is received, the Sound Canvas VA will be able to receive the messages specified by General MIDI 2, and use the General MIDI 2 sound map.

#### GM System Off

"GM System Off" is a command message that resets the internal state of the Sound Canvas VA from the GM state to its native condition. The Sound Canvas VA will reset to the GS default state.

#### Status

F0H

#### Data byte

7EH, 7F, 09H, 02H

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

7EH

ID number (Universal Non-realtime Message)

7FH

Device ID (Broadcast)

09H

Sub ID#1 (General MIDI Message)

02H

Sub ID#2 (General MIDI Off)

F7H

EOX (End Of Exclusive)

\* When this message is received, the Sound Canvas VA will reset to the GS default state.

#### GS reset

GS Reset is a command message that resets the internal settings of a device to the GS initial state. This message appears at the beginning of GS music data, and a GS device that receives this message will automatically be set to the proper state to correctly play back GS music data.

#### Status

F0H

#### Data byte

41H, dev, 42H, 12H, 40H, 00H, 7FH, 00H, 41H

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

41H

ID number (Roland)

10H

Device ID

42H

Model ID (GS)

12H

Command ID (DT1)

40H

Address MSB

00H

Address

7FH

Address LSB

00H

Data (GS reset)

41H

Checksum

F7H

EOX (End Of Exclusive)

\* The "dev" is own device number or 7FH (Broadcast).

\* When this message is received, Rx.NRPN will be ON.

\* There must be an interval of at least 50 ms between this message and the next.

### Universal Realtime System Exclusive Messages

#### Master Volume

#### Status

F0H

#### Data byte

7FH, 7FH, 04H, 01H, 11H, mmH

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

7FH

ID number (universal realtime message)

7FH

Device ID (Broadcast)

04H

Sub ID#1 (Device Control messages)

01H

Sub ID#2 (Master Volume)

11H

Master Volume lower byte

mmH

Master Volume upper byte

F7H

EOX (End Of Exclusive)

\* The lower byte (11H) of Master Volume will be handled as 00H.

#### Master Fine Tuning

#### Status

F0H

#### Data byte

7FH, 7FH, 04H, 03H, 11H, mmH

#### Status

F7H

#### Byte

F0H

#### Explanation

Exclusive status

7FH

ID number (universal realtime message)

7FH

Device ID (Broadcast)

04H

Sub ID#1 (Device Control)

03H

Sub ID#2 (Master Fine Tuning)

11H

Master Fine Tuning LSB

mmH

Master Fine Tuning MSB

F7H

EOX (End Of Exclusive)

mm, 11 : 00 00H - 40 00H - 7F 7FH (-100 - 0 - +99.9 [cents])



○ Master Coarse Tuning

Status	Data byte	Status
F0H	7FH,7FH,04H,04H,IIH,mmH	F7
Byte	Explanation	
F0H	Exclusive status	
7FH	ID number (universal realtime message)	
7FH	Device ID (Broadcast)	
04H	Sub ID#1 (Device Control)	
04H	Sub ID#2 (Master Coarse Tuning)	
IIH	Master Coarse Tuning LSB	
mmH	Master Coarse Tuning MSB	
F7H	EOX (End Of Exclusive)	
IIH :	ignored (processed as 00H)	
mmH :	28H - 40H - 58H (-24 - 0 - +24 [semitones])	

● Global Parameter Control

Parameters of the Global Parameter Control are newly provided for the General MIDI 2.

○ Reverb Parameters

Status	Data byte	Status
F0H	7FH,7FH,04H,05H,01H,01H,01H,01H,01H,ppH,vvH	F7H
Byte	Explanation	
F0H	Exclusive status	
7FH	ID number (universal realtime message)	
7FH	Device ID (Broadcast)	
04H	Sub ID#1 (Device Control)	
05H	Sub ID#2 (Global Parameter Control)	
01H	Slot path length	
01H	Parameter ID width	
01H	Value width	
01H	Slot path MSB	
01H	Slot path LSB (Effect 0101: Reverb)	
ppH	Parameter to be controlled.	
vvH	Value for the parameter.	
F7H	EOX (End Of Exclusive)	
pp=0	Reverb Type	
	vv = 00H      Small Room (Room1)	
	vv = 01H      Medium Room (Room2)	
	vv = 02H      Large Room (Room3)	
	vv = 03H      Medium Hall (Hall1)	
	vv = 04H      Large Hall (Hall2)	
	vv = 08H      Plate (Plate)	
	* The Sound Canvas VA displays Reverb Type as described in the parenthesis.	
pp=1	Reverb Time	
	vv = 00H - 7FH      0 - 127	

○ Chorus Parameters

Status	Data byte	Status
F0H	7FH,7FH,04H,05H,01H,01H,01H,01H,02H,ppH,vvH	F7H
Byte	Explanation	
F0H	Exclusive status	
7FH	ID number (universal realtime message)	
7FH	Device ID (Broadcast)	
04H	Sub ID#1 (Device Control)	
05H	Sub ID#2 (Global Parameter Control)	
01H	Slot path length	
01H	Parameter width	
01H	Value width	
01H	Slot path MSB	
02H	Slot path LSB (Effect 0102: Chorus)	
ppH	Parameter to be controlled.	
vvH	Value for the parameter.	
F7H	EOX (End Of Exclusive)	
pp=0	Chorus Type	
	vv=0              Chorus1	
	vv=1              Chorus2	
	vv=2              Chorus3	

vv=3	Chorus4
vv=4	FB Chorus
vv=5	Flanger

pp=1	Mod Rate	
	vv = 00H - 7FH	0 - 127
pp=2	Mod Depth	
	vv = 00H - 7FH	0 - 127
pp=3	Feedback	
	vv = 00H - 7FH	0 - 127
pp=4	Send To Reverb	
	vv = 00H - 7FH	0 - 127

○ Channel Pressure

Status	Data byte	Status
F0H	7FH,7FH,09H,01H,0nH,ppH,rrH	F7H
Byte	Explanation	
F0H	Exclusive status	
7FH	ID number (universal realtime message)	
7FH	Device ID (Broadcast)	
09H	Sub ID#1 (Controller Destination Setting)	
01H	Sub ID#2 (Channel Pressure)	
0nH	MIDI Channel (00 - 0F)	
ppH	Controlled parameter	
rrH	Controlled range	
F7H	EOX (End Of Exclusive)	
pp=0	Pitch Control	
	rr = 28H - 58H      -24 - +24 [semitones]	
pp=1	Filter Cutoff Control	
	rr = 00H - 7FH      -9600 - +9450 [cents]	
pp=2	Amplitude Control	
	rr = 00H - 7FH      0 - 200%	
pp=3	LFO Pitch Depth	
	rr = 00H - 7FH      0 - 600 [cents]	
pp=4	LFO Filter Depth	
	rr = 00H - 7FH      0 - 2400 [cents]	
pp=5	LFO Amplitude Depth	
	rr = 00H - 7FH      0 - 100%	

○ Controller

Status	Data byte	Status
F0H	7FH,7FH,09H,03H,0nH,cch,ppH,rrH	F7H
Byte	Explanation	
F0H	Exclusive status	
7FH	ID number (universal realtime message)	
7FH	Device ID (Broadcast)	
09H	Sub ID#1 (Controller Destination Setting)	
03H	Sub ID#2 (Control Change)	
0nH	MIDI Channel (00 - 0F)	
cch	Controller number (01 - 1F, 40 - 5F)	
ppH	Controlled parameter	
rrH	Controlled range	
F7H	EOX (End Of Exclusive)	
pp=0	Pitch Control	
	rr = 28H - 58H      -24 - +24 [semitones]	
pp=1	Filter Cutoff Control	
	rr = 00H - 7FH      -9600 - +9450 [cents]	
pp=2	Amplitude Control	
	rr = 00H - 7FH      0 - 200%	
pp=3	LFO Pitch Depth	
	rr = 00H - 7FH      0 - 600 [cents]	
pp=4	LFO Filter Depth	
	rr = 00H - 7FH      0 - 2400 [cents]	
pp=5	LFO Amplitude Depth	
	rr = 00H - 7FH      0 - 100%	

○ Scale/Octave Tuning Adjust

Status	Data byte	Status
F0H	7EH,7FH,08H,08H,ffH,ggH,hhH,ssH...	F7

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
7FH	Device ID (Broadcast)
08H	Sub ID#1 (MIDI Tuning Standard)
08H	Sub ID#2 (scale/octave tuning 1-byte form)
ffH	Channel/Option byte1 bits 0 to 1 = channel 15 to 16 bit 2 to 6 = Undefined
ggH	Channel byte2 bits 0 to 6 = channel 8 to 14
hhH	Channel byte3 bits 0 to 6 = channel 1 to 7
ssH	12 byte tuning offset of 12 semitones from C to B 00H = -64 [cents] 40H = 0 [cents] (equal temperament) 7FH = +63 [cents]
F7H	EOX (End Of Exclusive)

○ Key-Based Instrument Controllers

Status	Data byte	Status
F0H	7FH,7FH,0AH,01H,0nH,kkH,nnH,vvH...	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
0AH	Sub ID#1 (Key-Based Instrument Control)
01H	Sub ID#2 (Controller)
0nH	MIDI Channel (00 - 0F)
kkH	Key Number
nnH	Control Number
vvH	Value
F7	EOX (End Of Exclusive)
nn=07H	Level vv = 00H - 7FH 0 - 200% (Relative)
nn=0AH	Pan vv = 00H - 7FH Left - Right (Absolute)
nn=5BH	Reverb Send vv = 00H - 7FH 0 - 127 (Absolute)
nn=5D	Chorus Send vv = 00H - 7FH 0 - 127 (Absolute)

\* This parameter affects drum instruments only.

● Universal Non-realtime System Exclusive Messages

○ Identity Request Message

Status	Data byte	Status
F0H	7EH, dev, 06H, 01H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
dev	Device ID
06H	Sub ID#1 (General Information)
01H	Sub ID#2 (Identity Request)
F7H	EOX (End Of Exclusive)

\* The "dev" is 10H (own device) number or 7FH (Broadcast)

● Data transmission

The Sound Canvas VA can use Exclusive messages to transmit internal settings to other devices. The Exclusive message used when transmitting GS format data has a model ID of 42H and a device ID of 10H.

○ Data set 1 DT1 (12H)

This is the message that actually performs data transmission, and is used when you wish to transmit the data.

Status	Data byte	Status
F0H	41H, dev, 42H, 12H, aaH, bbH, cch, ddH, ... eeH, sum	F7H
Byte	Explanation	
F0H	Exclusive status	
41H	ID number (Roland)	
10H	Device ID	
42H	Model ID (GS), 45H	
12H	Command ID (DT1)	
aaH	Address MSB: upper byte of the starting address of the transmitted data	
bbH	Address: middle byte of the starting address of the transmitted data	
cch	Address LSB: lower byte of the starting address of the transmitted data	
ddH	Data: the actual data to be transmitted. Multiple bytes of data are transmitted starting from the address.	
:	:	
eeH	Data	
sum	Checksum	
F7H	EOX (End Of Exclusive)	

- \* The amount of data that can be transmitted at one time depends on the type of data, and data can be received only from the specified starting address and size.
- \* Data larger than 128 bytes must be divided into packets of 128 bytes or less. If "Data Set 1" is transmitted successively, there must be an interval of at least 40 ms between packets.
- \* Regarding the checksum, please refer to "Example of an Exclusive message and calculating a checksum (p. 109)"

2. Individual Parameter Transmission

(Model ID=45H or 42H)

Individual Parameter Transmission transmits data (or requests data) for one parameter as one Exclusive message (one packet of "F0 .... F7"). In Individual Parameter Transmission, you must use the Address and Size listed in the following "Parameter Address Map." Addresses marked by "#" cannot be used as starting addresses.

■ Address Block map

An outlined address map of the Individual Parameter Transmission is as follows;

<Model ID = 42H>

● Port

Address (H)	Block
00 00 00	SYSTEM
20 00 00	USER TONE BANK
21 00 00	USER DRUM SET
40 00 00	PATCH COMMON #
40 10 00	PATCH PART (BLOCK00-0F)
41 00 00	DRUM SETUP

## ● Parameter address map

This map indicates address, size, Data (range), Parameter, Description, and Default Value of parameters which can be transferred using "Request data 1 (RQ1)" and "Data set 1 (DT1)." All the numbers of address, size, Data, and Default Value are indicated in 7-bit Hexadecimal-form. Numbers in the explanatory column are given in decimal notation. The MODEL ID = 45H parameters are related to LCD display.

## ● System Parameters

Parameters affecting the entire unit are called System Parameters.

<MODEL ID = 42H>

Address (H)	Size (H)	Data (H)	Parameter	Description	Default (H)	Description
00 00 7F	00 00 01	00 - 01	SYSTEM MODE SET 00	MODE-1 00: MODE-1 (Single module mode) (Rx. only)		

\* When the Data value 00 is received, the same processing will be carried out as when GS Reset is received. Other values are ignored.

## ● Patch parameters

### ○ Patch common parameters

The parameters common to all Parts in each module are called Patch Common parameters.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 00 00	00 00 04	0018 - 07E8	MASTER TUNE	-100.0 - +100.0 [cents]	00 04 00 00	0 [cents]
40 00 01#				Use nibblized data.		
40 00 02#						
40 00 03#						

\* Refer to "3. Supplementary material", "About the Tuning (p. 109)"

40 00 04	00 00 01	00 - 7F	MASTER VOLUME	0 - 127 (= F0 7F 7F 04 01 00 vv F7)	7F	127
40 00 05	00 00 01	28 - 58	MASTER KEY-SHIFT	-24 - +24 [semitones]	40	0 [semitones]
40 00 06	00 00 01	01 - 7F	MASTER PAN	-63 (LEFT) - +63 (RIGHT)	40	0 (CENTER)
40 00 7F	00 00 01	00	MODE SET	00 = GS Reset (Rx. only)		
40 01 00	00 00 10	20 - 7F	PATCH NAME	16 ASCII Characters		
40 01 : #						
40 01 0F#						
40 01 30	00 00 01	00 - 07	REVERB MACRO	00: Room 1 01: Room 2 02: Room 3 03: Hall 1 04: Hall 2 05: Plate 06: Delay 07: Panning Delay	04	Hall 2
40 01 31	00 00 01	00 - 07	REVERB CHARACTER	0 - 7	04	4
40 01 32	00 00 01	00 - 07	REVERB PRE-LPF	0 - 7	00	0
40 01 33	00 00 01	00 - 7F	REVERB LEVEL	0 - 127	40	64
40 01 34	00 00 01	00 - 7F	REVERB TIME	0 - 127	40	64
40 01 35	00 00 01	00 - 7F	REVERB DELAY FEEDBACK	0 - 127	00	0
40 01 37	00 00 01	00 - 7F	REVERB PREDELAY TIME	0 - 127 [ms]	00	0

REVERB MACRO is a macro parameter that allows global setting of reverb parameters. When you select the reverb type with REVERB MACRO, each reverb parameter will be set to their most suitable value.  
REVERB CHARACTER is a parameter that changes the reverb algorithm. The value of REVERB CHARACTER corresponds to the REVERB MACRO of the same number.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 01 38	00 00 01	00 - 07	CHORUS MACRO	00: Chorus 1 01: Chorus 2 02: Chorus 3 03: Chorus 4 04: Feedback Chorus 05: Flanger 06: Short Delay 07: Short Delay (FB)	02	Chorus 3
40 01 39	00 00 01	00 - 07	CHORUS PRE-LPF	0-7	00	0
40 01 3A	00 00 01	00 - 7F	CHORUS LEVEL	0-127	40	64
40 01 3B	00 00 01	00 - 7F	CHORUS FEEDBACK	0-127	08	8
40 01 3C	00 00 01	00 - 7F	CHORUS DELAY	0-127	50	80
40 01 3D	00 00 01	00 - 7F	CHORUS RATE	0-127	03	3
40 01 3E	00 00 01	00 - 7F	CHORUS DEPTH	0-127	13	19
40 01 3F	00 00 01	00 - 7F	CHORUS SEND LEVEL TO REVERB	0-127	00	0
40 01 40	00 00 01	00 - 7F	CHORUS SEND LEVEL TO DELAY	0-127	00	0

CHORUS MACRO is a macro parameter that allows global setting of chorus parameters. When you select the chorus type with CHORUS MACRO, each chorus parameter will be set to their most suitable value.

40 01 50	00 00 01	00 - 09	DELAY MACRO	00: Delay 1 01: Delay 2 02: Delay 3 03: Delay 4 04: Pan Delay 1 05: Pan Delay 2 06: Pan Delay 3 07: Pan Delay 4 08: Delay to Reverb 09: Pan Repeat	00	Delay1
40 01 51	00 00 01	00 - 07	DELAY PRE-LPF	0 - 7	00	0
40 01 52	00 00 01	01 - 73	DELAY TIME CENTER	0.1 ms - 1 sec	61	340
40 01 53	00 00 01	01 - 78	DELAY TIME RATIO LEFT	4 - 500%	01	4
40 01 54	00 00 01	01 - 78	DELAY TIME RATIO RIGHT	4 - 500%	01	4
40 01 55	00 00 01	00 - 7F	DELAY LEVEL CENTER	0 - 127	7F	127
40 01 56	00 00 01	00 - 7F	DELAY LEVEL LEFT	0 - 127	00	0
40 01 57	00 00 01	00 - 7F	DELAY LEVEL RIGHT	0 - 127	00	0
40 01 58	00 00 01	00 - 7F	DELAY LEVEL	0 - 127	40	64
40 01 59	00 00 01	00 - 7F	DELAY FEEDBACK	-64 - +63	50	+16
40 01 5A	00 00 01	00 - 7F	DELAY SENDLEVEL TO REVERB	0 - 127	00	0

\* DELAY MACRO is a macro parameter that allows global setting of delay parameters. When you select the delay type with DELAY MACRO, each delay parameter will be set to their most suitable value.

\* The relation between the DELAY TIME CENTER value and the actual delay time is as follows.

DELAY TIME	Time Range [ms]	Resolution [ms]
01 - 14	0.1 - 2.0	0.1
14 - 23	2.0 - 5.0	0.2
23 - 2D	5.0 - 10.0	0.5
2D - 37	10.0 - 20.0	1.0
37 - 46	20.0 - 50.0	2.0
46 - 50	50.0 - 100.0	5.0
50 - 5A	100.0 - 200.0	10.0
5A - 69	200.0 - 500.0	20.0
69 - 73	500.0 - 1000.0	50.0

\* DELAY TIME RATIO LEFT and DELAY TIME RATIO RIGHT specify the ratio in relation to DELAY TIME CENTER. The resolution is 100/24 (%).

40 02 00	00 00 01	00 - 01	EQ LOW FREQ	200Hz, 400Hz	00	200Hz
40 02 01	00 00 01	34 - 4C	EQ LOW GAIN	-12 - +12dB	40	0
40 02 02	00 00 01	00 - 01	EQ HIGH FREQ	3kHz, 6kHz	00	3kHz
40 02 03	00 00 01	34 - 4C	EQ HIGH GAIN	-12 - +12dB	40	0

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 03 00	00 00 02	00 - 7F	EFX TYPE	00 00	00: Thru	
40 03 01#						
40 03 03	00 00 01	00 - 7F	EFX PARAMETER 1			
40 03 04	00 00 01	00 - 7F	EFX PARAMETER 2			
40 03 05	00 00 01	00 - 7F	EFX PARAMETER 3			
40 03 06	00 00 01	00 - 7F	EFX PARAMETER 4			
40 03 07	00 00 01	00 - 7F	EFX PARAMETER 5			
40 03 08	00 00 01	00 - 7F	EFX PARAMETER 6			
40 03 09	00 00 01	00 - 7F	EFX PARAMETER 7			
40 03 0A	00 00 01	00 - 7F	EFX PARAMETER 8			
40 03 0B	00 00 01	00 - 7F	EFX PARAMETER 9			
40 03 0C	00 00 01	00 - 7F	EFX PARAMETER 10			
40 03 0D	00 00 01	00 - 7F	EFX PARAMETER 11			
40 03 0E	00 00 01	00 - 7F	EFX PARAMETER 12			
40 03 0F	00 00 01	00 - 7F	EFX PARAMETER 13			
40 03 10	00 00 01	00 - 7F	EFX PARAMETER 14			
40 03 11	00 00 01	00 - 7F	EFX PARAMETER 15			
40 03 12	00 00 01	00 - 7F	EFX PARAMETER 16			
40 03 13	00 00 01	00 - 7F	EFX PARAMETER 17			
40 03 14	00 00 01	00 - 7F	EFX PARAMETER 18			
40 03 15	00 00 01	00 - 7F	EFX PARAMETER 19			
40 03 16	00 00 01	00 - 7F	EFX PARAMETER 20			

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 03 17	00 00 01	00 - 7F	EFX SEND LEVEL TO REVERB	0-127	28	40
40 03 18	00 00 01	00 - 7F	EFX SEND LEVEL TO CHORUS	0-127	00	0
40 03 19	00 00 01	00 - 7F	EFX SEND LEVEL TO DELAY	0-127	00	0
40 03 1B	00 00 01	00 - 7F	EFX CONTROL SOURCE1	Off, CC1-95, CAf, Bend	00	Off
40 03 1C	00 00 01	00 - 7F	EFX CONTROL DEPTH1	-100 - 0 - +100 [%]	40	0 (%)
40 03 1D	00 00 01	00 - 7F	EFX CONTROL SOURCE2	Off, CC1 - 95, CAf, Bend	00	Off
40 03 1E	00 00 01	00 - 7F	EFX CONTROL DEPTH2	-100 - 0 - +100 [%]	40	0 (%)
40 03 1F	00 00 01	00 - 7F	EFX SEND EQ SWITCH	OFF/ON	01	ON

EFX TYPE is a macro parameter which sets various Insertion Effect parameters as a group. When you use EFX TYPE to select an Insertion Effect type, each effect parameter will be set to the most suitable value.

○ Patch Part parameters

The Sound Canvas VA has 16 Parts. Parameters that can be set individually for each Part are called Patch Part parameters. If you specify a part, specify the address 40 \*\*\* using the block number to the corresponding part. If you use Exclusive messages to set Patch Part parameters, specify the address by Block number rather than Part Number (normally the same number as the MIDI channel). The Block number can be specified as one of 16 blocks, from 0 (H) to F (H).

The relation between Part number and Block number is as follows.

x...BLOCK NUMBER (0 - F),	Part 1	(default MIDIch = 1)	x=1
	Part 2	(default MIDIch = 2)	x=2
	:	:	:
	Part 9	(default MIDIch = 9)	x=9
	Part10	(default MIDIch =10)	x=0
	Part11	(default MIDIch =11)	x=A
	Part12	(default MIDIch =12 )	x=B
	:	:	:
	Part16	(default MIDIch =16)	x=F

n... MIDI channel number (0 - F) of the BLOCK.

In the following map, the control numbers of the control changes are indicated as CC#.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 1x 00	00 00 02	00 - 7F	TONE NUMBER	CC#00 VALUE 0 - 127	00	0
40 1x 01#		00 - 7F		P.C. VALUE 1 - 128	00	1
40 1x 02	00 00 01	00 - 10	Rx. CHANNEL	1 - 16, OFF	Same as the Part Number	
40 1x 03	00 00 01	00 - 01	Rx. PITCH BEND	OFF/ON	01	ON
40 1x 04	00 00 01	00 - 01	Rx. CH PRESSURE (CAf)	OFF/ON	01	ON
40 1x 05	00 00 01	00 - 01	Rx. PROGRAM CHANGE	OFF/ON	01	ON
40 1x 06	00 00 01	00 - 01	Rx. CONTROL CHANGE	OFF/ON	01	ON
40 1x 07	00 00 01	00 - 01	Rx. POLY PRESSURE (PAf)	OFF/ON	01	ON
40 1x 08	00 00 01	00 - 01	Rx. NOTE MESSAGE	OFF/ON	01	ON
40 1x 09	00 00 01	00 - 01	Rx. RPN	OFF/ON	01	ON
40 1x 0A	00 00 01	00 - 01	Rx. NRPN	OFF/ON	00 (01*)	OFF (ON*)

\* When "GM1 System On" and "GM2 System On" are received, Rx. NRPN will be set OFF. When "GS Reset" is received, it will be set ON.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 1x 0B	00 00 01	00 - 01	Rx. MODULATION	OFF/ON	01	ON
40 1x 0C	00 00 01	00 - 01	Rx. VOLUME	OFF/ON	01	ON
40 1x 0D	00 00 01	00 - 01	Rx. PANPOT	OFF/ON	01	ON
40 1x 0E	00 00 01	00 - 01	Rx. EXPRESSION	OFF/ON	01	ON
40 1x 0F	00 00 01	00 - 01	Rx. HOLD1	OFF/ON	01	ON
40 1x 10	00 00 01	00 - 01	Rx. PORTAMENTO	OFF/ON	01	ON
40 1x 11	00 00 01	00 - 01	Rx. SOSTENUTO	OFF/ON	01	ON
40 1x 12	00 00 01	00 - 01	Rx. SOFT	OFF/ON	01	ON
40 1x 13	00 00 01	00 - 01	MONO/POLY MODE	Mono/Poly (=CC# 126 01/CC# 127 00)	01	Poly
40 1x 14	00 00 01	00 - 02	ASSIGN MODE	0 = SINGLE 1 = LIMITED-MULTI 2 = FULL-MULTI	SC-8820/SC-88Pro/SC-88 MAP 01 SC-55 MAP	LIMITED-MULTI SINGLE (Drum Part) LIMITED-MULTI (Normal Part)
					00 at x=0 01 at x ≠0	
<p>Single : If the same note is played multiple times in succession, the previously-sounding note will be completely silenced, and then the new note will be sounded.</p> <p>LimitedMulti : If the same note is played multiple times in succession, the previously-sounding note will be continued to a certain extent even after the new note is sounded. (Default setting)</p> <p>FullMulti : If the same note is played multiple times in succession, the previously-sounding note(s) will continue sounding for their natural length even after the new note is sounded.</p>						
<p>* ASSIGN MODE is the parameter that determines how voice assignment will be handled when sounds overlap on identical note numbers in the same channel (i.e., repeatedly struck notes). This is initialized to a mode suitable for each Part, so for general purposes there is no need to change this.</p>						
40 1x 15	00 00 01	00 - 02	USE FOR RHYTHM PART	0 = OFF 1 = MAP1 2 = MAP2	00 at ≠0 01 at x=0	OFF (Normal Part) MAP1 (Drum Part)
<p>* This parameter sets the Drum Map of the Part used as the Drum Part. The Sound Canvas VA can simultaneously (in different Parts) use up to two Drum Maps (MAP1, MAP2). With the initial settings, Part10 (MIDI CH=10, x=0) is set to MAP1 (1), and other Parts are set to normal instrumental Parts (OFF (0)).</p>						
40 1x 16	00 00 01	28 - 58	PITCH KEY SHIFT	-24 - +24 [semitones]	40	0 [semitones]
40 1x 17	00 00 02	08 - F8	PITCH OFFSET FINE	-12.0 - +12.0 [Hz]	08 00	0 [Hz]
40 1x 18#				Use nibblized data.		
<p>PITCH OFFSET FINE allows you to alter, by a specified frequency amount, the pitch at which notes will sound. This parameter differs from the conventional Fine Tuning (RPN #1) parameter in that the amount of frequency alteration (in Hertz) will be identical no matter which note is played. When a multiple number of Parts, each of which has been given a different setting for PITCH OFFSET FINE, are sounded by means of an identical note number, you can obtain a Celeste effect.</p>						
40 1x 19	00 00 01	00 - 7F	PART LEVEL	0 - 127 (=CC# 7)	64	100
40 1x 1A	00 00 01	00 - 7F	VELOCITY SENSE DEPTH	0 - 127	40	64
40 1x 1B	00 00 01	00 - 7F	VELOCITY SENSE OFFSET	0 - 127	40	64
40 1x 1C	00 00 01	00 - 7F	PART PANPOT	-64 (RANDOM), -63 (LEFT) - +63 (RIGHT) (=CC# 10, except RANDOM)	40	0 (CENTER)
40 1x 1D	00 00 01	00 - 7F	KEYBOARD RANGE LOW	(C-1) - (G9)	00	C-1
40 1x 1E	00 00 01	00 - 7F	KEYBOARD RANGE HIGH	(C-1) - (G9)	7F	G 9
40 1x 1F	00 00 01	00 - 5F	CC1 CONTROLLER NUMBER	0 - 95	10	16
40 1x 20	00 00 01	00 - 5F	CC2 CONTROLLER NUMBER	0 - 95	11	17
40 1x 21	00 00 01	00 - 7F	CHORUS SEND LEVEL	0 - 127 (=CC# 93)	00	0
40 1x 22	00 00 01	00 - 7F	REVERB SEND LEVEL	0 - 127 (=CC# 91)	28	40
40 1x 23	00 00 01	00 - 01	Rx.BANK SELECT	OFF/ON	01 (00*)	ON (OFF*)
<p>* When "GM1 System On" is received, Rx.BANK SELECT will be set OFF. When "GS RESET" is received, Rx.BANK SELECT will be set ON.</p>						
40 1x 24	00 00 01	00 - 01	RX BANK SELECT LSB	OFF/ON	01	ON
<p>When RX BANK SELECT LSB = OFF, Bank Select LSB (Bn 20 11) will be treated as 00H regardless of its value.</p>						
40 1x 2A	00 00 02	00 00 - 40 00 - 7F 7F	PITCH FINE TUNE	-100 - 0 - +100 [cents] (= RPN#1)	40 00	0
40 1x 2B#						
40 1x 2C	00 00 01	00 - 7F	DELAY SEND LEVEL	0-127 (=CC# 94)	00	0
40 1x 30	00 00 01	00 - 7F	TONE MODIFY1	-64 - +63 (=NRP# 8/CC#76)	40	0
40 1x 31	00 00 01	00 - 7F	TONE MODIFY2	-64 - +63 (=NRP# 9/CC#77)	40	0
40 1x 32	00 00 01	00 - 7F	TONE MODIFY3	-64 - +63 (=NRP# 32/CC#74)	40	0
			TVF Cutoff Freq			

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 1x 33	00 00 01	00 - 7F	TONE MODIFY4	-64 - +63	40	0
			TVF Resonance	(=NRPN# 33/CC#71)		
40 1x 34	00 00 01	00 - 7F	TONE MODIFY5	-64 - +63	40	0
			TVF&TVA Env.attack	(=NRPN# 99/CC#73)		
40 1x 35	00 00 01	00 - 7F	TONE MODIFY6	-64 - +63	40	0
			TVF&TVA Env.decay	(=NRPN# 100/CC#75)		
40 1x 36	00 00 01	00 - 7F	TONE MODIFY7	-64 - +63	40	0
			TVF&TVA Env.release	(=NRPN# 102/CC#72)		
40 1x 37	00 00 01	00 - 7F	TONE MODIFY8	-64 - +63	40	0
			Vibrato Delay	(=NRPN# 10/CC#78)		
40 1x 40	00 00 0C	00 - 7F	SCALE TUNING C	-64 - +63 [cents]	40	0 [cents]
40 1x 41#		00 - 7F	SCALE TUNING C#	-64 - +63 [cents]	40	0 [cents]
40 1x 42#		00 - 7F	SCALE TUNING D	-64 - +63 [cents]	40	0 [cents]
40 1x 43#		00 - 7F	SCALE TUNING D#	-64 - +63 [cents]	40	0 [cents]
40 1x 44#		00 - 7F	SCALE TUNING E	-64 - +63 [cents]	40	0 [cents]
40 1x 45#		00 - 7F	SCALE TUNING F	-64 - +63 [cents]	40	0 [cents]
40 1x 46#		00 - 7F	SCALE TUNING F#	-64 - +63 [cents]	40	0 [cents]
40 1x 47#		00 - 7F	SCALE TUNING G	-64 - +63 [cents]	40	0 [cents]
40 1x 48#		00 - 7F	SCALE TUNING G#	-64 - +63 [cents]	40	0 [cents]
40 1x 49#		00 - 7F	SCALE TUNING A	-64 - +63 [cents]	40	0 [cents]
40 1x 4A#		00 - 7F	SCALE TUNING A#	-64 - +63 [cents]	40	0 [cents]
40 1x 4B#		00 - 7F	SCALE TUNING B	-64 - +63 [cents]	40	0 [cents]

\* SCALE TUNING is a function that allows fine adjustment to the pitch of each note in the octave. The pitch of each identically-named note in all octaves will change simultaneously. A setting of +/- 0 cents (40H) is equal temperament.

40 2x 00	00 00 01	28 - 58	MOD PITCH CONTROL	-24 - +24 [semitones]	40	0 [semitones]
40 2x 01	00 00 01	00 - 7F	MOD TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 02	00 00 01	00 - 7F	MOD AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 03	00 00 01	00 - 7F	MOD LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 04	00 00 01	00 - 7F	MOD LFO1 PITCH DEPTH	0 - 600 [cents]	0A	10 [cents]
40 2x 05	00 00 01	00 - 7F	MOD LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 06	00 00 01	00 - 7F	MOD LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 07	00 00 01	00 - 7F	MOD LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 08	00 00 01	00 - 7F	MOD LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 09	00 00 01	00 - 7F	MOD LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 0A	00 00 01	00 - 7F	MOD LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 10	00 00 01	40 - 58	BEND PITCH CONTROL	0 - 24 [semitones]	42	2 [semitones]
40 2x 11	00 00 01	00 - 7F	BEND TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 12	00 00 01	00 - 7F	BEND AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 13	00 00 01	00 - 7F	BEND LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 14	00 00 01	00 - 7F	BEND LFO1 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 15	00 00 01	00 - 7F	BEND LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 16	00 00 01	00 - 7F	BEND LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 17	00 00 01	00 - 7F	BEND LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 18	00 00 01	00 - 7F	BEND LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 19	00 00 01	00 - 7F	BEND LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 1A	00 00 01	00 - 7F	BEND LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 20	00 00 01	28 - 58	CAf PITCH CONTROL	-24 - +24 [semitones]	40	0 [semitones]
40 2x 21	00 00 01	00 - 7F	CAf TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 22	00 00 01	00 - 7F	CAf AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 23	00 00 01	00 - 7F	CAf LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 24	00 00 01	00 - 7F	CAf LFO1 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 25	00 00 01	00 - 7F	CAf LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 26	00 00 01	00 - 7F	CAf LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 27	00 00 01	00 - 7F	CAf LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 28	00 00 01	00 - 7F	CAf LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 29	00 00 01	00 - 7F	CAf LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 2A	00 00 01	00 - 7F	CAf LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 30	00 00 01	28 - 58	PAf PITCH CONTROL	-24 - +24 [semitones]	40	0 [semitones]
40 2x 31	00 00 01	00 - 7F	PAf TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 32	00 00 01	00 - 7F	PAf AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 33	00 00 01	00 - 7F	PAf LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 34	00 00 01	00 - 7F	PAf LFO1 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 35	00 00 01	00 - 7F	PAf LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 36	00 00 01	00 - 7F	PAf LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 37	00 00 01	00 - 7F	PAf LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 38	00 00 01	00 - 7F	PAf LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 39	00 00 01	00 - 7F	PAf LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 3A	00 00 01	00 - 7F	PAf LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]

Address (H)	Size (H)	Data (H)	Parameter	Description	Default Value (H)	Description
40 2x 40	00 00 01	28 - 58	CC1 PITCH CONTROL	-24 - +24 [semitones]	40	0 [semitones]
40 2x 41	00 00 01	00 - 7F	CC1 TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 42	00 00 01	00 - 7F	CC1 AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 43	00 00 01	00 - 7F	CC1 LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 44	00 00 01	00 - 7F	CC1 LFO1 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 45	00 00 01	00 - 7F	CC1 LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 46	00 00 01	00 - 7F	CC1 LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 47	00 00 01	00 - 7F	CC1 LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 48	00 00 01	00 - 7F	CC1 LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 49	00 00 01	00 - 7F	CC1 LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 4A	00 00 01	00 - 7F	CC1 LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 50	00 00 01	28 - 58	CC2 PITCH CONTROL	-24 - +24 [semitones]	40	0 [semitones]
40 2x 51	00 00 01	00 - 7F	CC2 TVF CUTOFF CONTROL	-9600 - +9600 [cents]	40	0 [cents]
40 2x 52	00 00 01	00 - 7F	CC2 AMPLITUDE CONTROL	-100.0 - +100.0 [%]	40	0 [%]
40 2x 53	00 00 01	00 - 7F	CC2 LFO1 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 54	00 00 01	00 - 7F	CC2 LFO1 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 55	00 00 01	00 - 7F	CC2 LFO1 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 56	00 00 01	00 - 7F	CC2 LFO1 TVA DEPTH	0 - 100.0 [%]	00	0 [%]
40 2x 57	00 00 01	00 - 7F	CC2 LFO2 RATE CONTROL	-10.0 - +10.0 [Hz]	40	0 [Hz]
40 2x 58	00 00 01	00 - 7F	CC2 LFO2 PITCH DEPTH	0 - 600 [cents]	00	0 [cents]
40 2x 59	00 00 01	00 - 7F	CC2 LFO2 TVF DEPTH	0 - 2400 [cents]	00	0 [cents]
40 2x 5A	00 00 01	00 - 7F	CC2 LFO2 TVA DEPTH	0 - 100.0 [%]	00	0 [%]

\* You may not always be able to obtain the desired effect by modifying the LFO 1 and LFO 2 parameters.

40 4x 00	00 00 01	00 - 04	TONE MAP NUMBER (= CC#32 : Bank number LSB)	MAP 0 - 4 00: SELECTED 01: SC-55 MAP 02: SC-88 MAP 03: SC-88Pro MAP 04: SC-8820 MAP	00	
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\* When "GS Reset" is received, this will be 00: SELECTED.

40 4x 01	00 00 01	01 - 04	TONE MAP-0 NUMBER	01: SC-55 MAP 02: SC-88 MAP 03: SC-88Pro MAP 04: SC-8820 MAP	(04)	
----------	----------	---------	-------------------	---	------	--

\* This specifies a MAP when TONE MAP NUMBER is 00.

40 4x 20	00 00 01	00 - 01	EQ ON/OFF	OFF/ON	01	ON
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\* This turns the EQ (equalizer) on/off.

40 4x 22	00 00 01	00 - 01	PART EFX ASSIGN	00: BYPASS 01: EFX	00	BYPASS
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### ● Drum setup parameters

m: Map number (0 = MAP1, 1 = MAP2)

rr: drum part note number (00H - 7FH: 0 - 127)

Address (H)	Size (H)	Data (H)	Parameter	Description
41 m0 00	00 00 0C	20 - 7F	DRUM MAP NAME	ASCII Character
41 m0 0B#			#	
41 m1 rr	00 00 01	00 - 7F	PLAY NOTE NUMBER	Pitch coarse
41 m2 rr	00 00 01	00 - 7F	LEVEL	TVA level (=NRP# 26)
41 m3 rr	00 00 01	00 - 7F	ASSIGN GROUP NUMBER	Non, 1 - 127
41 m4 rr	00 00 01	00 - 7F	PANPOT	-64 (RANDOM), -63 (LEFT) - +63 (RIGHT) (=NRP# 28, except RANDOM)
41 m5 rr	00 00 01	00 - 7F	REVERB SEND LEVEL	0.0 - 1.0 Multiplicand of the part reverb level (=NRP# 29)
41 m6 rr	00 00 01	00 - 7F	CHORUS SEND LEVEL	0.0 - 1.0 Multiplicand of the part chorus level (=NRP# 30)
41 m7 rr	00 00 01	00 - 01	Rx. NOTE OFF	OFF/ON
41 m8 rr	00 00 01	00 - 01	Rx. NOTE ON	OFF/ON
41 m9 rr	00 00 01	00 - 7F	DELAY SEND LEVEL	0.0 - 1.0 Multiplicand of the part delay level (=NRP# 31)

\* When the Drum Set is changed, DRUM SETUP PARAMETER values will all be initialized.

\* It is not possible to simultaneously use both Chorus Send Level and Delay Send Level for a single Drum Instrument.



### 3. Supplementary material

● Decimal and Hexadecimal table

(An "H" is appended to the end of numbers in hexadecimal notation.)

In MIDI documentation, data values and addresses/sizes of Exclusive messages, etc. are expressed as hexadecimal values for each 7 bits.

The following table shows how these correspond to decimal numbers.

Dec.	Hex.	Dec.	Hex.	Dec.	Hex.	Dec.	Hex.
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

\* Decimal values such as MIDI channel, bank select, and program change are listed as one greater than the values given in the above table.

\* A 7-bit byte can express data in the range of 128 steps. For data where greater precision is required, we must use two or more bytes. For example, two hexadecimal numbers aa bbH expressing two 7-bit bytes would indicate a value of aa x 128+bb.

\* In the case of values which have a +/- sign, 00H = -64, 40H = +/-0, and 7FH = +63, so that the decimal expression would be 64 less than the value given in the above chart. In the case of two types, 00 00H = -8192, 40 00H = +/-0, and 7F 7FH = +8191. For example, if aa bbH were expressed as decimal, this would be aa bbH - 40 00H = aa x 128+bb - 64 x 128.

\* Data marked "Use nibbled data" is expressed in hexadecimal in 4-bit units. A value expressed as a 2-byte nibble 0a 0bH has the value of a x 16+b.

<Example 1> What is the decimal expression of 5AH ?

From the preceding table, 5AH = 90

<Example 2> What is the decimal expression of the value 12 34H given as hexadecimal for each 7 bits?

From the preceding table, since 12H = 18 and 34H = 52

18 x 128 + 52 = 2356

<Example 3> What is the decimal expression of the nibbled value 0A 03 09 0D ?

From the preceding table, since 0AH = 10, 03H = 3, 09H = 9, 0DH = 13

((10 x 16 + 3) x 16 + 9) x 16 + 13 = 41885

<Example 4> What is the nibbled expression of the decimal value 1258?

16) 1258

16) 78 ... 10

16) 4 ... 14

0 ... 4

Since from the preceding table, 0 = 00H, 4 = 04H, 14 = 0EH, 10 = 0AH, the result is: 00 04 0E 0AH.

● Examples of actual MIDI messages

<Example 1> 92 3E 5F

9n is the Note-on status, and n is the MIDI channel number. Since 2H = 2, 3EH = 62, and 5FH = 95, this is a Note-on message with MIDI CH = 3, note number 62 (note name is D4), and velocity 95.

<Example 2> CE 49

CnH is the Program Change status, and n is the MIDI channel number. Since EH = 14 and 49H = 73, this is a Program Change message with MIDI CH = 15, program number 74 (Flute in GS).

<Example 3> EA 00 28

EnH is the Pitch Bend Change status, and n is the MIDI channel number. The 2nd byte (00H = 0) is the LSB and the 3rd byte (28H = 40) is the MSB, but Pitch Bend Value is a signed number in which 40 00H (= 64 x 12 + 80 = 8192) is 0, so this Pitch Bend Value is

28 00H - 40 00H = 40 x 12 + 80 - (64 x 12 + 80) = 5120 - 8192 = -3072

If the Pitch Bend Sensitivity is set to 2 semitones, -8192 (00 00H) will cause the pitch to change -200 cents, so in this case -200 x (-3072) / (-8192) = -75 cents of Pitch Bend is being applied to MIDI channel 11.

<Example 4> B3 64 00 65 00 06 0C 26 00 64 7F 65 7F

BnH is the Control Change status, and n is the MIDI channel number. For Control Changes, the 2nd byte is the control number, and the 3rd byte is the value. In a case in which two or more messages consecutive messages have the same status, MIDI has a provision called "running status" which allows the status byte of the second and following messages to be omitted. Thus, the above messages have the following meaning.

B3 64 00	MIDI ch.4, lower byte of RPN parameter number:00H
(B3) 65 00	(MIDI ch.4) upper byte of RPN parameter number:00H
(B3) 06 0C	(MIDI ch.4) upper byte of parameter value:0CH
(B3) 26 00	(MIDI ch.4) lower byte of parameter value:00H
(B3) 64 7F	(MIDI ch.4) lower byte of RPN parameter number:7FH
(B3) 65 7F	(MIDI ch.4) upper byte of RPN parameter number:7FH

In other words, the above messages specify a value of 0C 00H for RPN parameter number 00 00H on MIDI channel 4, and then set the RPN parameter number to 7F 7FH.

RPN parameter number 00 00H is Pitch Bend Sensitivity, and the MSB of the value indicates semitone units, so a value of 0CH = 12 sets the maximum pitch bend range to +/-12 semitones (1 octave). (On GS sound generators the LSB of Pitch Bend Sensitivity is ignored, but the LSB should be transmitted anyway (with a value of 0) so that operation will be correct on any device.)

Once the parameter number has been specified for RPN or NRPN, all Data Entry messages transmitted on that same channel will be valid, so after the desired value has been transmitted, it is a good idea to set the parameter number to 7F 7FH to prevent accidents. This is the reason for the (B3) 64 7F (B3) 65 7F at the end.

It is not desirable for performance data (such as Standard MIDI File data) to contain many events with running status as given in <Example 4>. This is because if playback is halted during the song and then rewind or fast-forwarded, the sequencer may not be able to transmit the correct status, and the sound generator will then misinterpret the data. Take care to give each event its own status.

It is also necessary that the RPN or NRPN parameter number setting and the value setting be done in the proper order. On some sequencers, events occurring in the same (or consecutive) clock may be transmitted in an order different than the order in which they were received. For this reason it is a good idea to slightly skew the time of each event (about 1 tick for TPQN = 96, and about 5 ticks for TPQN = 480).

TPQN: Ticks Per Quarter Note

● Example of an Exclusive message and calculating a checksum

Roland Exclusive messages (RQ1, DT1) are transmitted with a checksum at the end (before F7) to make sure that the message was correctly received. The value of the checksum is determined by the address and data (or size) of the transmitted Exclusive message.

How to calculate the checksum (hexadecimal numbers are indicated by "H")

The checksum is a value derived by adding the address, size, and checksum itself and inverting the lower 7 bits.

Here's an example of how the checksum is calculated. We will assume that in the Exclusive message we are transmitting, the address is aa bb cCH and the data or size is dd ee FFH.

aa+bb+cc+dd+ee+ff = sum  
 sum / 128 = quotient ... remainder  
 128 - remainder = checksum

<Example 1> Setting REVERB MACRO to ROOM 3

According to the "Parameter address map (p. 102)", the REVERB MACRO Address is 40 01 30H, and ROOM 3 is a value of 02H. Thus,

F0 41 10 42 12 40 01 30 02 ?? F7  
 (1) (2) (3) (4) (5) address data checksum (6)

- (1) Exclusive Status
- (2) ID (Roland)
- (3) Device ID (17)
- (4) Model ID (GS)
- (5) Command ID (DT1)
- (6) End of Exclusive

Next, we calculate the checksum.

40H+01H+30H+02H = 64 + 1+48 + 2 = 115 (sum)  
 115 (sum) / 128 = 0 (quotient) ... 115 (remainder)  
 checksum = 128 - 115 (remainder) = 13 = 0DH

This means that F0 41 10 42 12 40 01 30 02 0D F7 is the message we transmit.

<Example 2> Requesting transmission of the LEVEL for DRUM MAP 1 NOTE NUMBER 75 (D#5; Claves)

NOTE NUMBER 75 (D#5) is 4BH in hexadecimal.

According to the "Parameter address map (p. 102)", the LEVEL of NOTE NUMBER 75 (D#5; Claves) in DRUM MAP 1 has an Address of 41 02 4BH and a Size of 00 00 01H. Thus,

F0 41 10 42 11 41 02 4B 00 00 01 ?? F7  
 (1) (2) (3) (4) (5) address size checksum (6)

- (1) Exclusive Status
- (2) ID (Roland)
- (3) Device ID (17)
- (4) Model ID (GS)
- (5) Command ID (RQ1)
- (6) End of Exclusive

Next we calculate the checksum.

41H+02H+4BH+00H+00H+01H = 65 + 2+ 75 + 0 + 0 + 1 = 143 (sum)  
 143 (sum) / 128 = 1 (quotient) ... 15 (remainder)  
 checksum = 128 - 15 (remainder) = 113 = 71H

This means that F0 41 10 42 11 41 02 4B 00 00 01 71 F7 is the message we transmit.

<Example 3> Setting REVERB LEVEL to 12

According to the "Parameter address map (p. 102)", the REVERB LEVEL Address is 40 01 33H, and the parameter value is 0CH. Thus,

F0 41 10 42 12 40 01 33 0C ?? F7  
 (1) (2) (3) (4) (5) address data checksum (6)

- (1) Exclusive Status
- (2) ID (Roland)
- (3) Device ID (17)
- (4) Model ID (GS)
- (5) Command ID (DT1)
- (6) EOx

Next we calculate the checksum.

40H + 01H + 33H + 0CH=64 + 1 + 51 + 12 = 128 (sum)

128 (sum) / 128 = 0 (quotient) ... 0 (remainder)  
 checksum = 128 - 0 (remainder) = 128 = 80H

In this case, however, the checksum value should be 00H, not 80H. You should use 00H if the remainder is 0.

This means that F0 41 10 42 12 40 01 33 0C 00 F7 is the message we transmit.

● About the Tuning

In MIDI, individual Parts are tuned by sending RPN #1 (Master Fine Tuning) to the appropriate MIDI channel.

In MIDI, an entire device is tuned by either sending RPN #1 to all MIDI channels being used, or by sending a System Exclusive MASTER TUNE (address 40 00 00H).

RPN #1 allows tuning to be specified in steps of approximately 0.012 cents (to be precise, 100/8192 cent), and System Exclusive MASTER TUNE allows tuning in steps of 0.1 cent. One cent is 1/100th of a semitone.

The values of RPN #1 (Master Fine Tuning) and System Exclusive MASTER TUNE are added together to determine the actual pitch sounded by each Part.

Frequently used tuning values are given in the following table for your reference. Values are in hexadecimal (decimal in parentheses).

Hz of A4	Cent	RPN #1	Sys.Ex. 40 00 00
445.0	+19.56	4C 43 (+1603)	00 04 0C 04 (+196)
444.0	+15.67	4A 03 (+1283)	00 04 09 0D (+157)
443.0	+11.76	47 44 (+ 964)	00 04 07 06 (+118)
442.0	+ 7.85	45 03 (+ 643)	00 04 04 0F (+ 79)
441.0	+ 3.93	42 42 (+ 322)	00 04 02 07 (+ 39)
440.0	0.00	40 00 (0)	00 04 00 00 (0)
439.0	- 3.94	3D 3D (- 323)	00 03 0D 09 (- 39)
438.0	- 7.89	3A 7A (- 646)	00 03 0B 01 (- 79)

<Example> Setting the tuning of MIDI channel 3 to A4 = 442.0 Hz

Send RPN #1 to MIDI channel 3. From the above table, the value is 45 03H.

B2 64 00	MIDI ch.3, lower byte of RPN parameter number: 00H
(B2) 65 01	(MIDI ch.3) upper byte of RPN parameter number: 01H
(B2) 06 45	(MIDI ch.3) upper byte of parameter value: 45H
(B2) 26 03	(MIDI ch.3) lower byte of parameter value: 03H
(B2) 64 7F	(MIDI ch.3) lower byte of RPN parameter number: 7FH
(B2) 65 7F	(MIDI ch.3) upper byte of RPN parameter number: 7FH

● The Scale Tune Feature (address: 40 1x 40)

The scale Tune feature allows you to finely adjust the individual pitch of the notes from C through B. Though the settings are made while working with one octave, the fine adjustments will affect all octaves. By making the appropriate Scale Tune settings, you can obtain a complete variety of tuning methods other than equal temperament. As examples, three possible types of scale setting are explained below.

○ Equal Temperament

This method of tuning divides the octave into 12 equal parts. It is currently the most widely used form of tuning, especially in occidental music. On the Sound Canvas VA, the default settings for the Scale Tune feature produce equal temperament.

○ Just Temperament (Tonic of C)

The principal triads resound much more beautifully than with equal temperament, but this benefit can only be obtained in one key. If transposed, the chords tend to become ambiguous. The example given involves settings for a key in which C is the keynote.

○ Arabian Scale

By altering the setting for Scale Tune, you can obtain a variety of other tunings suited for ethnic music. For example, the settings introduced below will set the unit to use the Arabian Scale.

Example Settings

Note name	Equal Temperament	Just Temperament (Tonic of C)	Arabian Scale
C	0	0	-6
C#	0	-8	+45
D	0	+4	-2
D#	0	+16	-12
E	0	-14	-51
F	0	-2	-8
F#	0	-10	+43
G	0	+2	-4
G#	0	+14	+47
A	0	-16	0
A#	0	+14	-10
B	0	-12	-49

The values in the table are given in cents. Convert these values to hexadecimal, and transmit them as Exclusive data.

For example, to set the tune (C-B) of the Part1 Arabian Scale, send the following data:

F0 41 10 42 12 40 11 40 3A 6D 3E 34 0D 38 6B 3C 6F 40 36 0F 76 F7

SOUND Canvas VA  
Model SC-VA

Date : 2015. 12  
Version : 1.00

### MIDI Implementation Chart

	Function...	Transmitted	Recognized	Remarks
<b>Basic Channel</b>	Default	x	1-16	
	Changed	x	1-16	
<b>Mode</b>	Default	x	Mode 3	*2
	Messages	x	Mode 3, 4 (M=1)	
	Altered	*****		
<b>Note Number</b>	: True Voice	x	0-127	
		*****	0-127	
<b>Velocity</b>	Note On	x	O	
	Note Off	x		
<b>After Touch</b>	Key's	x	O *1	
	Channel's	x	O *1	
<b>Pitch Bend</b>		x	O *1	
<b>Control Change</b>	0, 32	x	O *1	Bank select
	1	x	O *1	Modulation
	5	x	O *1	Portamento time
	6, 38	x	O *1	Data entry
	7	x	O *1	Volume
	10	x	O *1	Panpot
	11	x	O *1	Expression
	64	x	O *1	Hold 1
	65	x	O *1	Portamento
	66	x	O *1	Sostenuto
	67	x	O *1	Soft
	84	x	O *1	Portamento control
	91	x	O *1	Effects 1 (Reverb Send Level)
	93	x	O *1	Effects 3 (Chorus Send Level)
	94	x	O *1	Effects 4 (Delay Send Level)
	98, 99	x	x *1	NRPN LSB, MSB
100, 101	x	O *1	RPN LSB, MSB	
<b>Program Change</b>	: True Number	x	O *1	
	*****		0-127	Program No. 1-128
<b>System Exclusive</b>		O	O *1, *3	
<b>System Common</b>	: Song Position	x	x	
	: Song Select	x	x	
	: Tune Request	x	x	
<b>System Real Time</b>	: Clock	x	x	
	: Commands	x	x	
<b>Aux Messages</b>	: All Sound Off	x	O (120, 126, 127)	
	: Reset All Controllers	x	O	
	: Local ON/OFF	x	x	
	: All Notes Off	x	O (123-125)	
	: Active Sensing	O	O	
	: System Reset	x	x	
<b>Notes</b>	* 1 O X is selectable. * 2 Recognized as M=1 even if M≠1. *3 Individual transfer only (bulk dump reception is not possible).			

O : Yes X : No

Mode 1 : OMNI ON, POLY      Mode 2 : OMNI ON, MONO  
Mode 3 : OMNI OFF, POLY    Mode 4 : OMNI OFF, MONO

## Roland SOUND Canvas VA: Software Synthesizer

### [Sound Generator]

**- Number of parts**

16 parts

**- Maximum Polyphony**

64 voices

**- MIDI Format**

Conforms to GS, GM2, GM

**- Sound Maps**

4 types (SC-8820, SC-88Pro, SC-88, SC-55)

**- Preset Instruments**

1,600 tones

**- Drum sound sets**

63 drum sets

**- Effects**

Reverb (8 types)

Chorus (8 types)

Delay (10 types)

2 Band Equalizer

Insertion Effect (64 types)

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.