

# Using BOSS TONE STUDIO for KATANA Gen3

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02

## To edit values



Slide your finger up or down to edit a parameter. Long-press to enter a numeric value or choose from a list.

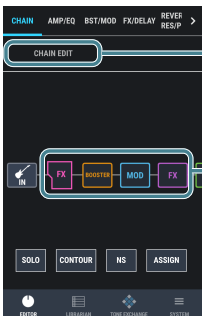
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# EDITOR TOP screen



## CHAIN

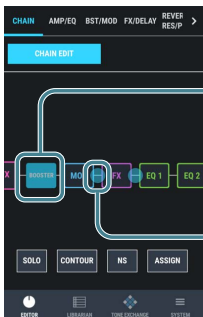


Tap to turn CHAIN EDIT MODE on/off. You can rearrange the effects when in CHAIN EDIT mode.

You can press the icons to turn the respective effects on/off. Long-press the icons to view the respective EFFECT detail screens (p. 10).

\* You can scroll the screen horizontally.

# CHAIN EDIT MODE



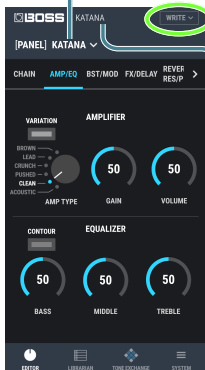
After you tap the block of the effect you want to change, the block is highlighted in blue and begins to blink. Tap the same block again to deselect it.

The blue circles shown within the chain indicate the positions to which you can move the block. When you tap a blue circle, the block moves to that position.

# AMP/EQ

Shows the currently selected patch. Tap this to switch patches.

Saves an edited effect to the KATANA unit.



WRITE

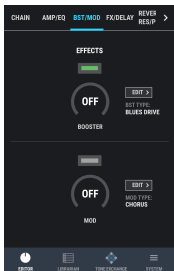
CLEAR

Initializes the parameters.

The name of the connected model is shown.

\* Depending on the patch, it may take some time to switch the patches using the Editor.

# BST/MOD FX/DELAY

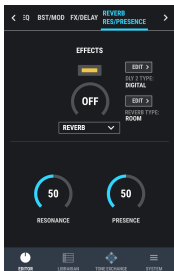


Each time you tap, the color alternates between green, red, and orange, and the setting changes. For details, refer to “Using Effects” in the owner’s manual of the unit.

EDIT >

Moves to the EFFECTS detail screen (p. 10) .

# REVERB/RES/PRESENCE



Each time you tap, the color alternates between green, red, and orange, and the setting changes. For details, refer to “Using Effects” in the owner’s manual of the unit.

EDIT >

Moves to the EFFECTS detail screen (p. 10) .

REVERB ▾

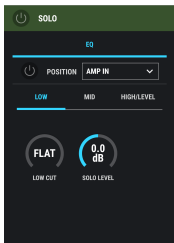
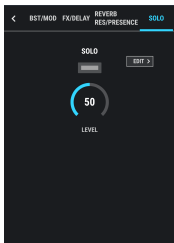
This selects the [REVERB] knob mode.

MODE	Explanation
DELAY	The delay selected by DELAY2 is assigned.
DLY+REV	The delay selected by DELAY2 and the reverb selected by REVERB are both assigned.
REVERB	The reverb selected by REVERB is assigned.

# SOLO

You can edit SOLO related parameters such as SOLO LEVEL and SOLO EQ.

\* SOLO DELAY can only be specified on the KATANA-Artist/KATANA-Artist HEAD.

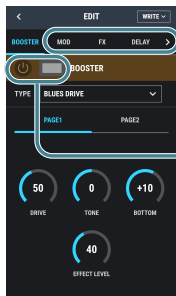


# EFFECTS detail screen

## Effect edit screen

This screen assigns effects to the [BST/MOD] knob, [FX/DELAY] knob, and [REVERB] knob.

For details, refer to “Using Effects” in the owner’s manual of the KATANA unit.



Slide left/right, and tap to edit each effect.

Tap here to switch the effect assigned to the knob on/off, or to switch between effect types.

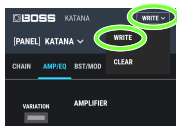
# EQ, NS

You can edit the EQ (PARAMETRIC EQUALIZER) and NS (NOISE SUPPRESSOR) parameters for each patch.

- \* EQ and NS can be specified only in BOSS TONE STUDIO for KATANA Gen3. It cannot be specified on the KATANA unit itself.

# Saving an edited effect in the KATANA unit (WRITE)

1. Tap the [WRITE] button, and then tap "WRITE" in the list.



2. Select a writing-destination, enter a name, and tap the [WRITE] button.

\* When you save the edited data, it overwrites the patch on the KATANA. The previous settings cannot be recovered. Select a patch that you don't mind overwriting.

# LIBRARIAN screen

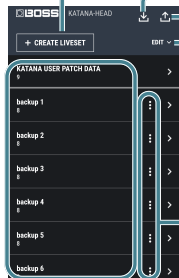


## LIVESET LIST

Tap the [LIBRARIAN] button; the liveset list appears. There can be a maximum of 30 livesets.

Creates a new liveset.

Imports a liveset.



Exports a liveset.

Copies or deletes a liveset.

Tap to edit the name of the liveset.

Tap to see a list of the patches (p. 15) in the liveset that you tapped.

backup 1



Shows how many patches are in the liveset.

backup 1

8



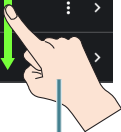
backup 2

8



backup 3

8



Drag to change the order.

# PATCH LIST

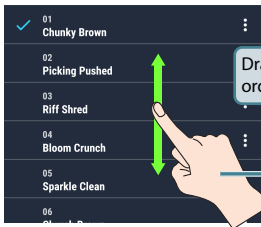
Up to 20 patches can be placed in one liveset.



Copies or deletes a patch.

Tap to edit the name of a patch.


Tap to switch to the sound of the patch you tapped, letting you preview it.




Drag to change the order.

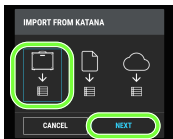
# Importing patches from the KATANA unit into LIBRARIAN (IMPORT FROM KATANA)

1. Tap the [LIBRARIAN] button.

2. In the upper part of the screen, tap the  button.



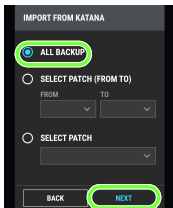
3. Tap , and then tap the [NEXT] button.



4. Tap "ALL BACKUP", and then tap the [NEXT] button.

\* "ALL BACKUP" saves all patches as a liveset.

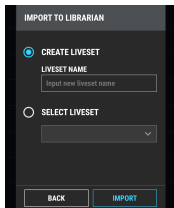
\* "SELECT PATCH (FROM TO)" saves the patches between "FROM" and "TO" as a liveset.



- \* “SELECT PATCH” saves only the selected patch as a liveset.

## Creating a new liveset

5. Select “CREATE LIVESET”, enter a name in LIVESET NAME, and tap the [IMPORT] button.




## Adding to an existing liveset

5. Tap “SELECT LIVESET”, select the liveset to which you want to add, and tap the [IMPORT] button.

# Exporting a liveset from LIBRARIAN into the KATANA unit (EXPORT TO KATANA)

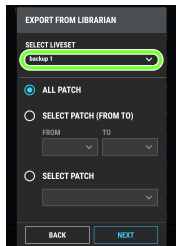
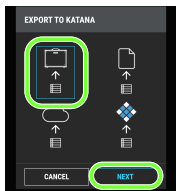
Here's how a saved liveset can be exported to patches in the KATANA unit.

**1.** Tap the [LIBRARIAN] button.

**2.** In the upper part of the screen, tap the  button.

**3.** Tap , and then tap the [NEXT] button.

**4.** Select the liveset that you want to export.

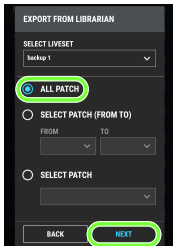


**5.** In the liveset area, tap **“ALL PATCH”**, then tap the **[NEXT]** button.

\* **“ALL PATCH”** exports all patches of the liveset to the KATANA unit.

\* **“SELECT PATCH (FROM TO)”** exports the patches between **“FROM”** and **“TO”** to the KATANA unit.

\* **“SELECT PATCH”** exports the selected patch to the KATANA unit.




**6.** Select the patch at which you want to start overwriting the data in the KATANA unit, and tap the **[EXPORT]** button.




# Exporting a liveset from LIBRARIAN to the mobile device (EXPORT TO FILE)

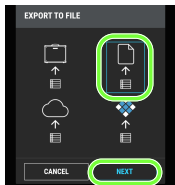
Here's how a liveset from LIBRARIAN can be converted into a liveset file and exported to the mobile device.

1. Tap the [LIBRARIAN] button.

2. In the upper part of the screen, tap the  button.



3. Tap , and then tap the [NEXT] button.




4. Select the liveset that you want to export, and tap the [EXPORT] button.

5. The data is exported to the mobile device.

# Importing a file from the mobile device into LIBRARIAN (IMPORT FROM FILE)

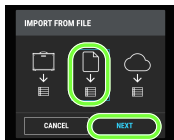
Here's how a liveset file previously exported to the mobile device can be imported into LIBRARIAN.

1. Tap the [LIBRARIAN] button.

2. In the upper part of the screen, tap the  button.



3. Tap , and then tap the [NEXT] button.





4. Select a liveset file that was exported to the mobile device.

# Exporting a liveset from LIBRARIAN to a cloud service (EXPORT TO CLOUD)

Here's how a liveset from LIBRARIAN can be converted to a liveset file and exported to a cloud service.

**1.** Tap the [LIBRARIAN] button.

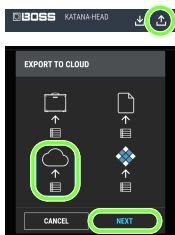
**2.** In the upper part of the screen, tap the  button.

**3.** Tap , and then tap the [NEXT] button.

**4.** Select the liveset that you want to export to a cloud service, and tap the [EXPORT] button.

**5.** The Cloud screen appears, allowing you to export the file.

Choose "iCloud Drive" for an iOS device, or "Google Drive" for an Android device.




In some cases, your mobile device might support more than one cloud service. This app only supports operation using iCloud Drive on iOS devices and Google Drive on Android devices.

# Importing a file from a cloud service into LIBRARIAN (IMPORT FROM CLOUD)

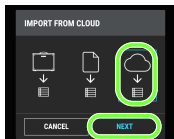
Here's how a liveset file previously exported to a cloud service can be imported into LIBRARIAN.

**1.** Tap the [LIBRARIAN] button.

**2.** In the upper part of the screen, tap the  button.



**3.** Tap , and then tap the [NEXT] button.



**4.** Select a liveset file that was saved in the cloud.

# What you can do with BOSS TONE EXCHANGE

BOSS TONE EXCHANGE is a sound sharing service that lets users from around the world share the livesets that they have created in BOSS TONE STUDIO.


Here's what you can do with BOSS TONE EXCHANGE.

- Upload and share your livesets to BOSS TONE EXCHANGE.
- Download livesets created by BOSS users from around the world.

## MEMO

You must sign in with your Roland account to use BOSS TONE EXCHANGE.

# Signing in to BOSS TONE EXCHANGE

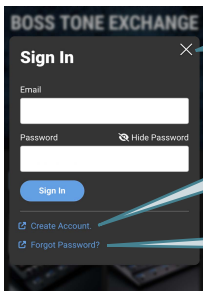
1. Tap the [  ] button.
2. Tap "Sign in" at the top of the screen.



BOSS TONE EXCHANGE

➔ Sign in

3. Enter the e-mail address and password you registered for your Roland account.




Tap here if you don't want to sign in. You can sign in later.


Tap here to create a new Roland account.


Tap here if you've forgotten your password.


\* Your mobile device must be connected to the Internet in order to sign in.

# Uploading livesets to BOSS TONE EXCHANGE

1. Tap the [LIBRARIAN] button.
2. Tap the [  ] button at the top of the screen.

3. Tap  and then tap the [NEXT] button.

You aren't signed in to BOSS TONE EXCHANGE if "Please SignIn" (  ) is shown. Sign in to BOSS TONE EXCHANGE.

The app is checking your sign-in status to BOSS TONE EXCHANGE if "Checking" (  ) is shown, so wait for a little while.

4. Select the liveset you want to upload, and tap the [NEXT] button.
5. Input the liveset information, and tap "Upload".

This starts the upload.

## Upload Your Liveset




Liveset Name (100 characters max)

\* Required

Gear \* Required

Icon (2 MB max) \* Required

# Downloading livesets from BOSS TONE EXCHANGE

1. Tap the [  ] button.
2. Tap the product name of the liveset you want to download.
3. Search for a liveset by inputting a keyword or genre.

## MEMO

Downloads from BOSS TONE EXCHANGE are done per liveset. Individual memories can't be downloaded, and individual memories can't be added to the library.

4. Select the liveset you want to download, and tap the [Download] button.  
The liveset is added to LIBRARIAN.

# SYSTEM


## Bluetooth SETTING

Here you can edit the Bluetooth connection settings.

## LINE OUT SETTING

LINE OUT AIR FEEL

REC

 CUSTOM SETTING

M1 M2

MIC TYPE RBN121

MIC DISTANCE 7cm

MIC POSITION 4cm

AMBIENCE PREDELAY 0

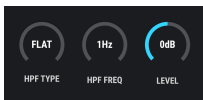
AMBIENCE LEVEL 0

## LINE OUT AIR FEEL

Specifies the sound of the LINE OUT, PHONES/REC OUT, and the USB EFFECT OUT.

Value	Explanation
REC	A distantly-miked sound for recording.
LIVE	A close-miked sound for live.
BLEND	A sound providing a good blend of closed-miked and distantly-miked sound that can be broadly used for live or recording.
CUSTOM SETTING	Lets you configure the mic type and position. * Two types of settings (M1, M2) are available.

## POWER AMP IN SETTING

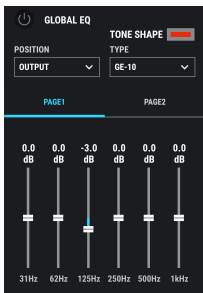


This sets the parameters when the unit is in POWER AMP IN mode.

- \* The unit enters POWER AMP IN mode when you plug a cable into the POWER AMP IN jack on the KATANA. There are some limitations to the Editor functions when the unit is in POWER AMP IN mode.

# GLOBAL EQ

You can place the global equalizer either before (INPUT) or after (OUTPUT) the effect chain to adjust the tone of the entire KATANA.



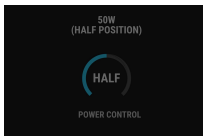
## TONE SHAPE

You can make three types of equalizer settings (green, red, orange) and switch between them during use.

# POWER CONTROL

Only for Artist, Artist HEAD

The output is adjustable when the POWER CONTROL knob is at HALF position.



## USB SETTING

You can set the USB audio volume used when your computer is connected to the KATANA.

Position	Parameter	Explanation
PRIMARY	MIX LEVEL	Adjusts the level of input just before the signal from the computer reaches MASTER.
	EFFECT OUT LEVEL	Adjusts the level of audio output to the computer, just before the signal from the computer reaches MASTER.
	LOOP BACK	When this is on, the input audio from your computer is looped back to the computer.

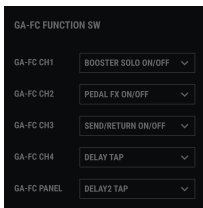
Position	Parameter	Explanation
SECONDARY	TO EFFECT LEVEL	Adjusts the level of input just before the signal from the computer reaches PRE AMP.
	DRY OUT LEVEL	Adjusts the level of audio output to the computer, just before the signal from the computer reaches PRE AMP.

## MIDI SETTING

Here you can specify how the KATANA is connected to an external MIDI device.

## GA-FC SETTING

Here you can assign the functions for FUNCTION mode on the GA-FC.



## ALL DATA BACKUP

Here you can save the state of all parameters, including the patches that are saved in the KATANA, to your mobile device or to the cloud. You can also load the saved data back into the KATANA.

- \* Processing requires a substantial amount of time.

## OWNER'S MANUAL

Here you can view the Owner's Manual for the unit, and view the pages of this manual.

- \* Your mobile device must be connected to the internet.

## SHOW BLUETOOTH SETUP SCREEN

You can make the Bluetooth connection screen display again.

## VERSION

Here you can view version information and license information for the BOSS TONE STUDIO for KATANA Gen3 software.

# Effect Parameter List

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# BOOSTER

Various boosters and distortion effects can be selected.

## BOOSTER Type

Type	Explanation
CLEAN BOOST	This not only functions as a booster, but also produces a clean tone that has punch even when used alone.
TREBLE BOOST	This is a booster that has bright characteristics.
MID BOOST	This is a booster with unique characteristics in the midrange. Making the connection before the COSM amp produces sound suitable for solos.
CRUNCH OD	A lustrous crunch sound with an added element of amp distortion.
BLUES DRIVE	This is a crunch sound of the BOSS BD-2. This produces distortion that faithfully reproduces the nuances of picking.
OVERDRIVE	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.

Type	Explanation
NATURAL OD	This is an overdrive sound that provides distortion with a natural feeling.
WARM OD	This is a warm overdrive.
TURBO OD	This is the high-gain overdrive sound of the BOSS OD-2.
T-SCREAM	This models an Ibanez TS-808.
DISTORTION	This gives a basic, traditional distortion sound.
FAT DS	A distortion sound with thick distortion.
DST+	This models a MXR DISTORTION+.
GUV DS	This models a Marshall GUV'NOR.
RAT	This models a Proco RAT.
METAL ZONE	This models the sound of the BOSS MT-2. It produces a wide range of metal sounds, from old style to slash metal.
METAL DS	This is distortion sound that is ideal for performances of heavy riffs.
'60S FUZZ	This models a FUZZFACE. It produces a fat fuzz sound.
MUFF FUZZ	This models an Electro-Harmonix Big Muff π.
OCT FUZZ	A fuzz sound with rich harmonic content.
HM-2	This models the sound of the BOSS HM-2. It produces distinctive cranked-up distortion sound with compression.

Type	Explanation
METAL CORE	This models the sound of the BOSS ML-2. The effect lets you create the optimal sound for playing high-speed metal riffs.
CENTA OD	This models a KLON CENTAUR.

## BOOSTER Parameters

Parameter	Value	Explanation
TYPE	Refer to BOOSTER Type	
DRIVE	0–120	Adjusts the depth of distortion.
TONE	-50–+50	This adjusts the tone.
BOTTOM	-50–+50	Adjusts the tone for the low frequency range. Turning this to the left (counterclockwise) produces a sound with the low end cut; turning it to the right boosts the low end in the sound.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
SOLO SW	OFF, ON	Switches to a tone that is suitable for solos.
SOLO LEVEL	0–100	Adjusts the volume level when the Solo Sw is ON.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# MOD/FX

With MOD and FX, you can select the effect to be used from the following. You can select the same effect for MOD and FX.

## MOD/FX Type

This is a list of the effects that can be selected for MOD/FX.

Effect Name	Explanation
CHORUS	Frequency band division is employed to produce two different choruses, one for low frequencies and one for higher frequencies. This allows you to achieve a more natural chorus sound.
FLANGER	The flanging effect gives a twisting, jet-airplane-like character to the sound.
PHASER	By adding varied-phase portions to the direct sound, the phaser effect gives a whooshing, swirling character to the sound.
UNI-V	This models a Uni-Vibe. Although this resembles a phaser effect, it also provides a unique undulation that you can't get with a regular phaser.

Effect Name	Explanation
<b>TREMOLO</b>	Tremolo is an effect that creates a cyclic change in volume.
<b>VIBRATO</b>	This effect creates vibrato by slightly modulating the pitch.
<b>ROTARY</b>	This produces an effect like the sound of a rotary speaker.
<b>RING MOD</b> (Ring modulator)	This creates a bell-like sound by ring-modulating the guitar sound with the signal from the internal oscillator. The sound can be unmusical and lack distinctive pitches.
<b>SLOW GEAR</b>	This produces a volume-swell effect ("violin-like" sound).
<b>SLICER</b>	This consecutively interrupts the sound to create the impression that a rhythm backing phrase is being played.
<b>COMP</b> (Compressor)	This is an effect that produces a long sustain by evening out the volume level of the input signal. You can also use it as a limiter to suppress only the sound peaks and prevent distortion.
<b>LIMITER</b>	The limiter attenuates loud input levels to prevent distortion.
<b>T. WAH</b> (Touch Wah)	You can produce a wah effect with the filter changing in response to the guitar level.
<b>AUTO WAH</b>	This changes the filtering over a periodic cycle, providing an automatic wah effect.
<b>PEDAL WAH</b>	This lets you produce a pedal wah effect.
<b>GRAPHIC EQ</b> (Graphic equalizer)	This adjusts the tone. You can adjust the sound character in ten bands.

Effect Name	Explanation
<b>PARAMETRIC EQ</b> (Parametric equalizer)	This adjusts the tone. You can adjust the sound character in four bands.
<b>GUITAR SIM</b> (Guitar simulator)	Simulation of the characteristics of particular guitar components such as pickups and different guitar bodies allows you to switch among a number of different guitar types all while using a single guitar.
<b>AC.GUITAR SIM</b> (Acoustic guitar simulator)	This transforms the sound of an electric guitar into the sound of an acoustic guitar.
<b>AC. PROCESSOR</b> (Acoustic processor)	This processor allows you to change the sound produced by the pickup on an acoustic electric guitar, creating a richer sound similar to that obtained with a microphone placed close to the guitar.
<b>WAVE SYNTH</b>	This is a synth sound that processes the guitar input signal.
<b>OCTAVE</b>	This adds a note one octave lower, creating a richer sound.
<b>HEAVY OCTAVE</b>	This adds sound lowered by an octave to the original sound. Since you can play chords even when using this effect, you can use it to fatten the sound of your chordal playing as well.
<b>PITCH SHIFTER</b>	This effect changes the pitch of the original sound (up or down) within a range of two octaves.
<b>HARMONIST</b>	Harmonist is an effect where the amount of shifting is adjusted according to an analysis of the guitar input, allowing you to create harmony based on diatonic scales.

Effect Name	Explanation
<b>HUMANIZER</b>	This can create human vowel-like sounds.
<b>PHASER 90E</b>	This models an MXR EVH-90 Phase Shifter.
<b>FLANGER117E</b>	This models an MXR EVH-117 Flanger.
<b>WAH 95E</b>	This models a Jim Dunlop EVH-95 Wah pedal. You can control the wah effect in real time by adjusting the expression pedal connected to the SEL CH1 CH2/ EXP PEDAL jack on the rear panel, or to the rear panel of the GA-FC foot controller (sold separately).
<b>DC-30</b>	This models a Roland DC-30.
<b>PEDAL BEND</b>	You can control the wah effect in real time by adjusting the expression pedal.

## CHORUS

The frequency bands are divided to produce two different choruses, one for low frequencies and one for higher frequencies. This makes the chorus sound more natural.

Parameter	Value	Explanation
LOW RATE	0–100	Adjusts the speed of the chorus effect for the low frequency range.
LOW DEPTH	0–100	Adjusts the depth of the chorus effect for the low frequency range. To use this as a doubling effect, set this to “0”.
LOW PRE DELAY	0.0–40.0ms	Adjusts the delay of the effect sound in the low-frequency range. Extend the pre-delay to produce the sensation of multiple sounds (doubling effect).
LOW LEVEL	0–100	Adjusts the volume of the chorus sound in the low-frequency range.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

Parameter	Value	Explanation
HIGH RATE	0–100	Adjusts the speed of the chorus effect for the high frequency range.
HIGH DEPTH	0–100	Adjusts the depth of the chorus effect for the high frequency range. To use this as a doubling effect, set this to “0”.
HIGH PRE DELAY	0.0–40.0ms	Adjusts the delay of the effect sound in the high-frequency range. Extend the pre-delay to produce the sensation of multiple sounds (doubling effect).
HIGH LEVEL	0–100	Adjusts the volume of the chorus sound in the high-frequency range.
CROSSOVER FREQUENCY	100Hz–4.00kHz	This sets the frequency dividing the low- and high-frequency ranges.

# FLANGER

The flanger effect gives a twisting, jet-airplane-like character to the sound.

Parameter	Value	Explanation
RATE	0–100	Sets the rate of the flanging effect.
DEPTH	0–100	Determines the depth of the flanging effect.
RESONANCE	0–100	Determines the amount of resonance (feedback). Increasing the value emphasizes the effect, for a more unusual sound.
MANUAL	0–100	Adjusts the center frequency at which to apply the effect.
EFFECT LEVEL	0–100	Adjusts the volume of the flanger.
LOW CUT	FLAT, 55Hz–800Hz	Sets the frequency at which the low cut filter begins to take effect. When “FLAT” is selected, the low cut filter will have no effect.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# PHASER

Gives a whooshing, swirling character to the sound by adding varied-phase portions to the direct sound.

Parameter	Value	Explanation
TYPE		Select the number of stages for the phaser effect.
	4 STAGE	This is a four-phase effect. A light phaser effect is obtained.
	8 STAGE	This is an eight-phase effect. Offers a popular phaser effect sound.
	12 STAGE	This is a twelve-phase effect. A deep phase effect is obtained.
	BiPHASE	This is a phaser with two phase shift circuits connected in series.
RATE	0–100	Sets the rate of the phaser effect.
DEPTH	0–100	Determines the depth of the phaser effect.
RESONANCE	0–100	Determines the amount of resonance (feedback). Increasing the value emphasizes the effect, for a more unusual sound.
MANUAL	0–100	Adjusts the center frequency of the phaser effect.
EFFECT LEVEL	0–100	Adjusts the volume of the phaser.

Parameter	Value	Explanation
STEP RATE	OFF, 0–100	This sets the cycle of the step function that changes the rate and depth. When it is set to a higher value, the change will be finer. Set this to “OFF” when not using the Step function.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

## UNI-V

This models a Uni-Vibe.

Although this resembles a phaser effect, it also provides a unique undulation that you can't get with a regular phaser.

Parameter	Value	Explanation
RATE	0–100	Adjusts the rate of the UNI-V effect.
DEPTH	0–100	Adjusts the depth of the UNI-V effect.
LEVEL	0–100	Adjusts the volume.

# TREMOLO

This effect creates a cyclic change in volume.

Parameter	Value	Explanation
WAVE SHAPE	0–100	Adjusts how the volume level changes (the curve). Higher values create steeper wave shapes (more abrupt changes).
RATE	0–100	Adjusts the frequency (speed) of the volume change.
DEPTH	0–100	Adjusts the depth of the volume change.
LEVEL	0–100	Adjusts the volume.

# VIBRATO

This effect creates vibrato by slightly modulating the pitch.

Parameter	Value	Explanation
RATE	0–100	Adjusts the rate of the vibrato.
DEPTH	0–100	Adjusts the depth of the vibrato.
LEVEL	0–100	Adjusts the volume.

# ROTARY

This produces an effect like the sound of a rotary speaker.

Parameter	Value	Explanation
RATE	0-100	Adjusts the speed of the rotation.
DEPTH	0-100	Adjusts the amount of depth in the rotary effect.
LEVEL	0-100	Adjusts the volume.

# RING MOD

The sound can be unmusical and lack distinctive pitches.

Parameter	Value	Explanation
MODE		This selects the mode for the ring modulator.
	NORMAL	This is a normal ring modulator.
	INTELLIGENT	By ring-modulating the input signal, a bell like sound is created. The intelligent ring modulator changes the oscillation frequency according to the pitch of the input sound and therefore produces a sound with the sense of pitch, which is quite different from NORMAL. This effect does not give a satisfactory result if the pitch of the guitar sound is not correctly detected.
FREQUENCY	0–100	Adjusts the frequency of the internal oscillator.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# SLOW GEAR

This produces a volume-swell effect (“violin-like” sound).

Parameter	Value	Explanation
<b>SENS</b>	0–100	Adjusts the sensitivity of the slow gear. When it is set to a lower value, the effect of the slow gear can be obtained only with a stronger picking, while no effect is obtained with a weaker picking. When the value is set higher, the effect is obtained even with a weak picking.
<b>RISE TIME</b>	0–100	Adjusts the time needed for the volume to reach its maximum from the moment you begin picking.
<b>LEVEL</b>	0–100	Adjusts the volume of the effect sound.

# SLICER

This consecutively interrupts the sound to create the impression that a rhythm backing phrase is being played.

Parameter	Value	Explanation
<b>PATTERN</b>	P1-P20	Select the slice pattern that will be used to cut the sound.
<b>RATE</b>	0-100	Adjust the rate at which the sound will be cut.
<b>TRIGGER SENS</b>	0-100	Adjust the sensitivity of triggering. With low settings of this parameter, softly picked notes will not retrigger the phrase (i.e., the phrase will continue playing), but strongly picked notes will retrigger the phrase so that it will playback from the beginning. With high settings of this parameter, the phrase will be retriggered even by softly picked notes.
<b>EFFECT LEVEL</b>	0-100	Adjusts the volume of the effect sound.
<b>DIRECT MIX</b>	0-100	Adjusts the volume of the direct sound.

# COMP

This is an effect that produces a long sustain by evening out the volume level of the input signal. You can also use it as a limiter to suppress only the sound peaks and prevent distortion.

Parameter	Value	Explanation
TYPE	BOSS COMP	This models a BOSS CS-3.
	HI-BAND	This is a compressor that adds an even stronger effect in the high end.
	LIGHT	This is a compressor with a light effect.
	D-COMP	This models a MXR DynaComp.
	ORANGE	This is modeled on the sound of the Dan Armstrong ORANGE SQUEEZER.
	FAT	When applied heavily, this compressor effect provides a fat tone with a boosted midrange.
	MILD	When applied heavily, this compressor effect produces a sweet tone with the high end cut.
SUSTAIN	0–100	Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.

Parameter	Value	Explanation
<b>ATTACK</b>	0–100	Adjusts the strength of the picking attack when the strings are played. Higher values result in a sharper attack, creating a more clearly defined sound.
<b>LEVEL</b>	0–100	Adjusts the volume.
<b>tone</b>	-50–+50	Adjusts the tone.

# LIMITER

The limiter attenuates loud input levels to prevent distortion.

Parameter	Value	Explanation
TYPE	Selects the limiter type.	
	BOSS LIMITER	This selects a stereo limiter.
	RACK 160D	This models a dbx 160X.
	VTG RACK U (VINTAGE RACK U)	This models a UREI 1178.
THRESHOLD	0–100	Adjust this as appropriate for the input signal from your guitar. When the input signal level exceeds this threshold level, limiting will be applied.
RATIO	1:1–INF:1	This selects the compression ratio used with signals in excess of the threshold level.
LEVEL	0–100	Adjusts the volume.
ATTACK	0–100	Adjusts the strength of the picking attack when the strings are played. Higher values result in a sharper attack, creating a more clearly defined sound.
RELEASE	0–100	Adjusts the release time.

# T. WAH

You can produce a wah effect with the filter changing in response to the guitar level.

Parameter	Value	Explanation
MODE		Select the wah mode.
	LPF	Low pass filter. This provides a wah effect over a wide frequency range.
	BPF	Band pass filter. This provides a wah effect in a narrow frequency range.
POLAR		Selects the direction in which the filter will change in response to the input.
	DOWN	The frequency of the filter falls.
	UP	The frequency of the filter rises.
SENS	0–100	Specifies the sensitivity with which the filter changes in the direction specified by the POLAR setting. Higher values produce a stronger tone which emphasizes the wah effect. The strength of picking has no effect when this is set to “0”.
FREQ	0–100	Adjusts the center frequency of the wah effect.

Parameter	Value	Explanation
PEAK	0–100	Adjusts the intensity of the wah effect in the area around the center frequency. Higher values produce a stronger filter tone that emphasizes the wah effect. With a value of 50 a standard wah sound will be produced.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# AUTO WAH

This changes the filtering over a periodic cycle, providing an automatic wah effect.

Parameter	Value	Explanation
MODE		Select the wah mode.
	LPF	Low pass filter. This provides a wah effect over a wide frequency range.
	BPF	Band pass filter. This provides a wah effect in a narrow frequency range.
RATE	0–100	Adjusts the frequency (speed) of the change.
DEPTH	0–100	Adjusts the depth of the effect.
FREQ	0–100	Adjusts the center frequency of the wah effect.
PEAK	0–100	Adjusts the intensity of the wah effect in the area around the center frequency. Higher values produce a stronger filter tone that emphasizes the wah effect. With a value of 50 a standard wah sound will be produced.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# PEDAL WAH

You can control the wah effect in real time by adjusting the expression pedal connected to the SEL CH1 CH2/EXP PEDAL jack on the rear panel, or to the rear panel of the GA-FC foot controller (sold separately).

Parameter	Value	Explanation
TYPE		Selects the wah mode.
	CRY WAH	This models the sound of the CRY BABY wah pedal popular in the '70s.
	VO WAH	This models the sound of the VOX V846.
	FAT WAH	This is a wah sound featuring a bold tone.
	LIGHT WAH	This wah has a refined sound with no unusual characteristics.
	7STRING WAH	This expanded wah features a variable range compatible with seven-string and baritone guitars.

Parameter	Value	Explanation
<b>TYPE</b>	RESO WAH	This completely original effect enhances the characteristic resonances produced by analog synth filters.
<b>PEDAL POS</b> (PEDAL POSITION)	0–100	Adjusts the position of the wah pedal.
<b>PEDAL MIN</b>	0–100	Selects the tone produced when the heel of the pedal is depressed.
<b>PEDAL MAX</b>	0–100	Selects the tone produced when the toe of the pedal is depressed.
<b>EFFECT LEVEL</b>	0–100	Adjusts the volume of the effect sound.
<b>DIRECT MIX</b>	0–100	Adjusts the volume of the direct sound.

# GRAPHIC EQ

This adjusts the tone. You can adjust the sound character in ten bands.

Parameter	Value
31Hz	-20–+20dB
62Hz	
125Hz	
250Hz	
500Hz	
1kHz	
2kHz	
4kHz	
8kHz	
16kHz	
LEVEL	-20–+20dB

# PARAMETRIC EQ

This adjusts the tone. You can adjust the sound character in four bands.

Parameter	Value	Explanation
LOW GAIN	-20--+20dB	Adjusts the low frequency range tone.
LOW-MID GAIN	-20--+20dB	Adjusts the low-middle frequency range tone.
HIGH-MID GAIN	-20--+20dB	Adjusts the high-middle frequency range tone.
HIGH GAIN	-20--+20dB	Adjusts the high frequency range tone.
LEVEL	-20--+20dB	Adjusts the overall volume level of the equalizer.
LOW-MID FREQUENCY	20Hz–10.0kHz	Specifies the center of the frequency range that will be adjusted by the LOW-MID GAIN.
LOW-MID Q	0.5–16	Adjusts the width of the area affected by the EQ centered at the LOW-MID FREQ. Higher values will narrow the area.
HIGH-MID FREQUENCY	20Hz–10.0kHz	Specifies the center of the frequency range that will be adjusted by the HIGH-MID GAIN.

Parameter	Value	Explanation
HIGH-MID Q	0.5–16	Adjusts the width of the area affected by the EQ centered at the HIGH-MID FREQ. Higher values will narrow the area.
LOW CUT	FLAT, 20Hz–800Hz	This sets the frequency at which the low cut filter begins to take effect. When “FLAT” is selected, the low cut filter has no effect.
HIGH CUT	630Hz– 12.5kHz, FLAT	Sets the frequency at which the high cut filter begins to take effect. When “FLAT” is selected, the high cut filter will have no effect.

# GUITAR SIM

Simulation of the characteristics of particular guitar components such as pickups and different guitar bodies allows you to switch among a number of different guitar types all while using a single guitar.

Parameter	Value	Explanation
TYPE		Selects the type of the guitar simulator.
	S→H	Changes from a single-coil pickup tone to a humbucking pickup tone.
	H→S	Changes from a humbucking pickup tone to a single-coil pickup tone.
	H→HF (HALF TONE)	Changes from a humbucking pickup tone to a single-coil pickup half tone.
	S→HOLLOW	Changes a single-coil pickup tone to a hollow body tone with the body resonance added.
	H→HOLLOW	Changes a humbucking pickup tone to a hollow body tone with the body resonance added.
	S→AC (ACOUSTIC)	Changes a single-coil pickup tone to an acoustic guitar tone.
	H→AC (ACOUSTIC)	Changes a humbucking pickup tone to an acoustic guitar tone.

Parameter	Value	Explanation
TYPE	P→AC (PIEZO →ACOUSTIC)	Changes a piezo pickup tone to an acoustic guitar tone.
LOW	-50--+50	Adjusts the low frequency range tone.
HIGH	-50--+50	Adjusts the high frequency range tone.
LEVEL	0-100	Adjusts the volume of the effect sound.
BODY	0-100	Adjusts the way the body sounds when TYPE is set to S→HOLLOW, H→HOLLOW, S→AC, H→AC or P→AC. The body sound increases as the value is raised; reducing the value produces a tone similar to that from a piezo pickup.

## AC. GUITAR SIM

This effect simulates the tonal character of an acoustic guitar.

Parameter	Value	Explanation
BODY	0-100	Adjusts the body resonance.
LOW	-50--+50	Specifies the sense of volume for the low-frequency range.
HIGH	-50--+50	Specifies the sense of volume for the high-frequency range.
LEVEL	0-100	Specifies the volume of the effect.

# AC. PROCESSOR



This processor allows you to change the sound produced by the pickup on an acoustic electric guitar, creating a richer sound similar to that obtained with a microphone placed close to the guitar.

Parameter	Value	Explanation
TYPE	Selects the modeling type.	
	SMALL	This is the sound of a small-bodied acoustic guitar.
	MEDIUM	This is a standard, unadorned acoustic guitar sound.
	BRIGHT	This is a bright acoustic guitar sound.
	POWER	This is a powerful acoustic guitar sound.
BASS	-50–+50	Adjusts the low frequency range tone.
MIDDLE	-50–+50	Adjusts the midrange balance.
TREBLE	-50–+50	Adjusts the high frequency range tone.
PRESENCE	-50–+50	Adjusts the balance in the extended upper range.
LEVEL	0–100	Adjusts the volume.
MIDDLE FREQ	20.0Hz–10.0kHz	Specifies the frequency range to be adjusted with MIDDLE.

# WAVE SYNTH

This is a synth sound that processes the guitar input signal.

- \* When you use a wave synthesizer, observe the following points.
  - Because of the need to analyze the pitch, chords (two or more sounds played simultaneously) cannot be played. Be sure to mute all the other strings and play only one note at a time.
  - If the unit cannot detect the attack, it may not sound correctly. If the unit cannot detect the attack, it may not sound correctly.
  - The sensitivity may vary according to the guitar's TONE knob and pickup type.

Parameter	Value	Explanation
WAVE		Selects a wave type which the synth sound is based.
	SAW	Creates a synth sound with a saw waveform (  ).
	SQUARE	Creates a synth sound with the square waveform (  ).
CUTOFF	0-100	Adjusts the frequency where the harmonics contents of the sound are cut off.

Parameter	Value	Explanation
<b>RESONANCE</b>	0–100	Adjusts the amount of resonance (and the tone coloration) in the synth sound. The higher the value, the more the synth tone coloration is emphasized.
<b>SYNTH LEVEL</b>	0–100	Adjusts the volume of the synth sound.
<b>FILTER SENS</b>	0–100	Adjusts the amount of filtering applied in response to the input.
<b>FILTER DECAY</b>	0–100	This sets the time needed for the filter to finish its sweep.
<b>FILTER DEPTH</b>	0–100	Adjusts the depth of the filter. When the value is higher, the filter will change more drastically.
<b>DIRECT MIX</b>	0–100	Adjusts the volume of the direct sound.

# OCTAVE

This adds a note one octave lower, creating a richer sound.

Parameter	Value	Explanation
RANGE	This selects the register to which the effect is applied.	
	RANGE 1 (B1–E6)	B1 (corresponds to the sound of an open 7th string) to E6 (corresponds to the 1st string played at the 24th fret)
	RANGE 2 (B1–E5)	B1 (corresponds to the sound of an open 7th string) to E5 (corresponds to the 1st string played at the 12th fret)
	RANGE 3 (B1–E4)	B1 (corresponds to the sound of an open 7th string) to E4 (corresponds to the sound of an open 1st string)
	RANGE 4 (B1–E3)	B1 (corresponds to the sound of an open 7th string) to E3 (corresponds to the 4th string played at the 2nd fret)
EFFECT LEVEL	0–100	Adjusts the volume of the sound one octave below.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# HEAVY OCTAVE

This adds sound lowered by an octave to the original sound. Since you can play chords even when using this effect, you can use it to fatten the sound of your chordal playing as well.

Parameter	Value	Explanation
1OCT LEVEL	0–100	Adjusts the volume of the sound one octave below.
2OCT LEVEL	0–100	Adjusts the volume of the sound two octaves below.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# PITCH SHIFTER

This effect changes the pitch of the original sound (up or down) within a range of two octaves.

Parameter	Value	Explanation
VOICE		Selects the number of voices for the pitch shift sound.
	1VOICE	One-voice pitch-shifted sound output in mono.
	2VOICE	Two-voice pitch-shifted sound (PS1, PS2) output in mono.
PS1:PITCH PS2:PITCH	-24+24	Adjusts the amount of pitch shift (the amount of interval) in semitone steps.
PS1:LEVEL PS2:LEVEL	0-100	Adjusts the volume of the pitch shifter.
DIRECT MIX	0-100	Adjusts the volume of the direct sound.
PS1:MODE PS2:MODE		Selection for the pitch shifter mode.
	FAST, MEDIUM, SLOW	The response is slower in the order of FAST, MEDIUM and SLOW, but the modulation is lessened in the same order.
	MONO	MONO is used for inputting single notes. * You may be unable to produce the intended effect when playing chords (two or more notes played simultaneously).

Parameter	Value	Explanation
PS1:FINE PS2:FINE	-50--+50	Make fine adjustments to the interval. The amount of the change in the Fine 100 is equivalent to that of the Pitch 1.
PS1:PRE DELAY PS2:PRE DELAY	0-300ms	Adjusts the time from when the direct sound is heard until the pitch shifted sounds are heard. Normally you can leave this set at 0 ms.
PS1:FEEDBACK	0-100	Adjusts the feedback amount of the pitch shift sound.

# HARMONIST

Harmonist is an effect where the amount of shifting is adjusted according to an analysis of the guitar input, allowing you to create harmony based on diatonic scales.

- \* Because of the need to analyze the pitch, chords (two or more sounds played simultaneously) cannot be played. Be sure to mute all the other strings and play only one note at a time.
- \* If the unit cannot detect the attack, it may not sound correctly. If the unit cannot detect the attack, it may not sound correctly.
- \* The sensitivity may vary according to the guitar's TONE knob and pickup type.

Parameter	Value	Explanation
VOICE		Selects the number of voices for the pitch shift sound.
	1VOICE	One pitch-shifted voice is output in mono.
	2VOICE	Two pitch-shifted voices are output in mono.
HR1:HARMONY HR2:HARMONY	-2 oct--+2 oct, USER	This determines the pitch of the sound added to the input sound, when you are making a harmony. It allows you to set it by up to 2 octaves higher or lower than the input sound. When the scale is set to USER, this parameter sets the user scale number to be used.

Parameter	Value	Explanation
MASTER KEY	C (Am)-B (G <sup>#</sup> m)	The key of the song you're playing is shown as described in *1 according to the key signature (#, ♭) of the musical notation.
DIRECT MIX	0-100	Adjusts the volume of the direct sound.
HR1:PRE DELAY HR2:PRE DELAY	0-300ms	Adjusts the time from when the direct sound is heard until the harmonist sounds are heard. Normally you can leave this set at 0 ms.
HR1:FEEDBACK	0-100	Adjusts the feedback amount of the harmonist sound.
HR1:LEVEL HR2:LEVEL	0-100	Adjusts the volume of the harmony sound.

**Major** C F B<sup>b</sup> E<sup>b</sup> A<sup>b</sup> D<sup>b</sup>



**Minor** A<sup>m</sup> D<sup>m</sup> G<sup>m</sup> C<sup>m</sup> F<sup>m</sup> B<sup>b</sup>m

\*1

**Major** C G D A E B F<sup>#</sup>



**Minor** A<sup>m</sup> E<sup>m</sup> B<sup>m</sup> F<sup>#</sup>m C<sup>#</sup>m G<sup>#</sup>m D<sup>#</sup>m

Parameter	Value	Explanation	
USER SCALE *2 *3	C	-24▼C- +24▲C	You can specify a pitch in the range two octaves above or below the direct sound.
	D <sup>b</sup>	-24▼D <sup>b</sup> - +24▲D <sup>b</sup>	
	D	-24▼D- +24▲D	
	E <sup>b</sup>	-24▼E <sup>b</sup> - +24▲E <sup>b</sup>	
	E	-24▼E- +24▲E	
	F	-24▼F- +24▲F	
	F <sup>#</sup>	-24▼F <sup>#</sup> - +24▲F <sup>#</sup>	
	G	-24▼G- +24▲G	
	A <sup>b</sup>	-24▼A <sup>b</sup> - +24▲A <sup>b</sup>	
	A	-24▼A- +24▲A	
	B <sup>b</sup>	-24▼B <sup>b</sup> - +24▲B <sup>b</sup>	
	B	-24▼B- +24▲B	

\*2 This can be specified if HR1:HARMONY or HR2:HARMONY is "USER".

\*3 The correspondence between the note names and the knobs differs depending on the specified KEY. Knob [1] of the first page is the tonic (root note) of the specified KEY. The table shows the example of when KEY is set to C (Am). The table shows the example of when KEY is set to C (Am).

# HUMANIZER

This can create human vowel-like sounds.

Parameter	Value	Explanation
MODE		This sets the mode that switches the vowels.
	PICKING	It changes from VOWEL 1 to VOWEL 2 along with the picking. The time spent for the change is adjusted with the rate.
	AUTO	By adjusting the rate and depth, two vowels (VOWEL 1 and VOWEL 2) can be switched automatically.
VOWEL 1	a, e, i, o, u	Selects the first vowel.
VOWEL 2	a, e, i, o, u	Selects the second vowel.
SENS *1	0-100	Adjusts the sensitivity of the humanizer. When it is set to a lower value, no effect of the humanizer is obtained with weaker picking, while stronger picking produces the effect. When it is set to a higher value, the effect of the humanizer can be obtained whether the picking is weak or strong.
RATE	0-100	Adjusts the cycle for changing the two vowels.
DEPTH	0-100	Adjusts the depth of the effect.

Parameter	Value	Explanation
<b>LEVEL</b>	0-100	Adjusts the volume.
<b>MANUAL *2</b>	0-100	Adjusts the cycle for changing the two vowels. When it is set to lower than 50, the time for VOWEL 1 is shorter. When it is set to higher than 50, the time for VOWEL 1 is longer.

\*1 Setting available when MODE is set to PICKING.

\*2 Setting available when MODE is set to AUTO.

# PHASER 90E

This models an MXR EVH-90 Phase Shifter.

Parameter	Value	Explanation
SCRIPT	OFF, ON	Switches the character of the phaser. OFF: Modern ON: Vintage
SPEED	0-100	Sets the rate and the depth of the phaser effect.

# FLANGER117E

This models an MXR EVH-117 Flanger.

Parameter	Value	Explanation
MANUAL	0-100	Adjusts the center frequency at which to apply the effect.
WIDTH	0-100	Determines the depth of the flanging effect.
SPEED	0-100	This sets the rate of the flanging effect.
REGEN.	0-100	Determines the amount of feedback. Increasing the value will emphasize the effect, creating a more unusual sound.

# WAH 95E

This models a Jim Dunlop EVH-95 Wah pedal. You can control the wah effect in real time by adjusting the expression pedal connected to the SEL CH1 CH2/EXP PEDAL jack on the rear panel, or to the rear panel of the GA-FC foot controller (sold separately).

Parameter	Value	Explanation
<b>PEDAL POS</b> (PEDAL POSITION)	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an EXP Pedal or similar controller.
<b>PEDAL MIN</b>	0–100	Selects the tone produced when the heel of the EXP Pedal is depressed.
<b>PEDAL MAX</b>	0–100	Selects the tone produced when the toe of the EXP Pedal is depressed.
<b>EFFECT LEVEL</b>	0–100	Adjusts the volume of the effect sound.
<b>DIRECT MIX</b>	0–100	Adjusts the volume of the direct sound.

# DC-30

This models a Roland DC-30.

Parameter	Value	Explanation
TYPE	CHORUS	Chorus effect
	ECHO	Echo effect
CHORUS INTENSITY	0–100	Adjust the depth of the chorus effect. * Only when TYPE is CHORUS.
ECHO REPEAT RATE	40–600ms	Adjusts the delay time. * Only when TYPE is ECHO.
ECHO INTENSITY	0–100	Adjusts the volume that is returned to the input. A higher value will increase the number of the delay repeats. * Only when TYPE is ECHO.
ECHO VOLUME	0–100	Adjusts the volume of the delay sound. * Only when TYPE is ECHO.
INPUT VOLUME	0–100	Adjusts the input level.
TONE	-50–+50	Adjusts the tone.
OUTPUT	D/E	Direct sound and effect sound are output respectively.
	D+E	Direct sound and effect sound are mixed and output.

# PEDAL BEND

You can get a pitch bend effect in real time by adjusting the expression pedal connected to the SEL CH1 CH2/EXP PEDAL jack on the rear panel, or to the rear panel of the GA-FC foot controller (sold separately).

Parameter	Value	Explanation
PEDAL POSITION	0–100	Adjusts the pedal position for pedal bend. * This parameter is used after it's been assigned to an expression pedal or similar controller.
PITCH	-24–+24	This sets the pitch at the point where the expression pedal is all the way down.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

# DELAY/DELAY 2

This effect adds delayed sound to the direct sound, giving more body to the sound or creating special effects.

## DELAY types

Type	Explanation
DIGITAL	This is a simple mono delay.
PAN	This allows you to obtain the tap delay effect that divides the delay time, then deliver them to L and R channels.
STEREO	This is a stereo-in/out delay.
ANALOG	Gives a mild analog delay sound.
TAPE ECHO	This setting provides the characteristic wavering sound of the tape echo.
REVERSE	This produces an effect where the sound is played back in reverse.
MODULATE	This delay adds a pleasant wavering effect to the sound.
SDE-3000	This models the sound of the Roland SDE-3000.

# DELAY Parameters

Parameter	Value	Explanation
TYPE	Refer to DELAY types	
DELAY TIME	1–2000ms	Adjusts the delay time.
FEEDBACK	0–100	Adjusts the volume of delay that is returned to the input. Higher values increase the number of delay repeats.
HIGH CUT	630Hz–12.5kHz, FLAT	Sets the frequency at which the high cut filter begins to take effect. When FLAT is selected, the high cut filter has no effect.
TAP TIME	0–100%	Adjusts the delay time of the right channel delay. This setting adjusts the R channel delay time relative to the L channel delay time (considered as 100%). * Only when TYPE is PAN.
EFFECT LEVEL	0–120	Adjusts the volume of the delay sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
MOD RATE (MODULATION RATE)	0–100	Adjusts the modulation rate of the delay sound. * Only when TYPE is MODULATE or SDE-3000.
MOD DEPTH (MODULATION DEPTH)	0–100	Adjusts the modulation depth of the delay sound * Only when TYPE is MODULATE or SDE-3000.

Parameter	Value	Explanation
<b>MOD SW</b> (MODULATION SW)	OFF, ON	Turns the modulation on/off. * Only when TYPE is SDE-3000.
<b>FILTER</b>	OFF, ON	Turns the filter on/off. If this is on, a natural-sounding effect is obtained when you're using the delay as an echo. * Only when TYPE is SDE-3000.
<b>RANGE</b>	8 kHz, 17 kHz	Models the way in which the SDE-3000's frequency response is affected by the delay range. * Only when TYPE is SDE-3000.
<b>DELAY PHASE</b>	NORMAL, INVERSE	Specifies the phase of the delay sound. Selecting INVERSE inverts the phase. This effect is more pronounced when used together with modulation. * Only when TYPE is SDE-3000.
<b>FEEDBACK PHASE</b>	NORMAL, INVERSE	Specifies the phase of the delay sound feedback. Selecting INVERSE inverts the phase. * Only when TYPE is SDE-3000.

# REVERB

This effect adds reverberation to the sound.

## REVERB Type

Type	Explanation
PLATE	Simulates plate reverberation (a reverb unit that uses the vibration of a metallic plate). Provides a metallic sound with a distinct upper range.
ROOM	Simulates the reverberation in a small room. Provides warm reverberations.
HALL	Simulates the reverberation in a concert hall. Provides clear and spacious reverberations.
SPRING	This simulates the sound of a guitar amp's built-in spring reverb.
MODULATE	This reverb adds the wavering sound found in hall reverb to provide an extremely pleasant reverb sound.

## REVERB parameters

Parameter	Value	Explanation
<b>TYPE</b>	Refer to REVERB types	
<b>REVERB TIME</b>	0.1–10.0s	Adjusts the length (time) of reverberation.
<b>PRE DELAY</b>	0–500ms	Adjusts the time until the reverb sound appears.
<b>EFFECT LEVEL</b>	0–100	Adjusts the volume of the reverb sound.
<b>DIRECT MIX</b>	0–100	Adjusts the volume of the direct sound.
<b>LOW CUT</b>	FLAT, 20Hz–800Hz	This sets the frequency at which the low cut filter begins to take effect. When “FLAT” is selected, the low cut filter has no effect.
<b>HIGH CUT</b>	630Hz– 12.5kHz, FLAT	Sets the frequency at which the high cut filter begins to take effect. When “FLAT” is selected, the high cut filter has no effect.
<b>DENSITY</b>	0–10	Adjusts the density of the reverb sound.
<b>COLOR</b> (TYPE = SPRING only)	0–100	Adjust the unique tone of the spring reverb.

# PEDAL FX

You can control the effect in real time by adjusting the expression pedal connected to the SEL CH1 CH2/EXP PEDAL jack on the rear panel, or to the rear panel of the GA-FC foot controller (sold separately).

Parameter	Value	Explanation
<b>POSITION</b>	INPUT, POST AMP	Selects the PEDAL FX position in the effect chain.
<b>FX TYPE</b>	PEDAL WAH	Produces a wah effect.
	WAH 95E	This models the sound of a Jim Dunlop EVH-95. Produces a wah effect.
	PEDAL BEND	Applies a pitch-bend effect. * Because of the need to analyze the pitch, chords (two or more sounds played simultaneously) cannot be played.

# PEDAL WAH Parameters

Parameter	Value	Explanation
TYPE		Selects the wah mode.
	CRY WAH	This models the sound of the CRY BABY wah pedal popular in the '70s.
	VO WAH	This models the sound of the VOX V846.
	FAT WAH	This is a wah sound featuring a bold tone.
	LIGHT WAH	This wah has a refined sound with no unusual characteristics.
	7STRING WAH	This expanded wah features a variable range compatible with seven-string and baritone guitars.
	RESO WAH	This completely original effect offers enhancements on the characteristic resonances produced by analog synth filters.
PEDAL POS (PEDAL POSITION)	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an EXP Pedal or similar controller.
PEDAL MIN	0–100	Selects the tone produced when the heel of the EXP Pedal is depressed.

Parameter	Value	Explanation
PEDAL MAX	0–100	Selects the tone produced when the toe of the EXP Pedal is depressed.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

## WAH 95E Parameters

Parameter	Value	Explanation
PEDAL POS (PEDAL POSITION)	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an EXP Pedal or similar controller.
PEDAL MIN	0–100	Selects the tone produced when the heel of the EXP Pedal is depressed.
PEDAL MAX	0–100	Selects the tone produced when the toe of the EXP Pedal is depressed.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

## PEDAL BEND Parameters

Parameter	Value	Explanation
<b>PEDAL POS</b> (PEDAL POSITION)	0–100	Adjusts the pedal position for pedal bend.
<b>PITCH</b>	-24–+24	This sets the pitch at the point where the expression pedal is all the way down.
<b>EFFECT LEVEL</b>	0–100	Adjusts the volume of the effect sound.
<b>DIRECT MIX</b>	0–100	Adjusts the volume of the direct sound.

## EQ

This adjusts the tone.

## PARAMETRIC EQ

You can adjust the sound character in four bands.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
LOW GAIN	-20–+20dB	Adjusts the low frequency range tone.
LOW-MID GAIN	-20–+20dB	Adjusts the low-middle frequency range tone.
HIGH-MID GAIN	-20–+20dB	Adjusts the high-middle frequency range tone.
HIGH GAIN	-20–+20dB	Adjusts the high frequency range tone.
LEVEL	-20–+20dB	Adjusts the overall volume level of the equalizer.
LOW-MID FREQUENCY	20Hz– 10.0kHz	Specifies the center of the frequency range that will be adjusted by the LOW-MID GAIN.

Parameter	Value	Explanation
LOW-MID Q	0.5–16	Adjusts the width of the area affected by the EQ centered at the LOW-MID FREQ. Higher values will narrow the area.
HIGH-MID FREQUENCY	20Hz–10.0kHz	Specifies the center of the frequency range that will be adjusted by the HIGH-MID GAIN.
HIGH-MID Q	0.5–16	Adjusts the width of the area affected by the EQ centered at the HIGH-MID FREQ. Higher values will narrow the area.
LOW CUT	FLAT, 20Hz–800Hz	This sets the frequency at which the low cut filter begins to take effect. When “FLAT” is selected, the low cut filter has no effect.
HIGH CUT	630Hz–12.5kHz, FLAT	Sets the frequency at which the high cut filter begins to take effect. When “FLAT” is selected, the high cut filter will have no effect.
POSITION	AMP IN, AMP OUT	This lets you place the EQ before (AMP IN) or after (AMP OUT) the AMP/EQ block.

# GE-10

This models a BOSS GE-10 graphic equalizer. You can adjust the sound quality in ten bands.

Parameter	Value	
31Hz	-12--+12dB	
62Hz		
125Hz		
250Hz		
500Hz		
1kHz		
2kHz		
4kHz		
8kHz		
16kHz		
LEVEL	-12--+12dB	
POSITION	AMP IN	Positions the EQ in front of the amplifier unit within the KATANA's effect chain.
	AMP OUT	Positions the EQ behind the amplifier unit within the KATANA's effect chain.

# NS (NOISE SUPPRESSOR)

This effect reduces the noise and hum picked up by guitar pickups. Since it suppresses the noise in synchronization with the envelope of the guitar sound (the way in which the guitar sound decays over time), it has very little effect on the guitar sound, and does not harm the natural character of the sound.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
THRESH	0–100	Adjust this parameter as appropriate for the volume of the noise. If the noise level is high, a higher setting is appropriate. If the noise level is low, a lower setting is appropriate. * High settings for the threshold parameter may result in there being no sound when you play with your guitar volume turned down.
RELEASE	0–100	Adjusts the time from when the noise suppressor begins to function until the noise level reaches "0".

# SEND/RETURN

These are settings for the EFFECT LOOP (SEND/RETURN) jacks.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
POSITION	POST FV, POST REV, PRE FV	Specifies the position at which the external effect unit is connected within the KATANA's effect chain.
MODE	SERIES, PARALLEL	Specifies whether the external effect unit is connected in series or in parallel.
SEND LEVEL	0-100	Adjusts the volume of the output to the external effects device.
RETURN LEVEL	0-100	Adjusts the volume of the input from the external effects device.

\* The S/R setting is valid if a plug is connected to the RETURN jack.

# SOLO

Adjusts the volume and tonal character when using solo.

Parameter	Value	Explanation
SOLO ON/OFF	OFF, ON	Switches the solo function on/off.
SOLO LEVEL	0–100	Adjusts the volume when the solo function is ON.

## SOLO EQ Parameters

You can adjust the sound quality in three bands.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns the equalizer on/off when the solo function is ON.
POSITION	AMP-IN, AMP-OUT	Selects whether to place the equalizer before the preamp (INPUT) or after the preamp (OUTPUT).
LOW CUT	FLAT–800Hz	This sets the frequency at which the low cut filter begins to take effect. When “FLAT” is selected, the low cut filter will have no effect.

Parameter	Value	Explanation
LOW GAIN	-12– +12dB	Adjusts the middle frequency range tone.
MID FREQUENCY	20Hz– 10kHz	Specifies the center of the frequency range that will be adjusted by the MID GAIN.
MID Q	0.5–16	Adjusts the width of the area affected by the EQ centered at the MID FREQUENCY. Higher values will narrow the area.
MID GAIN	-12– +12dB	Adjusts the middle frequency range tone.
HIGH GAIN	-12– +12dB	Adjusts the high frequency range tone.
HIGH CUT	630Hz– FLAT	This sets the frequency at which the high cut filter begins to take effect. When “FLAT” is selected, the high cut filter will have no effect.
LEVEL	-12– +12dB	Adjusts the overall volume level of the equalizer.

# SOLO DELAY Parameters

Only for Artist, Artist HEAD

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns the delay on/off when the solo function is ON.
DELAY TIME	1–2000ms	Adjusts the delay time.
FEEDBACK	0–100	Adjusts the volume that is returned to the input. A higher value will increase the number of the delay repeats.
CARRYOVER	OFF, ON	Specifies whether the effect sound is carried-over (ON) or not carried-over (OFF) when you switch sounds or turn off the delay.
EFFECT LEVEL	0–120	Adjusts the volume of the delay sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
FILTER	OFF, ANALOG, TAPE ECHO	Switches between filter settings. This offers natural-sounding effects like analog delay or tape echo.
HIGH CUT	630Hz–12.5kHz, FLAT	This sets the frequency at which the high cut filter begins to take effect. When “FLAT” is selected, the high cut filter will have no effect.
MOD SW (MODULATION SW)	OFF, ON	Turns the modulation on/off.

Parameter	Value	Explanation
<b>MOD RATE</b> (MODULATION RATE)	0–100	Adjusts the modulation rate of the delay sound.
<b>MOD DEPTH</b> (MODULATION DEPTH)	0–100	Adjusts the modulation depth of the delay sound.