VG-800

Parameter Guide

Contents

Parameter list

* Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.
* In this manual, company names and product names of the respective owners are used because it is the most practical way of describing the sounds that are emulated using DSP technology.

INST parameters

The parameters that can be configured for each scene are called "scene parameters".

INST SW/TYPE/LEVEL

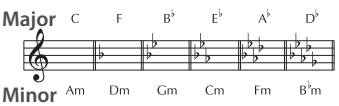
Parameter	Value	Explanation
INST SW	OFF, ON	Turns the instrument on/off. Press the [SELECT] knob on the INST EDIT screen to switch between on/off.
INST TYPE	E.GUITAR	Offers various electric guitar sounds.
	ACOUSTIC *1	Offers various acoustic guitar sounds.
	DUAL GUITAR *1	Lets you freely combine two guitar or bass guitar sounds.
	E.BASS	Offers various electric bass guitar sounds.
	AC BASS *2	Offers an acoustic bass sound.
	DUAL BASS *2	Lets you freely combine two bass guitar and guitar sounds.
	VIO GUITAR *1	Lets you add harmonics to create a unique, gentle sound.
	VIO BASS *2	
	SYNTH	Offers various synthesizer sounds.
INST LEVEL	0–100	Sets the volume of the instrument.
NORMAL MIX SW	OFF, ON	Sets the normal pickup signal on/off.
NORMAL MIX LEVEL	0–200	Sets the normal pickup volume on/off.

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

INST TYPE common parameters (ALT TUNE)

Lets you instantly switch between various tunings, while maintaining the tuning of the guitar/bass guitar on which the divided pickup is installed.

Parameter	Value	Explanation
ALT TUNE SW *10	OFF, ON	Turns the alternate tuning function on/off.
ALT TUNE MODE *10	Switches between alternate tuning functions.	
	ALT TUNE	Shifts the pitch for each string in half steps. This lets you use open tunings like open-D or open-G, shift the tuning of all strings up/down an octave and so forth.
	HARMONY	Analyzes the pitch of each string and adjusts the amount that the pitch is shifted, converting the pitches into harmony pitches within a diatonic scale.
ALT TUNE TYPE *3 *10	OPEN D, OPEN E, OPEN G, OPEN A *1	A tuning with which the open strings play a major chord.
	DROP D–A *1	With "DROP D", the sixth string is tuned to a lower D. For the other tunings, the DROP D tunings are lowered even further.
	D-MODAL *1	A tuning that drops the first, second and sixth strings a whole step for an ethnic feel.
	NASHVL *1	A tuning that raises the third, fourth, fifth and sixth strings one octave, giving the effect of playing just the secondary strings on a 12-string guitar.
	4TH *1	A tuning in fourths that raises the first and second strings by a half step.
	-12–+12 STEP	A tuning that lowers or raises all strings in half steps.
	USER	A user tuning that lets you set the tuning for each string.
PITCH 1–7 *1 *3 *5 **PITCH HiC–LowB** *2 *3 *5	-24–0–+24	Sets how much to shift the pitch of the strings, in semitones.
FINE 1–7 *1 *3 *5 **FINE HiC–LowB** *2 *3 *5	-50–+50	Fine-tunes the pitch of each string.A setting of -50 lowers the pitch one semitone, and a setting of +50 raises the pitch one semitone.
KEY *4	C (Am)–B (G#m)	The key setting corresponds to the key of the song (♯, ♭) as follows. * This parameter is the same as the KEY parameter on the MASTER block (p. 37).
	 	

Parameter	Value	Explanation
HARMONY *4 *10	-2oct–UNISON–+2oct, 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.
12STR SW *6 *10	OFF, ON	Turn this ON to simulate the sound of a 12-string guitar. This adds the sound of a sub-string to your normal six-string guitar sound, like a 12-string guitar.
12STR TYPE *7	NORMAL	This is the normal tuning for a 12-string guitar.
	USER	A user tuning that lets you set the tuning for each sub-string.
12STR PITCH 1–7 *1 *7 *8	-24–0–+24	Sets how much to shift the pitch of the sub-strings, in semitones.
12STR PITCH HiC–LowB *2 *7 *8		
12STR FINE 1–7 *1 *7 *8	-50–+50	Fine-tunes the pitch of the sub-string.A setting of -50 lowers the pitch one semitone, and a setting of +50 raises the pitch one semitone.
12STR FINE HiC–LowB *2 *7 *8		
12STR LEVEL 1–7 *1 *7 *8	0–100	Sets the volume of the sub-string.
12STR LEVEL HiC–LowB *2 *7 *8		
12STR DELAY 1–7 *1 *7 *8	0 ms–100 ms	Adjusts how long of a delay occurs before you hear the sub-string sound after you play the main string, for each string.
12STR DELAY HiC–LowB *2 *7 *8		
STR BEND SW *10	OFF, ON	Turns the string bend function on/off.
BEND CONTROL *10	0–100	When this is set to "0", the pitch is not shifted when you bend the string. When this is set to "100", the pitch is shifted by the amount set in BEND DEPTH6–BEND DEPTH1 (LowB–HiC). Normally, this should be set to "0", and you can use a control assignment to shift the bend value from 0 to 100.
BEND DEPTH 1–7 *1 *10	-24–0–+24	Sets how much to shift the pitch of each string when BEND CONTROL is set to "100". Sets how much to shift the pitch of the strings from the current pitch, in semitones.
BEND DEPTH HiC–LowB *2 *10		
A:STR DELAY 1–7 *9 **B:STR DELAY 1–7** *9	0 ms–100 ms	Adjusts the amount that the sound is delayed for each string by DUAL GUITAR/DUAL BASS. When you combine two guitar/bass guitar sounds, you can delay the string sound of one of them to simulate a 12-string guitar. (This effect is not applied when ALT TUNE SW is OFF.)

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

*3 Enabled when ALT TUNE MODE is "ALT TUNE".

*4 Enabled when ALT TUNE MODE is "HARMONY".

*5 Enabled when ALT TUNE TYPE is "USER". When INST TYPE is DUAL GUITAR or DUAL BASS, either "A:" or "B:" is prepended to the parameter name.

*6 Enabled when INST TYPE is E.GUITAR, E.BASS, ACOUSTIC, AC BASS, DUAL GUITAR or DUAL BASS.

*7 Enabled when INST TYPE is E.GUITAR, E.BASS, ACOUSTIC or AC BASS.

*8 Enabled when 12STR TYPE is "USER".

*9 Enabled when INST TYPE is DUAL GUITAR or DUAL BASS. At this time, either "A:" or "B:" is prepended to the parameter name.

*10 When INST TYPE is DUAL GUITAR or DUAL BASS, either "A:" or "B:" is prepended to the parameter name.

USER SCALE

* Effective with USER selected for HARMONY parameter.

Parameter	Value
C	▼▼C–▼C–C–▲C–▲▲C
D♭	▼▼D♭–▼D♭–D♭–▲D♭–▲▲D♭
D	▼▼D–▼D–D–▲D–▲▲D
E♭	▼▼E♭–▼E♭–E♭–▲E♭–▲▲E♭
E	▼▼E–▼E–E–▲E–▲▲E
F	▼▼F–▼F–F–▲F–▲▲F
F♯	▼▼F♯–▼F♯–F♯–▲F♯–▲▲F♯
G	▼▼G–▼G–G–▲G–▲▲G
A♭	▼▼A♭–▼A♭–A♭–▲A♭–▲▲A♭
A	▼▼A–▼A–A–▲A–▲▲A
B♭	▼▼B♭–▼B♭–B♭–▲B♭–▲▲B♭
B	▼▼B–▼B–B–▲B–▲▲B

The minus (-) and plus (+) symbols indicate sounds above or below the specified original note.

Triangles next to the note names indicate octaves.

One downward-pointing triangle indicates a note one octave below the note displayed; two triangles indicates a two-octave drop.

One upward-pointing triangle indicates a note one octave above the note displayed; two triangles indicates a two-octave rise.

INST TYPE common parameters (STRING/OTHERS)

These parameters are used to adjust the volume and pan for each string, the NS or EQ that works on the entire INST block and so forth.

* The NS (noise suppressor) is an effect that reduces noise and hum from the pickups of a guitar or bass guitar. 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.

* The EQ (equalizer) adjusts the tonal character of the sound. A parametric EQ is provided for adjusting the sound over four separate frequency bands.

Parameter	Value	Explanation
STRING LEVEL 1–7 *1 *3	0–100	Sets the output level for each string.
STRING LEVEL HiC–LowB *2 *3		
STRING PAN 1–7 *1 *3	L50–CENTER–R50	Sets the panning of each string's sound when using stereo output.
STRING PAN HiC–LowB *2 *3		
POSITION LIMIT SW *4	OFF, ON	Turns the position limit function on/off. When this is ON, the instrument plays over the fret range set in POSITION LIMIT LOW and HIGH.
POSITION LIMIT LOW *4	NO LIMIT, 0–24FRET	Sets the fret range within which the instrument plays.
POSITION LIMIT HIGH *4	0–24FRET, NO LIMIT	
EQ SW *3	OFF, ON	Switches the EQ on/off.
EQ LOW CUT *3	FLAT, 20.0 Hz–16.0 kHz	Cuts the frequencies below the frequency that you set. When "FLAT" is selected, the low cut filter has no effect.
EQ LOW GAIN *3	-20 dB–+20 dB	Adjusts the low frequency range tone.
EQ LOW-MID FREQ *3	20.0 Hz–16.0 kHz	Specifies the center of the frequency range to be adjusted by the LOW-MID GAIN.
EQ LOW-MID Q *3	0.5, 1, 2, 4, 8, 16	Adjusts the width of the area affected by the EQ, centered on the frequency specified by LOW-MID FREQ. Higher values will narrow the area.
EQ LOW-MID GAIN *3	-20 dB–+20 dB	Adjusts the low-middle frequency range tone.
EQ HIGH-MID FREQ *3	20.0 Hz–16.0 kHz	Specifies the center of the frequency range to be adjusted by the HIGH-MID GAIN.
EQ HIGH-MID Q *3	0.5, 1, 2, 4, 8, 16	Adjusts the width of the area affected by the EQ, centered on the frequency specified by HIGH-MID FREQ. Higher values will narrow the area.
EQ HIGH-MID GAIN *3	-20 dB–+20 dB	Adjusts the high-middle frequency range tone.
EQ HIGH GAIN *3	-20 dB–+20 dB	Adjusts the tonal character of the high frequencies.
EQ HIGH CUT *3	20.0 Hz–16.0 kHz, FLAT	Cuts the frequencies above the frequency that you set. When FLAT is selected, the high cut filter has no effect.
EQ LEVEL *3	-20 dB–+20 dB	Adjusts the overall volume level of the equalizer.
NS SW *3	OFF, ON	Switches the NS on/off.
NS THRESHOLD *3	0–100	Adjust this parameter as appropriate for the volume of the noise. If the noise level is high, a higher setting is appropriate. Adjust the value so that the decay of the guitar sound sounds natural.
NS RELEASE *3	0–100	Adjusts the time from when the noise suppressor begins to function until the noise level reaches "0".

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

*3 When INST TYPE is DUAL GUITAR or DUAL BASS, either "A:" or "B:" is prepended to the parameter name.

*4 Enabled when INST TYPE is DUAL GUITAR or DUAL BASS.

E.GUITAR parameters

GUITAR (In GUITAR MODE)

Parameter	Value	Explanation
TYPE	Selects the electric guitar type "TYPE" (p. 7).	
PU SELECT	Selects the pickup position.	
	REAR	Rear pickup
	R+C *1	Rear and center pickups
	CENTER *1	Center pickup
	C+F *1	Center and front pickups
	FRONT	Front pickup
	R+F *2	Rear and front pickups
	ALL *3	All pickups
TONE TYPE *4	MILD, STANDARD, BRIGHT1, BRIGHT2	Selects the fretless tone type.
SENS *4	0–100	This controls the input sensitivity.
DEPTH *4	0–100	This controls the volume of the harmonics.
ATTACK *4	0–100	Adjusts the attack of the picking sound.
RESONANCE *4	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *4	0–100	Adjusts the volume of the direct sound.
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE	0–100	Adjusts the tone of the body. The standard value is 100; lowering the value creates a softer tone.

*1 Valid when the TYPE is set to CLA-ST, MOD-ST, or LIPS.

*2 Valid when the TYPE is set to TE, LP, P-90, 335, L4, RICK, WIDE RANGE, or BRIGHT HUM.

*3 Valid when the TYPE is set to LIPS.

*4 Valid when the TYPE is set to FRETLESS.

TYPE

Value	Explanation
CLA-ST	The sound of a Fender Stratocaster. Simulates the installation of three single-coil pickups (passive type).
MOD-ST	This models a guitar with three EMG active single-coil pickups.
TE	The sound of a Fender Telecaster. This models a guitar with two single-coil pickups.
LP	The sound of a Gibson Les Paul Standard. Simulates the installation of two humbucking pickups (passive type).
P-90	The sound of a Gibson Les Paul Junior. This provides two single-coil pickups of the type used on fixed-neck guitars and affectionately known as soap-bar or dog-ear pickups.
335	The sound of a Gibson ES-335 Dot. Typical semi-acoustic guitar with two humbucking pickups.
L4	The sound of a Gibson L-4 CES. Acoustic body guitar suited for jazz. Equipped with two humbucking pickups and strung with flat wound strings.
RICK	This models a Rickenbacker 360. Semi-hollow body guitar with two unique single-coil pickups.
LIPS	The sound of a Danelectro 56-U3. This models a guitar equipped with three pickups noted for their visual resemblance to lipstick tubes.
WIDE RANGE	This produces the fat sound typical of a larger number of coil windings than on a conventional single-coil pickup.
BRIGHT HUM	A conventional humbucking pickup places two coils side by side, causing the high frequencies to be canceled; however, this model produces a tone that preserves these high frequencies while retaining the characteristics of a humbucking pickup.
FRETLESS	This models a fretless guitar.

GUITAR (In BASS MODE)

Parameter	Value	Explanation
TYPE	Selects the electric guitar type.	
	ST	The sound of a Fender Stratocaster. Simulates the installation of three single-coil pickups (passive type).
	LP	The sound of a Gibson Les Paul Standard. Simulates the installation of two humbucking pickups (passive type).
	FRETLESS	This models a fretless guitar.
PU SELECT	Selects the pickup position.	
	REAR	Rear pickup
	R+C *1	Rear and center pickups
	CENTER *1	Center pickup
	C+F *1	Center and front pickups
	FRONT	Front pickup
	R+F *2	Rear and front pickups
TONE TYPE *3	MILD, STANDARD, BRIGHT1, BRIGHT2	Selects the fretless tone type.
SENS *3	0–100	This controls the input sensitivity.
DEPTH *3	0–100	This controls the volume of the harmonics.
ATTACK *3	0–100	Adjusts the attack of the picking sound.
RESONANCE *3	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *3	0–100	Adjusts the volume of the direct sound.
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE	0–100	Adjusts the tone of the body. The standard value is 100; lowering the value creates a softer tone.

*1 Valid when the TYPE is set to ST.

*2 Valid when the TYPE is set to LP.

*3 Valid when the TYPE is set to FRETLESS.

ACOUSTIC parameters

ACOUSTIC

Parameter	Value	Explanation
TYPE	Selects the acoustic guitar type "TYPE" (p. 9).	
BODY *1	0–100	Adjusts the body resonation. Raising the value produces more of a sense of the guitar body in the sound. Lower the value in conditions where fee dBack is prone to occur.
RESONANCE *2	0–100	Adjusts the body resonance. The resonation increases as the value is raised.
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE	-50–+50	Adjusts the tone of the body. The standard value is 0; raising the value boosts the high range.
ATTACK *3	0–100	Specifies the strength of the attack when you pluck the string strongly. As this setting is increased, the attack will be sharper, and the sound will be crisper.
SUSTAIN *4	0–100	You can specify how the resulting volume will be affected by changes (loud/soft dynamics) in the guitar string vibrations that are input. Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.
PU SELECT *5	Selects the pickup position.	
	FRONT	Front pickup
	R+F	Rear and front pickups
	REAR	Rear pickup
	PIEZO	Piezo pickup
SENS *5	0–100	Adjusts the input sensitivity.
COLOR *5	0–100	Adjusts the overall tone quality of the sitar.
DECAY *5	0–100	Adjusts the time it takes following the attack for the tone to change.
BUZZ *5	0–100	Adjusts the amount of characteristic buzz produced by the buzz bridge when the strings make contact with it.

*1 Valid when the TYPE is set to other than RESO or BANJO.

*2 Valid when the TYPE is set to RESO or BANJO.

*3 Valid when the TYPE is set to NYLON, BANJO, or SITAR.

*4 Valid when the TYPE is set to RESO.

*5 Valid when the TYPE is set to SITAR.

TYPE

TYPE	Explanation
MA28	The sound of a Martin D-28. Older model known for its exquisitely balanced sound.
TRP-0	The sound of a Martin 000-28. This model features a full low-end resonance and crisp, distinct contour.
GB45	The sound of a Gibson J-45. This vintage model features a unique, seasoned tone with good response.
GB SML	The sound of a Gibson B-25. Featuring a compact body, this vintage model is often used in blues.
GLD40	The sound of a Guild D-40. This model features warm resonance from the body along with a delicate string resonance.
NYLON	This models a nylon-string guitar.
RESO	This models a Dobro-type resonator guitar.
BANJO	This models a conventional five-string banjo.
SITAR	This models a Coral electric sitar. The sitar's distinctive buzz and tonal change are modeled.

AC BASS parameters

AC BASS

Parameter	Value	Explanation
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
BODY	0–100	This sets the volume level of the resonant sound produced by the panels and cavity (the body resonation).
RESONANCE	0–100	Adjusts the body resonance. The resonation increases as the value is raised.
SIZE	-50–+50	Specifies the size of the body. This modifies the resonant frequency to simulate changes in body size. A setting of 0 will produce a normal resonance.
ATTACK	0–100	Specifies the strength of the attack when you pluck the string strongly. The higher the value you set, the greater the intensity of the sound produced when the strings are played. The attack of the body sound will increase as well.
BOTTOM	0–100	This sets the volume level of string vibration.
BUZZ SENS	0–100	This sets the sensitivity for the distinctive harmonics of an acoustic bass. Adjust this to match the velocity of fingering.
DECAY	0–100	This sets the decay of the string vibration.

E.BASS parameters

BASS (In GUITAR MODE)

Parameter	Value	Explanation
TYPE	Type of Bass	
	JB	The sound of a Fender Jazz Bass.
	PB	The sound of a Fender Precision Bass.
	FRETLESS	This models a fretless bass.
REAR VOLUME *1	0–100	Sets the volume of the rear pickup.
FRONT VOLUME *1	0–100	Sets the volume of the front pickup.
TONE TYPE *2	Selects the fretless tone type.	
	JB (REAR)	The sound of the rear pickup of a Jazz Bass.
	JB (R+F)	The sound of the rear pickup and front pickup of a Jazz Bass.
	JB (FRONT)	The sound of the front pickup of a Jazz Bass.
	PB	The sound of a Precision Bass.
SENS *2	0–100	This controls the input sensitivity.
DEPTH *2	0–100	This controls the volume of the harmonics.
ATTACK *2	0–100	Adjusts the attack of the picking sound.
RESONANCE *2	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *2	0–100	Adjusts the volume of the direct sound.
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE	0–100	Adjusts the tone of the body.

*1 Valid when the TYPE is set to JB.

*2 Valid when the TYPE is set to FRETLESS.

BASS (In BASS MODE)

Parameter	Value	Explanation
TYPE	Select the bass guitar type "TYPE" (p. 10).	
MASTER VOLUME *1	0–100	Sets the overall bass volume level. With a setting of 0, there will be no sound.
REAR VOLUME *1	0–100	Sets the volume of the rear pickup.
FRONT VOLUME *1	0–100	Sets the volume of the front pickup.
REAR TONE *2	0–100	Adjusts the tone of the rear pickup.
FRONT TONE *2	0–100	Adjusts the tone of the front pickup.
TREBLE *3	0–100	Adjusts the tone for the high frequency range.
BASS *3	0–100	Adjusts the tone for the low frequency range.
PU SELECT *4	Selects the pickup position.	
	REAR	Use the rear pickup.
	R+F	Use both front and rear pickups.
	FRONT	Use the front pickup.
TREBLE ON *5	OFF, ON	Switches the rear pickup on/off.
BASS ON *5	OFF, ON	Switches the front pickup on/off.
RHYTHM/SOLO *5	Switches between rhythm and solo.	
	RHYTHM	The volume will be set to 50.
	SOLO	The volume will be set to 100.
TONE TYPE *6	Selects the fretless tone type.	
	JB (REAR)	The sound of the rear pickup of a Jazz Bass.
	JB (R+F)	The sound of the rear pickup and front pickup of a Jazz Bass.
	JB (FRONT)	The sound of the front pickup of a Jazz Bass.
	PB	The sound of a Precision Bass.
SENS *6	0–100	This controls the input sensitivity.
DEPTH *6	0–100	This controls the volume of the harmonics.
ATTACK *6	0–100	Adjusts the attack of the picking sound.
RESONANCE *6	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *6	0–100	Adjusts the volume of the direct sound.
VOLUME *7	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE *8	0–100	Adjusts the tone of the body.

*1 Valid when the TYPE is set to VINT JB, JB, RICK, T-BIRD, ACTIVE, or VIOLIN.

*2 Valid when the TYPE is set to RICK.

*3 Valid when the TYPE is set to M-MAN or ACTIVE.

*4 Valid when the TYPE is set to RICK.

*5 Valid when the TYPE is set to VIOLIN.

*6 Valid when the TYPE is set to FRETLESS.

*7 Valid when the TYPE is set to VINT PB, PB, M-MAN, or FRETLESS.

*8 Valid when the TYPE is set to VINT JB, JB, VINT PB, PB, T-BIRD, or FRETLESS.

TYPE

Value	Explanation
VINT JB	This models a Fender Jazz Bass from the sixties.
JB	This models a Fender Jazz Bass from the late seventies or later.
VINT PB	This models a Fender Precision Bass from the early sixties.
PB	This models a Fender Precision Bass from the late seventies or later.
M-MAN	This models a Music Man StingRay Bass from the seventies.
RICK	This models a Rickenbacker 4001.
T-BIRD	This models a Gibson Thunderbird.
ACTIVE	This models a typical bass equipped with active pickups.
VIOLIN	This models a Höfner Violin Bass.
FRETLESS	This models a fretless bass.

DUAL GUITAR paremeters

DUAL GUITAR

Parameter	Value	Explanation
MODE	SINGLE	Uses only one guitar, either "A" or "B".
	DUAL	Uses both "A" and "B" guitars at the same time.
SELECT	A, B	When MODE is set to "SINGLE", this sets which guitar to use, "A" or "B".
BALANCE	100:0–100:100–0:100	When MODE is set to "DUAL", this sets the volume balance between A and B.
A:TYPE B:TYPE	This selects the type of instrument ("TYPE"), namely electric guitar, acoustic guitar and electric bass guitar.	
	Electric guitar: CLA-ST, MOD-ST, TE, LP, P-90, 335, L4, RICK, LIPS, WIDE RANGE, BRIGHT HUM, FRETLESS	Refer to "E.GUITAR paremeters" → "GUITAR (In GUITAR MODE)" → "TYPE" (p. 7).
	Acoustic guitar: MA28, TRP-0, GB45, GB SML, GLD 40, NYLON, RESO, BANJO, SITAR	Refer to "ACOUSTIC parameters" → "ACOUSTIC" → "TYPE" (p. 9).
	Electric bass guitar: JB, PB, PJ, FRETLESS B	Refer to "E.BASS parameters" → "BASS (In GUITAR MODE)" → "TYPE" (p. 9).
Refer to each type for explanations of the parameters included with each type.	Electric guitar: CLA-ST, MOD-ST, TE, LP, P-90, 335, L4, RICK, LIPS, WIDE RANGE, BRIGHT HUM, FRETLESS	Refer to "E.GUITAR paremeters" → "GUITAR (In GUITAR MODE)" (p. 7).
	Acoustic guitar: MA28, TRP-0, GB45, GB SML, GLD 40, NYLON, RESO, BANJO, SITAR	Refer to "ACOUSTIC parameters" → "ACOUSTIC" (p. 8).
	Electric bass guitar: JB, PB, PJ, FRETLESS B	Refer to "E.BASS parameters" → "BASS (In GUITAR MODE)" (p. 9).

DUAL BASS parementers

DUAL BASS

Parameter	Value	Explanation
MODE	SINGLE	Uses only one bass guitar, either "A" or "B".
	DUAL	Uses both "A" and "B" bass guitars at the same time.
SELECT	A, B	When MODE is set to "SINGLE", this sets which bass guitar to use, "A" or "B".
BALANCE	100:0–100:100–0:100	When MODE is set to "DUAL", this sets the volume balance between A and B.
A:TYPE B:TYPE	This selects the type of instrument ("TYPE"), namely electric bass guitar, acoustic bass and electric guitar.	
	Electric bass guitar: VINT JB, JB, VINT PB, PB, PJ, M-MAN, RICK, T-BIRD, ACTIVE, VIOLIN, FRETLESS	Refer to "E.BASS paremeters" → "BASS (In BASS MODE)" → "TYPE" (p. 10).
	Acoustic bass: AC BASS	An acoustic bass sound.
	Electric guitar: ST, LP, FRETLESS G	Refer to "E.GUITAR paremeters" → "GUITAR (In BASS MODE)" → "TYPE" (p. 8).
Refer to each type for explanations of the parameters included with each type.	Electric bass guitar: VINT JB, JB, VINT PB, PB, PJ, M-MAN, RICK, T-BIRD, ACTIVE, VIOLIN, FRETLESS	Refer to "E.BASS paremeters" → "BASS (In BASS MODE)" (p. 10).
	Acoustic bass: AC BASS	Refer to "AC BASS parameters" → "AC BASS" (p. 9).
	Electric guitar: ST, LP, FRETLESS G	Refer to "E.GUITAR paremeters" → "GUITAR (In BASS MODE)" (p. 8).

VIO GUITAR parameters

GUITAR

Parameter	Value	Explanation
TYPE	Select the electric guitar type "TYPE" (p. 7).	
PU SELECT	Selects the pickup position.	
	REAR	Rear pickup
	R+C *1	Rear and center pickups
	CENTER *1	Center pickup
	C+F *1	Center and front pickups
	FRONT	Front pickup
	R+F *2	Rear and front pickups
	ALL *3	All pickups
TONE TYPE *4	MILD, STANDARD, BRIGHT1, BRIGHT2	Selects the fretless tone type.
SENS *4	0–100	This controls the input sensitivity.
DEPTH *4	0–100	This controls the volume of the harmonics.
ATTACK *4	0–100	Adjusts the attack of the picking sound.
RESONANCE *4	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *4	0–100	Adjusts the volume of the direct sound.
VOLUME	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE	0–100	Adjusts the tone of the body. The standard value is 100; lowering the value creates a softer tone.

*1 Valid when the TYPE is set to CLA-ST, MOD-ST, or LIPS.

*2 Valid when the TYPE is set to TE, LP, P-90, RICK, 335, L4, WIDE RANGE, or BRIGHT HUM.

*3 Valid when the TYPE is set to LIPS.

*4 Valid when the TYPE is set to FRETLESS.

HARMO

Here you can add overtones (harmonics) to the sound specified in the GUITAR block.

Parameter	Value	Explanation
PITCH	-24–+24	Specifies the pitch of the harmonics in semitone units. A setting of -24 produces a sound two octaves below, and a setting of +24 produces a sound two octaves above. With a setting of 0, a harmonics sound at the same pitch as the original sound is heard.
GAIN	0–100	Specifies the volume of the harmonics sound. Larger values increase the volume of the harmonics sound.
ATTACK	0–100	Emphasizes the attack portion of the harmonics sound. Larger values emphasize the attack.
DIRECT MIX	0–100	Adjusts the volume of the direct sound. Larger values increase the volume of the direct sound.

FILTER

Here you can use a filter to add depth to the sound and shape the tonal character.

Parameter	Value	Explanation
OVERTONE	0–100	Modifies the nuances of the overtones. Larger values increase the overtones, giving the sound more depth.
ATTACK	0–100	Varies the nuances of the attack portion. Larger values emphasize the attack.
POWER BEND	0–100	Increasing this value will darken the sound. At the same time, the tone and volume will vary more easily in response to pitch change such as when using the vibrato arm.
SLIDE TIME	0–100	Larger values lengthen the time over which the tone changes from one note to the next on each string, producing an effect of smooth change between notes. At the same time, it tends to suppress the attack.
OCTAVE	-1, 0, +1	Adjusts the center frequency of the filter. A setting of 0 is the normal state, and a setting of -1 applies the filter at a frequency one octave below. A setting of +1 applies the filter at a frequency one octave above.
COLOR	0–100	Modifies the nuances of the overtones. Larger values produce a more detailed sound.
TOUCH SENS	0–100	Specifies how your playing dynamics on the guitar affect the tonal character. With larger values, stronger playing gives the sound more depth.
LEAD EMPHASIS	0–100	Emphasizes the sound when single notes are played. With VIO guitar, single-note (single-string) playing produces a lower output than when chords are played. Lead emphasis prevents this. Larger values boost the volume level of single notes. With a setting of 0, single notes are not emphasized.
DRY LEVEL	0–100	Sets the volume for the dry sound of the BASS block.

VIO BASS parameters

BASS

Parameter	Value	Explanation
TYPE	Select the bass guitar type "TYPE" (p. 10).	
MASTER VOLUME *1	0–100	Sets the overall bass volume level. With a setting of 0, there will be no sound.
REAR VOLUME *1	0–100	Sets the volume of the rear pickup.
FRONT VOLUME *1	0–100	Sets the volume of the front pickup.
REAR TONE *2	0–100	Adjusts the tone of the rear pickup.
FRONT TONE *2	0–100	Adjusts the tone of the front pickup.
TREBLE *3	0–100	Adjusts the tone for the high frequency range.
BASS *3	0–100	Adjusts the tone for the low frequency range.
PU SELECT *4	Selects the pickup position.	
	REAR	Use the rear pickup.
	R+F	Use both front and rear pickups.
	FRONT	Use the front pickup.
TREBLE ON *5	OFF, ON	Switches the rear pickup on/off.
BASS ON *5	OFF, ON	Switches the front pickup on/off.
RHYTHM/SOLO *5	Switches between rhythm and solo.	
	RHYTHM	The volume will be set to 50.
	SOLO	The volume will be set to 100.
TONE TYPE *6	Selects the fretless tone type.	
	JB (REAR)	The sound of the rear pickup of a Jazz Bass.
	JB (R+F)	The sound of the rear pickup and front pickup of a Jazz Bass.
	JB (FRONT)	The sound of the front pickup of a Jazz Bass.
	PB	The sound of a Precision Bass.
SENS *6	0–100	This controls the input sensitivity.
DEPTH *6	0–100	This controls the volume of the harmonics.
ATTACK *6	0–100	Adjusts the attack of the picking sound.
RESONANCE *6	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX *6	0–100	Adjusts the volume of the direct sound.
VOLUME *7	0–100	Adjusts the volume. With a setting of 0, there will be no sound.
TONE *8	0–100	Adjusts the tone of the body.

*1 Valid when the TYPE is set to VINT JB, JB, RICK, T-BIRD, ACTIVE, or VIOLIN.

*2 Valid when the TYPE is set to RICK.

*3 Valid when the TYPE is set to M-MAN or ACTIVE.

*4 Valid when the TYPE is set to RICK.

*5 Valid when the TYPE is set to VIOLIN.

*6 Valid when the TYPE is set to FRETLESS.

*7 Valid when the TYPE is set to VINT PB, PB, M-MAN, or FRETLESS.

*8 Valid when the TYPE is set to VINT JB, JB, VINT PB, PB, T-BIRD, or FRETLESS.

HARMO

Here you can add overtones (harmonics) to the sound specified in the GUITAR block.

Parameter	Value	Explanation
PITCH	-24–+24	Specifies the pitch of the harmonics in semitone units. A setting of -24 produces a sound two octaves below, and a setting of +24 produces a sound two octaves above. With a setting of 0, a harmonics sound at the same pitch as the original sound is heard.
GAIN	0–100	Specifies the volume of the harmonics sound. Larger values increase the volume of the harmonics sound.
ATTACK	0–100	Emphasizes the attack portion of the harmonics sound. Larger values emphasize the attack.
DIRECT MIX	0–100	Adjusts the volume of the direct sound. Larger values increase the volume of the direct sound.

FILTER

Here you can use a filter to add depth to the sound and shape the tonal character.

Parameter	Value	Explanation
OVERTONE	0–100	Modifies the nuances of the overtones. Larger values increase the overtones, giving the sound more depth.
ATTACK	0–100	Varies the nuances of the attack portion. Larger values emphasize the attack.
POWER BEND	0–100	Increasing this value will darken the sound. At the same time, the tone and volume will vary more easily in response to pitch change such as when using the vibrato arm.
SLIDE TIME	0–100	Larger values lengthen the time over which the tone changes from one note to the next on each string, producing an effect of smooth change between notes. At the same time, it tends to suppress the attack.
OCTAVE	-1, 0, +1	Adjusts the center frequency of the filter. A setting of 0 is the normal state, and a setting of -1 applies the filter at a frequency one octave below. A setting of +1 applies the filter at a frequency one octave above.
COLOR	0–100	Modifies the nuances of the overtones. Larger values produce a more detailed sound.
TOUCH SENS	0–100	Specifies how your playing dynamics on the bass affect the tonal character. With larger values, stronger playing gives the sound more depth.
LEAD EMPHASIS	0–100	Emphasizes the sound when single notes are played. With VIO bass, single-note (single-string) playing produces a lower output than when chords are played. Lead emphasis prevents this. Larger values boost the volume level of single notes. With a setting of 0, single notes are not emphasized.

SYNTH paremeters

SYNTH

Parameter	Value	Explanation
SYNTH TYPE	Selects the SYNTH type.	
	GR-300 *1	This models the Roland GR-300, the famed analog polyphonic guitar synthesizer of yesteryear. With the HEXA-DISTORTION effect and pitch-shifting six-string sawtooth wave generation from the instrument's HEXA VCO and VCF (variable frequency filter) brings out all the nuance from guitar performance, yet with the tone of an analog synthesizer.
	ANALOG GR *2	A vintage analog polyphonic bass synthesizer sound. This synth features hexa-distortion along with a hexa-VCO and VCF (frequency-variable filter), which generates sawtooth waves with shiftable pitches that are independent for each string. This lets you enjoy the sounds of an analog synthesizer while retaining the playing nuances of the bass guitar.
	SOLO	This is a soft lead instrument.
	FILTER BASS	This instrument is like a bass whose sound is passed through a filter.
	CRYSTAL	This is an Instrument providing a metallic luster.
	ORGAN	This is a Long Tone instrument suitable for playing solo parts or slow songs. Like an organ, you should balance out the volume level for each parameter to create just the sound you're after.
VOLUME	0–100	Sets the output level for the synth.

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

GR-300 (in GUITAR MODE)/ANALOG GR (in BASS MODE) parameters

GR-300/ANALOG GR

Parameter	Value	Explanation
MODE	Specifies whether to sound the hexa-VCO (sawtooth wave), the hexa-distortion (square wave), or both.	
	VCO	Only the hexa-VCO will sound.
	V+D	The hexa-VCO and hexa-distortion will sound together.
	DIST	Only the hexa-distortion will sound.
COMP SW *1	OFF, ON	If this is "ON", the decay time of the hexa-VCO will be extended.
CUTOFF	0–100	Adjusts the cutoff frequency at which the filter cuts off the sound's harmonic components.
RESONANCE	0–100	Adjusts the amount of filter resonance (distinctiveness of the sound) used.
ENV MOD SW	This automatically changes the VCF cutoff frequency according to the amplitude of the string vibration. This allows you to change the tone with a wah-like effect each time you pick a string.	
	OFF	Turns envelope modulation off.
	ON	This causes the VCF cutoff frequency to change from a high to low frequency each time the string is picked. This produces a wah-like effect, with the sound going from high frequencies to low.
	INV	As opposed to the ON setting, this allows you to have the VCF cutoff frequency change from a low to high frequency each time the string is picked. This produces a reverse wah-like effect, with the sound going from low frequencies to high.
ENV MOD SENS	0–100	Adjusts the input sensitivity of the envelope modulation. As the value is raised, the change from the envelope modulation broadens with even weaker picking.
ENV MOD ATTACK	0–100	Adjusts the attack time for the change in the envelope modulation produced by picking. Raising the value slows the attack for this change.
PITCH SW *1	OFF, A, B	This setting allows you to switch A, B and OFF the pitch shift, which enables the pitch of the HEXA-VCO sound to shift in response. * Pitch shift applies only to the hexa-VCO; it does not apply to hexa-distortion.
PITCH A PITCH B *1	-12–+12	This sets the amount of shift in pitch from the original sound in semitone increments.
FINE A FINE B *1	-50–+50	This finely adjusts the pitch. -50 is half a semitone down; +50 is half a semitone up.
DUET SW *1	OFF, ON	If this is "ON", a sawtooth wave at the same pitch as the original sound will be added to the hexa-VCO, making the sound richer. MEMO By setting the hexa-VCO's pitch shift to a PITCH setting such as +/-12 (an octave up/down), +/- 7 (a perfect fifth), or +/-5 (a perfect fourth), you can create thick, synthesizer-like sounds. By setting PITCH FINE to about "+/-5" to slightly skew the pitch shift of the hexa-VCO, you can give the sound greater depth.
SWEEP SW *1	OFF, ON	This is a Sweep function that smoothly changes the amount of shift when you use PITCH SW to vary the amount of pitch shift.
SWEEP RISE *1	0–100	Adjusts the amount of time for the pitch to shift when the PITCH SW parameter is switched and the sound changes to a higher pitch. If this is "0", the change will occur instantly; higher values produce slower change.
SWEEP FALL *1	0–100	Adjusts the amount of time for the pitch to shift when the PITCH SW parameter is switched and the sound changes to a lower pitch. If this is "0", the change will occur instantly; higher values produce slower change.
VIBRATO SW *1	OFF, ON	Allows you to apply electronic vibrato to the hexa-VCO.
VIBRATO RATE *1	0–100	Adjusts the rate of the vibrato.
VIBRATO DEPTH *1	0–100	Adjusts the depth of the vibrato.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	Cuts the frequency region below the specified frequency. When FLAT is selected, the low cut filter will have no effect.
HIGH CUT	20.0 Hz–16.0 kHz, FLAT	Cuts the frequency region above the specified frequency. When FLAT is selected, the high cut filter will have no effect.

*1 Valid when the MODE is set to VCO or V+D.

SOLO parameters

SOLO

Parameter	Value	Explanation
FILTER CUTOFF	0–100	Adjusts the cutoff frequency, setting the brightness (hardness) of the sound. Thesound gets brighter (harder) as the value is raised.
FILTER RESO	0–100	Adjusts the resonance (distinctiveness of the sound). As the value is increased, sounds in the frequency range near the cutoff frequency are boosted, making the sound more distinctive and unique.
TOUCH SENS	0–100	This sets the sensitivity when the filter is shifted according to the picking. The shifting of the filter caused by the picking increases as the value is raised. When the value is set to 0, the filter remains set, with no movement.
COLOR	0–100	Adjusts the amount of harmonics in the sound when the guitar/bass strings are played with greater force. The harmonic components become more prominent as the value is raised. **MEMO** To make adjustment easier, set FILTER CUTOFF to 100 and FILTER RESO and TOUCH SENS to 0, then gradually increase the COLOR setting as you play the guitar/bass.
SUSTAIN	0–100	Adjusts the range (time) over which lowlevel signals are boosted. Larger values will result in longer sustain.

FILTER BASS parameters

FILTER BASS

Parameter	Value	Explanation
FILTER CUTOFF	0–100	Adjusts the cutoff frequency, setting thebrightness (hardness) of the sound. Thesound gets brighter (harder) as the value is raised.
FILTER RESO	0–100	Adjusts the resonance (distinctiveness of the sound). As the value is increased, sounds in the frequency range near the cutoff frequency are boosted, making the sound more distinctive and unique.
TOUCH SENS	0–100	This sets the sensitivity when the filter is shifted according to the picking. The shifting of the filter caused by the picking increases as the value is raised. When the value is set to 0, the filter remains set, with no movement.
FILTER DECAY	0–100	This sets the speed at which the filter stops. The speed increases as the value of the setting is reduced. * The decay effect cannot be obtained if the TOUCH SENS value is too low.
COLOR	0–100	Adjusts the strength of the low range. As the value is increased, the low range will become stronger.

CRYSTAL parameters

CRYSTAL

Parameter	Value	Explanation
ATTACK LENGTH	0–100	This sets the decay time for the attack portion of the sound. A smaller setting results in a shorter attack.
MOD TUNE	0–100	This sets the tuning for the modulation applied to the attack.
MOD DEPTH	0–100	This sets the depth of the modulation applied to the attack. Larger values result in deeper undulations.
ATTACK LEVEL	0–100	This sets the volume level of the attack portion.
BODY LEVEL	0–100	This sets the volume level for the sustained portion of the sound.
SUSTAIN	0–100	Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.

ORGAN parameters

ORGAN

Parameter	Value	Explanation
FEET 16	0–100	A long tone that's one octave lower than the fundamental tone.
FEET 5+1/3	0–100	A long tone that's a perfect fifth above the fundamental tone.
FEET 8	0–100	A long tone that's the same pitch as the fundamental tone.
FEET 4	0–100	A long tone that's one octave above the fundamental tone.
FEET 2+2/3	0–100	A long tone that's one octave and a perfect fifth above the fundamental tone.
FEET 2	0–100	A long tone that's two octaves above the fundamental tone.
FEET 1+3/5	0–100	A long tone that's two octaves and a major third above the fundamental tone.
FEET 1+1/3	0–100	A long tone that's two octaves and a perfect fifth above the fundamental tone.
FEET 1	0–100	A long tone that's three octaves above the fundamental tone.
SUSTAIN	0–100	Adjusts the range (time) over which lowlevel signals are boosted. Larger values will result in longer sustain.

EFFECT parameters

FX1–FX3

With FX1, FX2 and FX3, you can select the effect to be used from the following.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	Refer to FX1/FX2/FX3 TYPE	

FX1/FX2/FX3 TYPE

This is a list of the effects that can be selected for FX1/FX2/FX3.

Value	Explanation	Page
AC RESONANCE	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.	p. 18
AUTO WAH	This changes the filtering over a periodic cycle, providing an automatic wah effect.	p. 19
CHORUS	In this effect, a slightly detuned sound is added to the original sound to add depth and breadth.	p. 19
CLASSIC-VIBE	Although this resembles a phaser effect, it also provides a unique undulation that you can't get with a regular phaser.	p. 19
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.	p. 20
DEFRETTER	This simulates a fretless guitar.	p. 20
DEFRETTER BASS	This simulates a fretless bass.	p. 20
DELAY	Adds delayed sound to the direct sound, giving more body to the sound or creating special effects.	p. 20
FLANGER	The flanging effect gives a twisting, jet-airplane-like character to the sound.	p. 21
FLANGER BASS		
FOOT VOLUME	This is a volume control effect. Typically, you will operate this using an expression pedal connected to the CTL3,4/EXP1 jack or the CTL5,6/EXP2 jack.	p. 21
GRAPHIC EQ	This effect adjusts the tonal character. Seven frequency bands can be adjusted.	p. 22
HARMONIST	Harmonist is an effect where the amount of shifting is adjusted according to an analysis of the guitar/bass input, allowing you to create harmony based on diatonic scales.	p. 22
HUMANIZER	This can create human vowel-like sounds.	p. 23
ISOLATOR	An effect that cuts the sound of the specified region.	p. 23
LIMITER	Attenuates loud input levels to prevent distortion.	p. 23
LO-FI	This deliberately degrades the audio quality to create a distinctive impression.	p. 23
OCTAVE	This adds a note one octave lower and a note two octaves lower, creating a richer sound.	p. 23
OCTAVE BASS		
PAN	With the volume level of the left and right sides alternately changing, when playing sound in stereo, you can get an effect that makes the guitar sound appear to fly back and forth between the speakers.	p. 24
PARAMETRIC EQ	This effect adjusts the tonal character. Four frequency bands can be adjusted.	p. 24
PEDAL BEND	This lets you use the pedal to get a pitch bend effect.	p. 24
PHASER	By adding varied-phase portions to the direct sound, the phaser effect gives a whooshing, swirling character to the sound.	p. 24
PITCH SHIFTER	This effect changes the pitch of the original sound (up or down) within a range of two octaves.	p. 25
REVERB	This effect adds reverberation to the sound.	p. 25
RING MOD	This creates a bell-like sound by ring-modulating the guitar/bass sound with the signal from the internal oscillator. The sound can be unmusical and lack distinctive pitches.	p. 26
ROTARY	This produces an effect like the sound of a rotary speaker.	p. 26
SITAR SIM	This simulates the sound of the sitar.	p. 26
SLICER	This consecutively interrupts the sound to create the impression that a rhythm backing phrase is being played.	p. 26
SLOW GEAR	This produces a volume-swell effect ("violin-like" sound).	p. 27
SLOW GEAR BASS		
SOUND HOLD	You can have sound played on the guitar /bass be held continuously. This effect allows you to perform the melody in the upper registers while holding a note in the lower registers.	p. 27
TOUCH WAH	You can produce a wah effect with the filter changing in response to the guitar/ bass level.	p. 27
TOUCH WAH BASS		
TREMOLO	Tremolo is an effect that creates a cyclic change in volume.	p. 27
VIBRATO	This effect creates vibrato by slightly modulating the pitch.	p. 27
WAH	You can control the wah effect in real time by the expression pedal connected to the CTL 2, 3/EXP 1 jack or CTL 4, 5/EXP 2 jack.	p. 28

AC RESONANCE

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	NATURAL	A natural and uncolored sound.
	WIDE	Mellow sound that emphasizes the body resonance
	BRIGHT	Brilliant sound with an extended high-frequency range
RESONANCE	0–100	Use this knob to adjust the balance between the body resonance effect of the acoustic guitar and the direct sound of the pickup.
TONE	-50–+50	Adjusts the tone.
LEVEL	0–100	Specifies the volume of the effect.

AUTO WAH

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

Parameter	Value	Explanation
FILTER MODE	Selects the wah mode.	
	LPF	Low pass filter. Passes only the low-frequency region.
	BPF	Band pass filter. Passes only the specified frequency region.
	HPF	High pass filter. Passes only the high-frequency region.
RATE *1	0–100, BPM	Adjusts the frequency (speed) of the change.
DEPTH	0–100	Adjusts the depth of the effect.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
FREQUENCY	0–100	Adjusts the center frequency of the Wah effect.
RESONANCE	0–100	Adjusts the amount of wah effect applied in the range near the reference frequency.
WAVEFORM	TRI, SINE	Selects the type of wave.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each memory.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

CHORUS

In this effect, a slightly detuned sound is added to the original sound to add depth and breadth.

Parameter	Value	Explanation
MODE	Selection for the chorus mode.	
	MONO	This chorus effect outputs the same sound from both L channel and R channel.
	STEREO1	This stereo chorus uses spatial synthesis, with the direct sound output in the L channel and the effect sound output in the R channel.
	STEREO2	This is a stereo chorus effect that adds different chorus sounds to L channel and R channel.
	DUAL	This lets you apply chorus independently to the L and R channels.
RATE *2	0–100, BPM	Adjusts the rate of the chorus effect.
RATE 1 RATE 2 *1 *2		
DEPTH	0–100	Adjusts the depth of the chorus effect. * To use it for doubling effect, set the value to 0.
DEPTH 1 DEPTH 2 *1		
PRE-DELAY	0.0 ms–40.0 ms	Adjusts the time needed for the effect sound to be output after the direct sound has been output. By setting a longer pre delay time, you can obtain an effect that sounds like more than one sound is being played at the same time (doubling effect).
PRE-DELAY 1 PRE-DELAY 2 *1		
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
EFFECT LEVEL 1 EFFECT LEVEL 2 *1		
WAVEFORM	TRI	Produces a typical chorus effect. 
WAVEFORM 1 WAVEFORM 2 *1	SINE	Produces a deeper sense of modulation. 
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
LOW CUT 1 LOW CUT 2 *1		
HIGH CUT	20.0 Hz–16.0 kHz, 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.
HIGH CUT 1 HIGH CUT 2 *1		
DIRECT MIX	0–100	Adjusts the volume of the direct sound. Setting this to 0 cuts the direct sound.
OUTPUT MODE *1	MONO	This setting is appropriate for mono output.
	STEREO	Produces a rich spaciousness when stereo output is used.
BPM	40–250	Adjusts the BPM value for each memory.

*1 Valid when the MODE is set to DUAL.

*2 Refer to "About effects when a note value is selected as a setting" (p. 37)".

CLASSIC-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 *1	0–100, BPM	Adjusts the rate of the effect.
DEPTH	0–100	Adjusts the depth of the effect.
EFFECT LEVEL	0–100	Adjusts the volume.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

COMPRESSOR

This is an effect that produces a long sustain by evening out the volume level of the input signal.

Parameter	Value	Explanation
TYPE	BOSS COMP	This models a BOSS CS-3.
	Hi-BAND	A compressor that adds an even stronger effect in the high end.
	LIGHT	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.
ATTACK	0–100	Adjusts the strength of the attack when picking.
EFFECT LEVEL	0–100	Adjusts the volume.
TONE	-50–+50	Adjusts the tone.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

DEFRETTER

This simulates a fretless guitar.

Parameter	Value	Explanation
SENS	0–100	This controls the input sensitivity of the defretter.
DEPTH	0–100	This controls the volume of the harmonics.
TONE	-50–+50	Adjusts the amount of blurring between the notes.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
ATTACK	0–100	Adjusts the attack of the picking sound.
RESONANCE	0–100	Adds a characteristically resonant quality to the sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

DEFRETTER BASS

This simulates a fretless bass.

Parameter	Value	Explanation
SENS	0–100	This controls the input sensitivity of the defretter.
ATTACK	0–100	Adjusts the attack of the picking sound.
TONE	-50–+50	Adjusts the amount of blurring between the notes.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

DELAY

Adds delayed sound to the direct sound, giving more body to the sound or creating special effects.

Parameter	Value	Explanation
TYPE	Selects the delay type "TYPE" (p. 21). * The stereo effect is canceled if a mono effect or AMP Modeling is connected after a stereo delay effect.	
TIME *1 *12 D1 TIME D2 TIME *2 *12	1 ms–2000 ms, BPM ♪=tick	Adjusts the delay time.
FEE dBACK *3 D1 FEE dBACK D2 FEE dBACK *2	0–100	This sets the amount of delay sound returned to the input. A higher value will increase the number of the delay repeats.
EFFECT LEVEL *4 D1 EFFECT LEVEL D2 EFFECT LEVEL *2	0–120	Adjusts the volume of the delay sound.
HIGH CUT *3 D1 HIGH CUT D2 HIGH CUT *2	20.0 Hz–16.0 kHz, 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.
TAP TIME *6	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%).
MOD RATE *7	0–100	Adjusts the modulation rate of the delay sound.
MOD DEPTH *7	0–100	Adjusts the modulation depth of the delay sound.
TRIGGER *8	OFF, ON	If this is ON, the WARP effect is applied.
MODE *9	RISE→FALL	Rotation stops when you switch TRIGGER from ON to OFF.
	RISE→FADE	When you switch TRIGGER from ON to OFF, fade-out occurs while continuing the rotation.
TRIGGER *9	OFF, ON	The TWIST effect is applied when you turn this ON.
RISE TIME *9	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
FALL TIME *9 *10	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.
FADE TIME *9 *11	0–100	Adjusts the fade-out time.
DIRECT MIX *5	0–100	Adjusts the volume of the direct sound.
CARRY OVER	OFF, ON	Specifies whether the effect sound remains when you turn off the effect, or does not remain.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Valid when the TYPE is set to other than DUAL-S, DUAL-P, DUAL L/R, or TWIST.

*2 Valid when the TYPE is set to DUAL-S, DUAL-P, or DUAL L/R.

*3 Valid when the TYPE is set to other than DUAL-S, DUAL-P, DUAL L/R, WARP or TWIST.

*4 Valid when the TYPE is set to other than DUAL-S, DUAL-P, or DUAL L/R.

*5 Valid when the TYPE is set to other than WARP or TWIST.

*6 Valid when the TYPE is set to PAN.

*7 Valid when the TYPE is set to MOD.

*8 Valid when the TYPE is set to WARP.

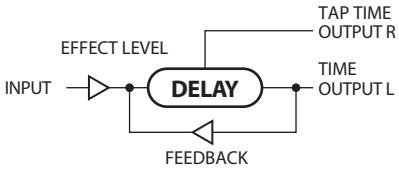
*9 Valid when the TYPE is set to TWIST.

*10 Valid when the MODE is set to RISE→FALL.

*11 Valid when the MODE is set to RISE→FADE.

*12 Refer to "About effects when a note value is selected as a setting" (p. 37)".

TYPE

Value	Explanation
STEREO1	The direct sound is output from the left channel, and the effect sound is output from the right channel.
STEREO2	This is a stereo-in/out delay.
PAN	This delay is specifically for stereo output. This allows you to obtain the tap delay effect that divides the delay time, then deliver them to L and R channels. 
DUAL-S	This is a delay comprising two different delays connected in series.
DUAL-P	This is a delay comprising two delays connected in parallel.
DUAL-L/R	This delay lets you specify the L and R channels independently. Delay 1 goes to the left channel, Delay 2 to the right.
REVERSE	This produces an effect where the sound is played back in reverse.
ANALOG	This gives a mild analog delay sound.
TAPE	This setting provides the characteristic wavering sound of the tape echo.
MOD	A delay with a pleasant amount of modulation added.
WARP	Produces a dream-like sound.
TWIST	Produces an aggressive sense of rotation. Using this in conjunction with distortion will produce an even wilder sense of rotation.

FLANGER/FLANGER BASS

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

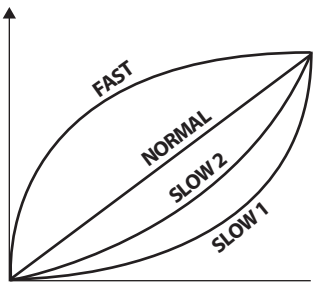
Parameter	Value	Explanation
RATE *1	0–100, BPM	This sets the rate of the flanging effect.
DEPTH	0–100	Determines the depth of the flanging effect.
RESONANCE	0–100	Determines the amount of resonance (fee dBack). Increasing the value will emphasize the effect, creating a more unusual sound.
MANUAL	0–100	Adjusts the center frequency at which to apply the effect.
SEPARATION	0–100	Adjusts the diffusion. The diffusion increases as the value increases.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
HIGH CUT	20.0 Hz–16.0 kHz, 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.
EFFECT LEVEL	0–100	Adjusts the volume of the flanger.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

FOOT VOLUME

This is a volume control effect.

Typically, you will operate this using an expression pedal connected to the CTL3,4/EXP1 jack or the CTL5,6/EXP2 jack.

Parameter	Value	Explanation
VOLUME MIN	0–100	Sets the volume when the heel of the EXP Pedal is depressed.
VOLUME MAX	0–100	Selects the volume when the toe of the EXP Pedal is depressed.
VOLUME CURVE	SLOW1, SLOW2, NORMAL, FAST	You can select how the actual volume changes relative to the amount the pedal is pressed. Volume 
PEDAL POSITION	0–100	Adjusts the volume.

GRAPHIC EQ

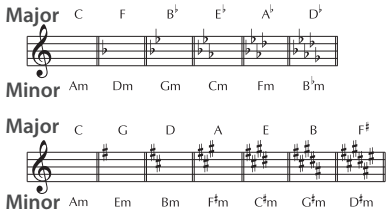
You can adjust the tone character in seven bands.

Parameter	Value	Explanation
LEVEL	-20–+20 dB	Adjusts the overall volume level of the equalizer.
100 Hz	-20–+20 dB	Adjust the volume of each frequency band.
200 Hz		
400 Hz		
800 Hz		
1.6 kHz		
3.2 kHz		
6.4 kHz		

HARMONIST

Harmonist is an effect where the amount of shifting is adjusted according to an analysis of the guitar/bass 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.
* When you are to play the next string while a certain sound is still playing, mute the previous sound and then play the next one with a clear attack. If the unit cannot detect the attack, it may not sound correctly.
* The sensitivity may vary according to TONE knob and pickup type of the guitar/bass.

Parameter	Value	Explanation
VOICE	Selects the number of voices for the pitch shift sound.	
	1VOICE	One-voice pitch-shifted sound output in mono.
	2MONO	Two-voice pitch-shifted sound (HR1, HR2) output in mono.
	2STEREO	Two-voice pitch-shifted sound (HR1, HR2) output through left and right channels.
HR1: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.
HR2:HARMONY *1		
KEY	C (Am)–B (G#m)	The key setting corresponds to the key of the song (♯, ♭) as follows.
		
HR1:LEVEL	0–100	Adjusts the volume of the harmony sound.
HR2:LEVEL *1		

Parameter	Value	Explanation
HR1:PRE-DELAY *2	0–300 ms, BPM ♪=[60]	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.
HR2:PRE-DELAY *1 *2		
HR1:FEE dBACK	0–100	Adjusts the fee dBack amount of the harmonist sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Valid when the VOICE is set to 2MONO or 2STEREO.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

USER SCALE

* Effective with USER selected for HARMONY parameter.

Parameter	Value
C	▼▼C–▼C–C–▲C–▲▲C
D♭	▼▼D♭–▼D♭–D♭–▲D♭–▲▲D♭
D	▼▼D–▼D–D–▲D–▲▲D
E♭	▼▼E♭–▼E♭–E♭–▲E♭–▲▲E♭
E	▼▼E–▼E–E–▲E–▲▲E
F	▼▼F–▼F–F–▲F–▲▲F
F♯	▼▼F♯–▼F♯–F♯–▲F♯–▲▲F♯
G	▼▼G–▼G–G–▲G–▲▲G
A♭	▼▼A♭–▼A♭–A♭–▲A♭–▲▲A♭
A	▼▼A–▼A–A–▲A–▲▲A
B♭	▼▼B♭–▼B♭–B♭–▲B♭–▲▲B♭
B	▼▼B–▼B–B–▲B–▲▲B

The minus (-) and plus (+) symbols indicate sounds above or below the specified original note.

Triangles next to the note names indicate octaves.

One downward-pointing triangle indicates a note one octave below the note displayed; two triangles indicates a two-octave drop.

One upward-pointing triangle indicates a note one octave above the note displayed; two triangles indicates a two-octave rise.

HUMANIZER

This can create human vowel-like sounds.

Parameter	Value	Explanation
MODE	This sets the mode that switches the vowels.	
	PICKING	It changes from VOWEL1 to VOWEL2 along with the picking. The time spent for the change is adjusted with the rate.
	AUTO	By adjusting the rate and depth, two vowels (VOWEL1 and VOWEL2) can be switched automatically.
VOWEL1	a, e, i, o, u	Selects the first vowel.
VOWEL2	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 *3	0–100, BPM	Adjusts the cycle for changing the two vowels.
DEPTH	0–100	Adjusts the depth of the effect.
MANUAL *2	0–100	This determines the point where the two vowels are switched. When it is set to 50, VOWEL1 and VOWEL2 are switched in the same length of time. When it is set to lower than 50, the time for VOWEL1 is shorter. When it is set to higher than 50, the time for VOWEL1 is longer.
EFFECT LEVEL	0–100	Adjusts the volume.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Setting available when MODE is set to PICKING.

*2 Setting available when MODE is set to AUTO.

*3 Refer to "About effects when a note value is selected as a setting" (p. 37)".

ISOLATOR

An effect that cuts the sound of the specified region.

Parameter	Value	Explanation
BAND	LOW, MIDDLE, HIGH	Selects the frequency region to cut.
RATE *1	0–100, BPM	Adjusts the rate of the modulation.
DEPTH	0–100	Adjusts the depth of the modulation.
BAND LEVEL	0–100	Specifies the amount to cut.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

LIMITER

Attenuates loud input levels to prevent distortion.

Parameter	Value	Explanation
TYPE	Selects the limiter type.	
	BOSS LIMITER	Selects a stereo limiter.
	RACK 160D	Models a dBx 160X.
	VTG RACK U	Models an UREI 1178.
THRESHOLD	0–100	Adjust this as appropriate for the input signal. When the input signal level exceeds this threshold level, compression will be applied.
RATIO	1:1, 1.2:1, 1.4:1, 1.6:1, 1.8:1, 2:1, 2.3:1, 2.6:1, 3:1, 3.5:1, 4:1, 5:1, 6:1, 8:1, 10:1, 12:1, 20:1, INF:1	Selects the compression ratio used with signals in excess of the threshold level.
EFFECT LEVEL	0–100	Adjusts the volume.
ATTACK	0–100	Adjusts the strength of the attack when picking. Higher values result in sharper attack, creating a more clearly defined sound.
RELEASE	0–100	Adjusts the release time.

LO-FI

This deliberately degrades the audio quality to create a distinctive impression.

Parameter	Value	Explanation
BIT DEPTH	OFF, 15–1	Specifies the bit depth.
SAMPLE RATE	OFF, 1/2–1/32	Specifies the sample rate.
BALANCE	D100:E0–D0:E100	Adjusts the volume balance between the direct sound and the effect sound.

OCTAVE/OCTAVE BASS

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

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

PAN

With the volume level of the left and right sides alternately changing, when playing sound in stereo, you can get an effect that makes the guitar sound appear to fly back and forth between the speakers.

Parameter	Value	Explanation
TYPE	AUTO	Varies the volume level on the left and right according to the settings for WAVE SHAPE, RATE, and DEPTH.
	MANUAL	Output uses the volume balance set with POSITION.
WAVE SHAPE *1	0–100	Adjusts changes in volume level. A higher value will steepen wave's shape.
RATE *1 *3	0–100, BPM	Adjusts the frequency (speed) of the change.
DEPTH *1	0–100	Adjusts the depth of the effect.
EFFECT LEVEL	0–100	Adjusts the volume.
POSITION *2	L50–CENTER–R50	Adjusts the volume balance between the left and right channels.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Setting available when TYPE is set to AUTO.

*2 Setting available when TYPE is set to MANUAL.

*3 Refer to "About effects when a note value is selected as a setting" (p. 37)".

PARAMETRIC EQ

You can adjust the tone character in four bands.

Parameter	Value	Explanation
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
LOW GAIN	-20–+20 dB	Adjusts the tone for the low frequency range.
LOW-MID FREQ	20.0 Hz–16.0 kHz	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.
LOW-MID GAIN	-20–+20 dB	Adjusts the low-middle frequency range tone.
HIGH-MID FREQ	20.0 Hz–16.0 kHz	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.
HIGH-MID GAIN	-20–+20 dB	Adjusts the high-middle frequency range tone.
HIGH GAIN	-20–+20 dB	Adjusts the tone for the high frequency range.
HIGH CUT	20.0 Hz–16.0 kHz, 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	-20–+20 dB	Adjusts the overall volume level of the equalizer.

PEDAL BEND

This lets you use the pedal to get a pitch bend effect.

Typically, you will operate this using an expression pedal connected to the CTL3,4/EXP1 jack or the CTL5,6/EXP2 jack.

* Because of the need to analyze the pitch, chords (two or more sounds played simultaneously) cannot be played.

Parameter	Value	Explanation
PITCH	-24–+24	This sets the pitch at the point where the EXP Pedal is all the way down.
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.
EFFECT LEVEL	0–100	Adjusts the volume of the pitch bend sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

PHASER

By adding varied-phase portions to the direct sound, the phaser effect gives a whooshing, swirling character to the sound.

Parameter	Value	Explanation
TYPE	4STAGE, 8STAGE, 12STAGE, BiPHASE	Selects the number of stages that the phaser effect will use.
RATE *1	0–100, BPM	This 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 (fee dBack). Increasing the value will emphasize the effect, creating a more unusual sound.
MANUAL	0–100	Adjusts the center frequency of the phaser effect.
STEP RATE *1	OFF, 0–100, BPM	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.
EFFECT LEVEL	0–100	Adjusts the volume of the phaser.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

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.
	2MONO	Two-voice pitch-shifted sound (PS1, PS2) output in mono.
	2STEREO	Two-voice pitch-shifted sound (PS1, PS2) output through left and right channels.
PS1:PITCH **PS2:PITCH** *1	-24–+24	Adjusts the amount of pitch shift (the amount of interval) in semitone steps.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
PS1: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.
PS2:MODE *1	**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).
PS1:FINE **PS2:FINE** *1	-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 *2 **PS2:PRE-DELAY** *1 *2	0 ms–300 ms, BPM ♪ – tick	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:LEVEL **PS2:LEVEL** *1	0–100	Adjusts the volume of the pitch shifter.
PS1:FEE dBACK	0–100	Adjusts the fee dBack amount of the pitch shift sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Valid when the VOICE is set to 2MONO or 2STEREO.

*2 Refer to "About effects when a note value is selected as a setting" (p. 37)".

REVERB

This effect adds reverberation to the sound.

Parameter	Value	Explanation
TYPE	This selects the reverb type. Various different simulations of space are offered.	
	AMBIENCE	Simulates an ambience mic (off-mic, placed at a distance from the sound source) used in recording and other applications. Rather than emphasizing the reverberation, this reverb is used to produce a sense of openness and depth.
	ROOM	Simulates the reverberation in a small room. Provides warm reverberations.
	HALL1	Simulates the reverberation in a concert hall. Provides clear and spacious reverberations.
	HALL2	Simulates the reverberation in a concert hall. Provides mild reverberations.
	PLATE	Simulates plate reverberation (a reverb unit that uses the vibration of a metallic plate). Provides a metallic sound with a distinct upper range.
	SPRING	This simulates the sound of a guitar amp's built-in spring reverb.
	MOD	This reverb adds the wavering sound found in hall reverb to provide an extremely pleasant reverb sound.
TIME	0.1 s–10.0 s	Adjusts the length (time) of reverberation.
PRE-DELAY	0 ms–500 ms	Adjusts the time until the reverb sound appears.
EFFECT LEVEL	0–100	Adjusts the volume of the reverb sound.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
HIGH CUT	20.0 Hz–16.0 kHz, 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.
DENSITY	1–10	Adjusts the density of the reverb sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
CARRY OVER	OFF, ON	Specifies whether the effect sound remains when you turn off the effect, or does not remain.
SPRING SENS *1	0–100	Adjusts the sensitivity of the spring effect. When the value is set higher, the effect is obtained even with a weak picking.

*1 Valid when the TYPE is set to SPRING.

RING MOD

This creates a bell-like sound by ring-modulating the guitar/bass sound with the signal from the internal oscillator. The sound can be unmusical and lack distinctive pitches.

Parameter	Value	Explanation
INTELLIGENT	OFF, ON	If this is ON, the oscillator frequency changes according to the pitch of the input sound, producing a pitched sound. In this case, the expected effect does not occur if the pitch of the guitar/bass sound is not detected correctly. We reco mmend that you use this with single-note playing.
FREQUENCY	0–100	Adjusts the frequency of the internal oscillator.
FREQ MOD RATE *1	0–100, BPM	Adjusts the rate at which the internal oscillator is modulated.
FREQ MOD DEPTH	0–100	Adjusts the depth to which the internal oscillator is modulated.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

ROTARY

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

Parameter	Value	Explanation
SPEED SELECT	SLOW, FAST	This parameter changes the simulated speaker's rotating speed (SLOW or FAST).
RATE SLOW *1	0–100, BPM	This parameter adjusts the rotation speed when SPEED SELECT is set to "SLOW".
RATE FAST *1	0–100, BPM	This parameter adjusts the rotation speed when SPEED SELECT is set to "FAST".
DEPTH	0–100	Adjusts the amount of depth in the rotary effect.
RISE TIME	0–100	This parameter adjusts the time it takes for the rotation SPEED SELECT to change when switched from "SLOW" to "FAST".
FALL TIME	0–100	This parameter adjusts the time it takes for the rotation SPEED SELECT to change when switched from "FAST" to "SLOW".
EFFECT LEVEL	0–100	Adjusts the volume.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

SITAR SIM

This simulates the sound of the sitar.

Parameter	Value	Explanation
SENS	0–100	Adjusts the sensitivity of the sitar. When it is set to a lower value, no effect of the sitar is obtained with weaker picking, while stronger picking produces the effect. When it is set to a higher value, the effect of the sitar can be obtained whether the picking is weak or strong.
DEPTH	0–100	This adjusts the amount of effect applied.
TONE	-50–+50	Adjusts the tone character. The high end is boosted as the value increases.
EFFECT LEVEL	0–100	Adjust the volume of the sitar sound.
RESONANCE	0–100	This adjusts the undulation of the resonance.
BUZZ	0–100	Adjusts the amount of characteristic buzz produced by the "buzz bridge" when the strings make contact with it.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

SLICER

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

Parameter	Value	Explanation
PATTERN	P1–P20	Select the slice pattern (rhythm) that will be used to cut the sound.
RATE *1	0–100, BPM	Adjust the rate at which the sound will be cut.
TRIGGER	OFF, ON	When you switch this from OFF to ON, the slice pattern (rhythm) returns to its beginning. * Patches are written with the TRIGGER parameter set to Off.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
ATTACK	0–100	Adjusts the volume of the attacks for the slice pattern (rhythm).
DUTY	1–99	Adjusts the duration of the sound for the slice pattern (rhythm).
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

SLOW GEAR/SLOW GEAR BASS

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

Parameter	Value	Explanation
SENS	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.
RISE TIME	0–100	Adjusts the time needed for the volume to reach its maximum from the moment you begin picking.
LEVEL	0–100	Adjusts the volume of the effect sound.

SOUND HOLD

You can have sound played on the guitar/bass be held continuously. This effect allows you to perform the melody in the upper registers while holding a note in the lower registers.

* This function will not work properly when two or more notes are played simultaneously.

Parameter	Value	Explanation
TRIGGER	OFF, ON	Switches the hold sound on and off. Normally, this is controlled with the CTL pedals. • It is assumed that this parameter will be assigned to the footswitch. • Patches are written with the TRIGGER parameter set to Off.
RISE TIME	0–100	Adjusts how rapidly the Sound Hold sound is produced.
EFFECT LEVEL	0–120	Adjusts the volume of the hold sound.

TOUCH WAH/TOUCH WAH BASS

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

Parameter	Value	Explanation
FILTER MODE	Selects the wah mode.	
	LPF	Low pass filter. Passes only the low-frequency region.
	BPF	Band pass filter. Passes only the specified frequency region.
	HPF	High pass filter. Passes only the high-frequency region.
POLARITY	Selects the direction in which the filter will change in response to the input.	
	DOWN	The frequency of the filter will fall.
	UP	The frequency of the filter will rise.
SENS	0–100	Specifies the sensitivity with which the filter moves in the direction specified by the POLARITY setting. Higher values will result in a stronger response. With a setting of 0, the strength of picking will have no effect.
FREQUENCY	0–100	Adjusts the center frequency of the Wah effect.
RESONANCE	0–100	Adjusts the amount of wah effect applied in the range near the reference frequency. Higher values will produce a stronger tone which emphasizes the wah effect more. With a value of 50, a standard wah sound will be produced.
DECAY	0–100	Adjusts the rate at which the filter is moved.
EFFECT LEVEL	0–100	Adjusts the volume of the effect sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.

TREMOLO

Tremolo is an effect that creates a cyclic change in volume.

Parameter	Value	Explanation
WAVE SHAPE	0–100	Adjusts changes in volume level. A higher value will steepen wave's shape.
RATE *1	0–100, BPM	Adjusts the frequency (speed) of the change.
DEPTH	0–100	Adjusts the depth of the effect.
EFFECT LEVEL	0–100	Adjusts the volume.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

VIBRATO

This effect creates vibrato by slightly modulating the pitch.

Parameter	Value	Explanation
RATE *1	0–100, BPM	Adjusts the rate of the vibrato.
DEPTH	0–100	Adjusts the depth of the vibrato.
TRIGGER	OFF, ON	This selects on/off of the vibrato.
RISE TIME	0–100	This sets the time passing from the moment the Trigger is turned on until the set vibrato is obtained.
EFFECT LEVEL	0–100	Adjusts the volume.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

WAH

You can control the wah effect in real time by the expression pedal.

Parameter	Value	Explanation
TYPE	Selects the type of wah.	
	CRY WAH	This models the sound of the CRY BABY wah pedal popular in the '70s.
	VO WAH	Models 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.
	BASS WAH	This wah has been specially adapted for use in the bass registers. Inclusion of the low-frequency range in the wah sound produces a robust wah effect, with no dilution of the sound.
PEDAL POSITION	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an expression 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.

AMP 1/AMP2 (AMP Modeling)

Simulates the response of the preamp, the size of the speakers, and the type of cabinet.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	Selects the AMP type "AMP TYPE" (p. 29).	
GAIN	0–120	Adjusts the distortion of the amp.
SAG	-10–+10	Adjusts the amount by which compression changes in response to the power amp.
RESONANCE	-10–+10	Adjusts the amount by which dynamics is affected by the interaction between the power amp and the speaker transformer.
LEVEL	0–100	Adjusts the volume of the entire preamp. * Be careful not to raise the LEVEL setting too high.
BASS	0–100	Adjusts the tone for the low frequency range.
MIDDLE	0–100	Adjusts the tone for the middle frequency range.
TREBLE	0–100	Adjusts the tone for the high frequency range.
PRESENCE	0–100	Adjusts the tone for the ultra high frequency range.
BRIGHT	OFF, ON	Turns the bright setting on/off. * BRIGHT is valid for some of the amps in TYPE.
GAIN SW	LOW, MIDDLE, HIGH	Provides for selection from three levels of distortion: LOW, MIDDLE, and HIGH. Distortion will successively increase for settings of LOW, MIDDLE and HIGH. * The sound of each Type is created on the basis that the Gain is set to MIDDLE.
SOLO SW	OFF, ON	Switches the tone to one suitable for solos.
SOLO LEVEL	0–100	Adjusts the volume level when the SOLO SW is ON.
SP TYPE	This setting selects the simulated speaker type "SP TYPE" (p. 29).	
MIC TYPE *1	This setting selects the simulated mic type "MIC TYPE" (p. 29).	
MIC DISTANCE *1	SHORT, MEDIUM, LONG	Simulates the distance between the mic and speaker. The distance from the speakers is farther in the order of SHORT<MEDIUM<LONG.
MIC POSITION *1	This simulates the mic position.	
	CENTER	Simulates the condition that the mic is set in the middle of the speaker cone.
	1 cm–10 cm	Simulates the condition that the mic is moved away from the center of the speaker cone.
MIC LEVEL *1	0–100	Adjusts the volume of the mic.
DIRECT MIX *1	0–100	Adjusts the volume of the direct sound.

*1 Disabled when SP TYPE (p. 29) is set to "OFF" or "USER1–16".

AMP TYPE

Value	Explanation
TRANSPARENT	An amp with a broad frequency range and an extremely flat response. Good for acoustic guitar.
NATURAL	An unembellished, clean sound that minimizes the amp's idiosyncrasies, such as its trebly character and boomy low end.
BOUTIQUE	Crunch sound that allows the nuances of your picking to be expressed even more faithfully than on conventional combo amps.
SUPREME	Great-feeling crunch sound that responds to the nuances of your picking while taking advantage of the distinctive character of a 4x12" speaker cabinet.
MAXIMUM	An amp that delivers the distinctively great response and tone of a vintage Marshall, while making it even higher gain.
JUGGERNAUT	A large stack sound that has been tweaked extensively in the pursuit of the ultimate metal sound.
X-CRUNCH	Crunch sound that uses MDP to deliver a crisp tone from all strings.
X-HI GAIN	High-gain sound that uses MDP to obtain high-gain sound with a wide range and a great-feeling sense of separation.
X-MODDED	Core sound that uses MDP to preserve the definition of the sound even with extreme gain.
X-ULTRA	A high-gain sound that uses MDP for a dense midrange tone with dynamics.
X-OPTIMA	A high-gain sound that uses MDP to emphasize sonic balance for phrases and ensemble playing.
X-TITAN	A tight high-gain sound with an edge, which uses MDP.
JC-120	This models the sound of the Roland JC-120.
TWIN COMBO	This models a Fender Twin Reverb.
DELUXE COMBO	This models a Fender Deluxe Reverb.
TWEED COMBO	This models a Fender Bassman 4x10" Combo.
DIAMOND AMP	This models a VOX AC30.
BRIT STACK	This models a Marshall 1959.
RECTI STACK	Models the sound of the Channel 2 MODERN Mode on the MESA/Boogie DUAL Rectifier.
MATCH COMBO	This models the sound input to left input on a Matchless D/C-30.
BG COMBO	This models the sound of the MESA/Boogie combo amp.
ORNG STACK	This models the dirty channel of an ORANGE ROCKERVERB.
BGNR UB METAL	This models the sound that models the high-gain channel of a Bogner Uberschall.
NATURAL BASS	Uncolored clean sound for bass.
X-DRIVE BASS	High-gain sound for bass, using MDP to provide wide range and a good-sounding sense of separation.
CONCERT	This models the Ampeg SVT.
STUDIO BASS	This models the Markbass Little Mark III.
SILVER TUBE	This models a Fender Bassman 100.
CLASSIC BLUE	This models the Acoustic 360.
SOLID STACK	This models the Gallien-Krueger 800RB.
FAT TUBE	This models the Orange AD200B MKIII.
DARK DRV	This models the Darkglass Electronics MICROTUBES B7K.

SP TYPE

Value	Explanation
OFF	This turns off the speaker simulator.
ORIGINAL	This is the built-in speaker of the amp you selected with AMP TYPE. → "AMP TYPE" (p. 29)
1x8"	This is a compact open-back speaker cabinet with one 8-inch speaker.
1x10"	This is a compact open-back speaker cabinet with one 10-inch speaker.
1x12"	This is a compact open-back speaker cabinet with one 12-inch speaker.
2x12"	This is a general open-back speaker cabinet with two 12-inch speakers.
4x10"	This is a large closed-back speaker cabinet with four 10-inch speakers.
4x12"	This is a large closed-back speaker cabinet with four 12-inch speakers.
8x12"	This is a stack of two cabinets each with four 12-inch speakers.
B1x15"	This is a compact open-back speaker cabinet for the bass guitar with one 15-inch speaker.
B1x18"	This is a compact open-back speaker cabinet for the bass guitar with one 18-inch speaker.
B2x15"	This is a general open-back speaker cabinet for the bass guitar with two 15-inch speakers.
B4x10"	This is a large closed-back speaker cabinet for the bass guitar with four 10-inch speakers.
B8x10"	This is a stack of two cabinets for bass, each with four 10-inch speakers.
USER 1–16	You can create an original SP TYPE by using a dedicated tool to load IR (Impulse Response) data into this unit. Download the dedicated tool from the BOSS website. https://www.boss.info/support/

MIC TYPE

Value	Explanation
DYN57	This is the sound of the SHURE SM57. General dynamic mic used for instruments and vocals.
DYN421	This is the sound of the SENNHEISER MD-421. Dynamic mic with extended low end.
CND451	This is the sound of the AKG C451B. Small condenser mic for use with instruments.
CND87	This is the sound of the NEUMANN U87. Condenser mic with flat response.
RBN121	This models the ROYER R-121. Ribbon mic that offers a warm, natural sound.
BLEND A	This models a Shure SM57 and ROYER R-121 mixed together. The sound of the SM57 is proportionally louder
BLEND B	This models a Shure SM57 and ROYER R-121 mixed together. The SM57 and R-121 are mixed at the same volumes.
BLEND C	This models a Shure SM57 and ROYER R-121 mixed together. The sound of the R-121 is proportionally louder.
FLAT	Simulates a mic with perfectly flat response. Produces a sonic image close to that of listening to the sound directly from the speakers (on site).

CHORUS

In this effect, a slightly detuned sound is added to the original sound to add depth and breadth.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
MODE	Selection for the chorus mode.	
	MONO	This chorus effect outputs the same sound from both L channel and R channel.
	STEREO1	This stereo chorus uses spatial synthesis, with the direct sound output in the L channel and the effect sound output in the R channel.
	STEREO2	This is a stereo chorus effect that adds different chorus sounds to L channel and R channel.
	DUAL	This lets you apply chorus independently to the L and R channels.
RATE *2 / **RATE 1** **RATE 2** *1 *2	0–100, BPM	Adjusts the rate of the chorus effect.
DEPTH / **DEPTH 1** **DEPTH 2** *1	0–100	Adjusts the depth of the chorus effect. * To use it for doubling effect, set the value to 0.
PRE-DELAY / **PRE-DELAY 1** **PRE-DELAY 2** *1	0.0 ms–40.0 ms	Adjusts the time needed for the effect sound to be output after the direct sound has been output. By setting a longer pre delay time, you can obtain an effect that sounds like more than one sound is being played at the same time (doubling effect).
EFFECT LEVEL / **EFFECT LEVEL 1** **EFFECT LEVEL 2** *1	0–100	Adjusts the volume of the effect sound.
WAVEFORM / **WAVEFORM 1** **WAVEFORM 2** *1	TRI	Produces a typical chorus effect. 
	SINE	Produces a deeper sense of modulation. 
LOW CUT / **LOW CUT 1** **LOW CUT 2** *1	FLAT, 20.0 Hz–16.0 kHz	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.
HIGH CUT / **HIGH CUT 1** **HIGH CUT 2** *1	20.0 Hz–16.0 kHz, 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.
DIRECT MIX	0–100	Adjusts the volume of the direct sound. Setting this to 0 cuts the direct sound.
OUTPUT MODE *1	MONO	This setting is appropriate for mono output.
	STEREO	Produces a rich spaciousness when stereo output is used.
BPM	40–250	Adjusts the BPM value for each patch.

*1 Valid when the MODE is set to DUAL.

*2 Refer to "About effects when a note value is selected as a setting" (p. 37)".

COMPRESSOR

This is an effect that produces a long sustain by evening out the volume level of the input signal.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	Selects the compressor "TYPE" (p. 31).	
SUSTAIN	0–100	Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.
ATTACK	0–100	Adjusts the strength of the attack when picking.
EFFECT LEVEL	0–100	Adjusts the volume.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
TONE	-50–+50	Adjusts the tone character.

TYPE

Value	Explanation
BOSS COMP	This models a BOSS CS-3.
Hi-BAND	A compressor that adds an even stronger effect in the high end.
LIGHT	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.

DISTORTION

This effect distorts the sound to create long sustain.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	Selects the DISTORTION "TYPE" (p. 31).	
DRIVE	0–120	Adjusts the depth of distortion.
TONE	-50–+50	Adjusts the tone.
LEVEL	0–100	Adjusts the volume of the effect sound.
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.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
SOLO SW	OFF, ON	Switches the tone to one suitable for solos.
SOLO LEVEL	0–100	Adjusts the volume level when the SOLO SW is ON.

TYPE

Value	Explanation
MID (MID BOOST)	This is a booster with unique characteristics in the midrange. Making the connection before the AIRD PREAMP produces sound suitable for solos.
CLEAN (CLEAN BOOST)	This not only functions as a booster, but also produces a clean tone that has punch even when used alone.
TREBLE (TREBLE BOOST)	This is a booster that has bright characteristics.
CRUNCH	A lustrous crunch sound with an added element of amp distortion.
NATURAL (NATURAL OD)	This is an overdrive sound that provides distortion with a natural feeling.
WARM OD	This is a warm overdrive.
FAT DS	A distortion sound with thick distortion.
LEAD DS	Produces a distortion sound with both the smoothness of an overdrive along with a deep distortion.
METAL DS	This is a distortion sound that is ideal for performances of heavy riffs.
OCT FUZZ	A fuzz sound with rich harmonic content.
A-DIST	This uses MDP technology to obtain ideal distortion in all ranges of the guitar, from low to high.
X-OD	This is an overdrive that uses MDP to obtain the distortion that's most appropriate in each pitch range.
X-DIST	This is a distortion that uses MDP to obtain the distortion that's most appropriate in each pitch range.
BLUES OD	This is a crunch sound of the BOSS BD-2. This produces distortion that faithfully reproduces the nuances of picking.
OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
SD-1	This models the sound of the BOSS SD-1.
T-SCREAM	This models an Ibanez TS-808.
TURBO OD	This is the high-gain overdrive sound of the BOSS OD-2.
DIST	This gives a basic, traditional distortion sound.
DS-1	This models the sound of the BOSS DS-1.
CENTA OD	This models a KLON CENTAUR.
RAT	This models a Proco RAT.

Value	Explanation
GUV DS	This models a Marshall GUV' NOR.
DIST+	This models the sound of the MXR DISTORTION+.
MTL ZONE (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.
HM-2	This models the sound of the BOSS HM-2. It produces distinctive cranked-up distortion sound with compression.
MTL CORE (METAL CORE)	This is the sound of the BOSS ML-2 which is ideal for high speed metal riffs.
60S FUZZ	This models a FUZZFACE. It produces a fat fuzz sound.
MUFF FUZ (MUFF FUZZ)	This models an Electro-Harmonix Big Muff π.
BASS OD	Overdrive tuned especially for use with basses.
BASS DS	Distortion tuned especially for use with basses.
BASS MT	Wild, radical distortion sound.
BASS FUZZ	Fuzz tuned especially for use with basses.
HI BAND	With this effect, distortion is applied only to the high frequency sounds, and not to the sounds in the low frequency range.
X-BASS	This effect uses MDP to provide ideal distortion in all pitch ranges of the bass, from low to high.
BASS DRV	This models a TECH21 SANSAMP BASS DRIVER DI.
BASS DI	This models a MXR Bass D.I.+.

EQ 1, EQ2

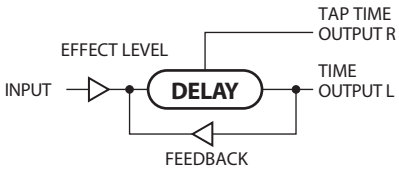
You can adjust the tone character in four bands.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
LOW GAIN	-20–+20 dB	Adjusts the tone for the low frequency range.
LOW-MID FREQ	20.0 Hz–16.0 kHz	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.
LOW-MID GAIN	-20–+20 dB	Adjusts the low-middle frequency range tone.
HIGH-MID FREQ	20.0 Hz–16.0 kHz	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.
HIGH-MID GAIN	-20–+20 dB	Adjusts the high-middle frequency range tone.
HIGH GAIN	-20–+20 dB	Adjusts the tone for the high frequency range.
HIGH CUT	20.0 Hz–16.0 kHz, 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	-20–+20 dB	Adjusts the overall volume level of the equalizer.

DELAY 1, DELAY 2

Adds delayed sound to the direct sound, giving more body to the sound or creating special effects.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	MONO	This is a simple mono delay.
	STEREO1	The direct sound is output from the left channel, and the effect sound is output from the right channel.
	STEREO2	This is a stereo-in/out delay.
	PAN	This delay is specifically for stereo output. This allows you to obtain the tap delay effect that divides the delay time, then deliver them to L and R channels.
TIME *1	1 ms–2000 ms, BPM ♪=♪	Adjusts the delay time.
FEE dBACK	0–100	This sets the amount of delay sound returned to the input. A higher value will increase the number of the delay repeats.
EFFECT LEVEL	0–120	Adjusts the volume of the delay sound.
HIGH CUT	20.0 Hz–16.0 kHz, 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.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
CARRY OVER	OFF, ON	Specifies whether the effect sound remains when you turn off the effect, or does not remain.
BPM	40–250	Adjusts the BPM value for each patch.
TAP TIME *2	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%).



*1 Refer to "About effects when a note value is selected as a setting" (p. 37)".

*2 Valid when the TYPE is set to PAN.

REVERB

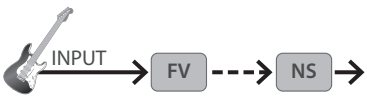
This effect adds reverberation to the sound.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
TYPE	This selects the reverb type. Various different simulations of space are offered.	
	AMBIENCE	Simulates an ambience mic (off-mic, placed at a distance from the sound source) used in recording and other applications. Rather than emphasizing the reverberation, this reverb is used to produce a sense of openness and depth.
	ROOM	Simulates the reverberation in a small room. Provides warm reverberations.
	HALL1	Simulates the reverberation in a concert hall. Provides clear and spacious reverberations.
	HALL2	Simulates the reverberation in a concert hall. Provides mild reverberations.
	PLATE	Simulates plate reverberation (a reverb unit that uses the vibration of a metallic plate). Provides a metallic sound with a distinct upper range.
	SPRING	This simulates the sound of a guitar amp's built-in spring reverb.
	MOD	This reverb adds the wavering sound found in hall reverb to provide an extremely pleasant reverb sound.
TIME	0.1 s–10.0 s	Adjusts the length (time) of reverberation.
PRE-DELAY	0 ms–500 ms	Adjusts the time until the reverb sound appears.
EFFECT LEVEL	0–100	Adjusts the volume of the reverb sound.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	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.
HIGH CUT	20.0 Hz–16.0 kHz, 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.
DENSITY	1–10	Adjusts the density of the reverb sound.
DIRECT MIX	0–100	Adjusts the volume of the direct sound.
CARRY OVER	OFF, ON	Specifies whether the effect sound remains when you turn off the effect, or does not remain.
SPRING SENS *1	0–100	Adjusts the sensitivity of the spring effect. When the value is set higher, the effect is obtained even with a weak picking.

*1 Valid when the TYPE is set to SPRING.

NS 1/NS2 (NOISE SUPPRESSOR)

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

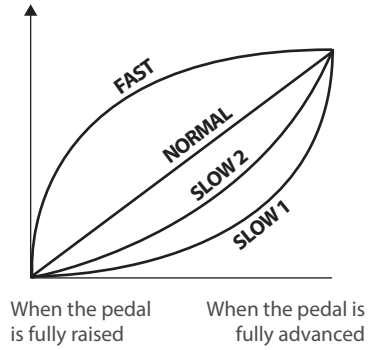
Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
THRESHOLD	0–100	Adjust this parameter as appropriate for the volume of the noise. If the noise level is high, a higher setting is appropriate. If the noise level is low, a lower setting is appropriate. Adjust this value until the decay of the guitar sound is as natural as possible. * High settings for the threshold parameter may result in there being no sound when you play with your guitar/bass volume turned down.
RELEASE	0–100	Adjusts the time from when the noise suppressor begins to function until the noise level reaches "0".
DETECT	This controls the noise suppressor based on the volume level for the point specified in Detect.	
	GK+NORMAL IN *1	Input volume from the GK IN jack and GUITAR INPUT jack
	GK INPUT *1	Input volume from the GK IN jack.
	NORMAL INPUT	Input volume from the GUITAR INPUT jack.
	NS INPUT	Noise suppressor input volume. * When connected as illustrated below, and you want to prevent a spatial-type effects sound (such as a delay sound) from being eradicated by the NS, you should set DETECT to "NS INPUT".  Spatial-type effect
	INST OUT	Specifies the output volume of the INST.
	FV1 OUT, FV2 OUT	Volume after passing through Foot Volume. * If you want to use FV (Foot Volume) in place of the guitar/bass guitar's volume control, you need to set DETECT to "FV OUT".
	PATCH, 01–10	NOISE SUPPRESSOR settings can be saved/loaded as ten variations. A saved VARIATION can be loaded into a different patch, which is convenient when you're creating sounds.  Foot Volume

*1 Set the GK SETTING parameter SENS (p. 46) appropriately.

FOOT VOLUME 1, FOOT VOLUME 2

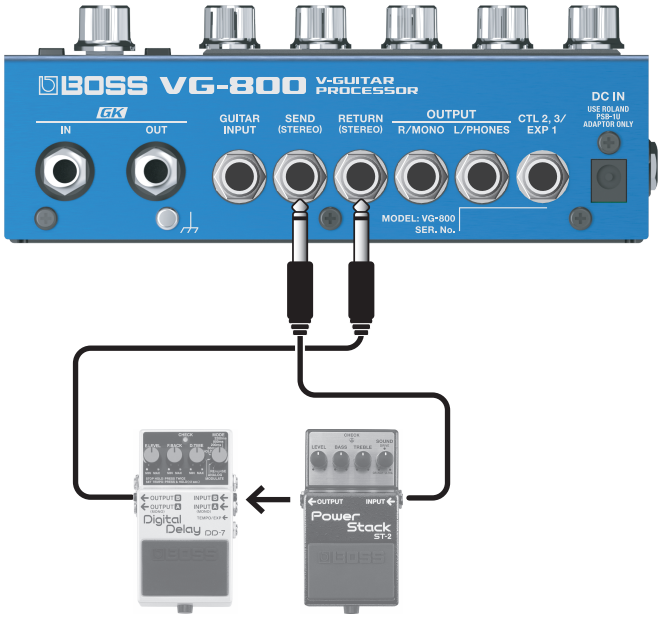
This is a volume control effect.

Normally, this is controlled with the expression pedal connected to the CTL 2, 3/EXP 1 jack or CTL 4, 5/EXP 2 jack.

Parameter	Value	Explanation
VOLUME MIN	0–100	Sets the volume when the heel of the EXP Pedal is depressed.
VOLUME MAX	0–100	Selects the volume when the toe of the EXP Pedal is depressed.
VOLUME CURVE	SLOW1, SLOW2, NORMAL, FAST	You can select how the actual volume changes relative to the amount the pedal is pressed. Volume 
PEDAL POSITION	0–100	Adjusts the volume.

SEND/RETURN

You can connect an external effects processor between the SEND jack and RETURN jack, and use it as one of the VG-800's effects processors.



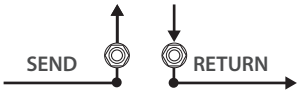
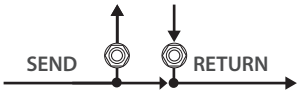
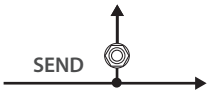
The sound that is input to SEND/RETURN (S/R1, S/R2) within the effect chain will be output to the SEND jack. The sound that is input via the RETURN jack will be input to SEND/RETURN within the effect chain.

* The SEND/RETURN jacks on this unit are stereo (TRS) jacks.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns on/off the SEND/RETURN.
ST LINK	OFF, ON	When this is on, you can use the two sets of SEND and RETURN jacks (S/R1, S/R2) to connect a stereo effect unit.
MODE	Selects the signal flow "MODE" (p. 35).	
SEND LEVEL	0–200	Adjusts the volume of the output to the external effects device.
RETURN LEVEL *1	0–200	Adjusts the volume of the input from the external effects device.
ADJUST *1	0–100	Adjusts the phase between the VG-800's internal processing and an external effect unit connected to the SEND/RETURN jacks.
PHASE	NORMAL, INVERT	Specifies the phase of the signal that is output from the SEND jack.

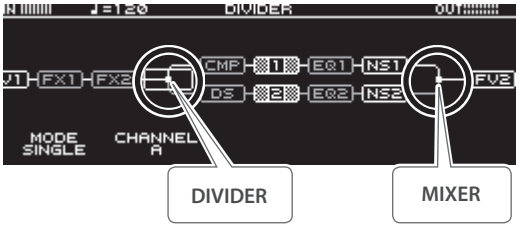
*1 You can adjust this if the MODE parameter is set to NORMAL or DIRECT MIX.

MODE

Value	Explanation
NORMAL	The input to SEND/RETURN within the effect chain will be output to the SEND jack, and the input from the RETURN jack will be output following SEND/RETURN. Use this setting if you want to connect an external effects processor in series within the VG-800's effect chain. 
DIRECT MIX	The input to SEND/RETURN within the effect chain will be output to the SEND jack, and the input from the RETURN jack and the input to SEND/RETURN (the direct sound) will be mixed and output following SEND/RETURN. Use this when you want to mix the VG-800's effects sounds together with the external effects device applied to it. 
BRANCH OUT	The input to SEND/RETURN within the effect chain will be output to the SEND jack. The input from the RETURN jack will be ignored. For example, by placing SEND/RETURN in the VG-800's effect chain in front of reverb or delay, this allows you to use the SEND jack as a dry out. 

DIVIDER

This lets you branch channel "A" and channel "B" within the effect chain.



Parameter	Value	Explanation
MODE	SINGLE	Use only one channel, either "A" or "B".
	DUAL	Use the two channels "A" and "B".
CH SELECT	A, B	Selects the channel to use. * Setting available when MODE is set to SINGLE.

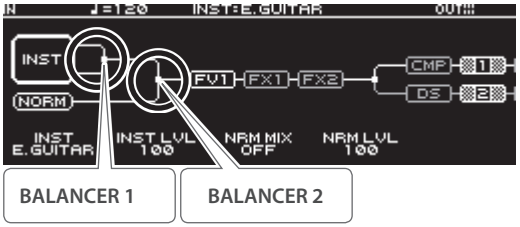
MIXER

This merges the signals that were branched using DIVIDER.

Parameter	Value	Explanation
A/B BALANCE	100:0–0:100	Adjusts the volume balance of channels "A" and "B". * This is shown only if DIVIDER MODE is set to "DUAL".
A:PAN	L50–R50	Adjusts the pan of channel "A".
B:PAN	L50–R50	Adjusts the pan of channel "B".

BALANCER 1, BALANCER 2

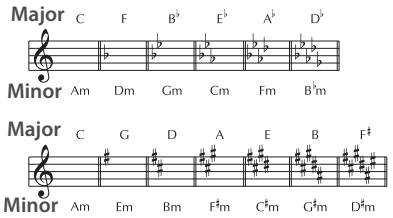
This adjusts the volume balance and panning for each of the routes INST and NORMAL INPUT.



Parameter	Value	Explanation
A/B BALANCE	100:0–0:100	Adjusts the volume balance of channels "A" and "B".
A:PAN	L50–R50	Adjusts the pan of channel "A".
B:PAN	L50–R50	Adjusts the pan of channel "B".

MASTER

These settings are applied to the overall patch.

Parameter	Value	Explanation
MEMORY LEVEL	0–200	Adjusts the volume of the patch.
BPM	40–250	Adjusts the BPM value for each memory. * BPM (beats per minute) indicates the number of quarter note beats that occur each minute
KEY	C (Am)–B (G#m)	This sets the key for the FX HARMONIST.
		
BPM HOLD	OFF, ON	Specifies whether the tempo (BPM) changes or is maintained when you switch memories.
GK SET	SYSTEM, SET1-SET10	Selects which GK setting to use when playing the GK MEMORY. If you select SYSTEM, the GK setting selected by the system parameter GK SET is used.
GK AUDIO MODE	SYSTEM, OFF, MIX, OUT, THRU	Selects the GK AUDIO signal flow. If you select SYSTEM, the setting selected by the system parameter GK AUDIO: AUDIO MODE is used. For details, refer to the system parameter "GK AUDIO" (p. 48).
GK MIX LEVEL	SYSTEM, 0-200	Adjusts the level of audio signal input to the GK IN jack on this unit. If you select SYSTEM, the setting selected by the system parameter GK AUDIO: MIX LEVEL is used.For details, refer to the system parameter "GK AUDIO" (p. 48).
GK OUT LEVEL	SYSTEM, 0-200	Adjusts the level of audio signal output from the GK OUT jack on this unit. If you select SYSTEM, the setting selected by the system parameter GK AUDIO: OUTPUT LEVEL is used. For details, refer to the system parameter "GK AUDIO" (p. 48).
OUTPUT SELECT	SYSTEM (Other values are same with the system parameter OUTPUT SELECT)	Specifies the device (amp) that's connected to the OUTPUT jacks. If you select SYSTEM, the setting selected by the system parameter OUTPUT SELECT is used. For details, refer to the system parameter "OUTPUT SELECT" (p. 47).

MEMO

For details on the GK settings parameter, refer to "GK SETTING paremeters" (p. 45).

About effects when a note value is selected as a setting

* When you specify a note value as the setting for a parameter (such as a RATE parameter in EFFECTS), this specifies the length (time) of one note. Since this time is calculated based on the "BPM" (tempo) of the MASTER block, you can easily design the sound to match the tempo of the song.
* If the note length (time) specified for a RATE or DELAY TIME parameter is longer than the allowable range of the setting, a time that is 1/2 or 1/4 of the specified time is assigned.

NORMAL INPUT

These are the settings for the normal (conventional) guitar/bass signal that is input to the GUITAR INPUT jack.

Parameter	Value	Explanation
ON/OFF	OFF, ON	Turns this effect on/off.
LEVEL	0–200	Adjusts the volume of the normal guitar/bass.
CABLE SIM	OFF, 1m/3ft, 3m/10ft, 5m/16ft, 7m/23ft, 9m/30ft, 12m/40ft	The normal guitar/bass signals that are input via the serial GK connection are routed through an active-type buffer, which reduces degradation of the higher frequencies. For this reason, the difference between using a serial GK connection and a standard cable is more noticeable in the high frequency range. By setting this parameter to the length of the cable you usually use, you can correct for the difference in sound between the divided pickup and a typical guitar/bass. Set this to "OFF" when connecting a normal guitar/bass guitar to the GUITAR INPUT jack.
PHASE	NORMAL, INVERT	Specifies the phase of the normal pickup signal.

CONTROL ASSIGN parameters

CONTROL FUNCTION

You can control the parameters of the VG-800 by using the switches on the VG-800 as well as from an external device.

Use these settings to configure which controller controls which function.

FUNCTION

[▼] DOWN, [▲] UP, [CTL1]–[CTL5], [CUR NUM], [GK SW1], [GK SW2]

* [▼] DOWN, [▲] UP and CTL1 are enabled when FOOT SW MODE (p. 52) is set to "UP/DOWN".
* CUR NUM is enabled when FOOT SW MODE (p. 52) is set to "BANK/NUMBER".

Value	Explanation
OFF	No assignment.
MEMORY +1 *1	Switches to the next memory number.
MEMORY -1 *1	Switches to the previous memory number.
BANK +1 *2	Switches to the next bank number.
BANK -1 *2	Switches to the previous banknumber.
LEVEL +10 *1	Increases the memory volume level by 10 units.
LEVEL +20 *1	Increases the memory volume level by 20 units.
LEVEL -10 *1	Decreases the memory volume level by 10 units.
LEVEL -20 *1	Decreases the memory volume level by 20 units.
BPM TAP	Used for tap input of the MASTER BPM.
DLY1 TAP	Use this for tap input of the DELAY 1.
DLY2 TAP	Use this for tap input of the DELAY 2.
FX1 DLY TAP	Use this for tap input of the FX1 DELAY.
FX2 DLY TAP	Use this for tap input of the FX2 DELAY.
FX3 DLY TAP	Use this for tap input of the FX3 DELAY.
TUNER	Turns the TUNER on and off.
FX BYPASS	Turns the FX BYPASS on and off.
INST	Turns the INS on and off.
INST NOR MIX	Turns the NORMAL MIX SW of the INST on and off.
ALT TUNE	Turns the ALT TUNE of the INST on and off.
12STR	Turns the 12STR of the INST on and off.
STR BEND	Turns the STR BEND of the INST on and off.
PU SEL UP	Switches the PU of the INST.
PU SEL DOWN	
DUAL SEL	Switches the DUAL GUITAR/BASS between type A and type B.
NORMAL	Turns the NORMAL INPUT on and off.
FX1	Turns the FX1 on and off.
FX2	Turns the FX2 on and off.
FX3	Turns the FX3 on and off.
CMP	Turns the COMPRESSOR on and off.
DS	Turns the DISTORTION on and off.
DS SOLO	Switches the DISTORTION solo function on/off.
AMP1	Turns the AMP1 on and off.
AMP1 SOLO	Switches the AMP1 solo function on/off.
AMP2	Turns the AMP2 on and off.
AMP2 SOLO	Switches the AMP2 solo function on/off.
EQ1	Turns the EQUALIZER1 on and off.
EQ2	Turns the EQUALIZER2 on and off.
NS1	Turns the NOISE SUPPRESSOR1 on and off.
NS2	Turns the NOISE SUPPRESSOR2 on and off.
DLY1	Turns the DELAY1 on and off.
DLY2	Turns the DEALY2 on and off.
CHO	Turns the CHORUS on and off.
REV	Turns the REVERB on and off.
S/R1	Turns the SEND/RETURN1 on and off.
S/R2	Turns the SEND/RETURN2 on and off.
FX1 TRIGGER	Turns the trigger of the FX1 on and off.
FX2 TRIGGER	Turns the trigger of the FX2 on and off.
FX3 TRIGGER	Turns the trigger of the FX3 on and off.
DIV CH.SELECT	Switches the DIVIDER channel select.
MIDI START	Controls the Start/Stop of external MIDI devices (such as sequencers).
mmC PLAY	Controls the Play/Stop of external MIDI devices (such as hard disk recorders).

*1 CUR NUM cannot be assigned.

*2 This cannot be assigned to [▼] DOWN, [▲] UP, CTL1 or CUR NUM.

[EXP1], [EXP2], [GK VOL]

Value	Explanation
OFF	No assignment.
FV1	Assigns the FOOT VOLUME1.
FV2	Assigns the FOOT VOLUME2.
FV1+TUNER	Assigns the FOOT VOLUME1. The tuner is displayed if the pedal is returned to minimum setting.
FV2+TUNER	Assigns the FOOT VOLUME2. The tuner is displayed if the pedal is returned to minimum setting.
FX1 PEDAL POS.	Assigns the FX1 PEDAL POSITION.
FX2 PEDAL POS.	Assigns the FX2 PEDAL POSITION.
FX3 PEDAL POS.	Assigns the FX3 PEDAL POSITION.
MEMORY LEVEL100	Assigns the MEMORY LEVEL, to be controlled within a range of 0–100.
MEMORY LEVEL200	Assigns the MEMORY LEVEL, to be controlled within a range of 0–200.
INST LEVEL	Assigns the INST LEVEL.
INST CUTOFF	Assigns the INST CUTOFF.
INST RESO	Assigns the INST RESONANCE.
GTR VOL	Assigns the INST GUITAR (BASS) VOLUME.
DUAL A/B	When INST is set to DUAL GUITAR, this assigns the A/B BALANCE.
NOR MIX 100	Assigns the INST NOR MIX LEVEL function to be controlled within a range of 0–100.
NOR MIX 200	Assigns the INST NOR MIX LEVEL function to be controlled within a range of 0–200.
STR BEND	Assigns the INST STR BEND CONTROL.
MIXER A/B	Assigns the MIXER A/B BALANCE.
BALANCER 1 A/B	Assigns the BALANCER1 A/B BALANCE.
BALANCER 2 A/B	Assigns the BALANCER2 A/B BALANCE.

MODE

Value	Explanation
TOGGLE	The setting is toggled OFF (minimum value) or ON (maximum value) with each operation.
MOMENT	The normal state is OFF (minimum value), and is ON (maximum value) only while the controller is operated.

PREFERENCE

Value	Explanation
MEMORY	Different settings can be made independently for each memory.
SYSTEM	The same settings are shared by all memories.

ASSIGN SETTING

ASSIGN1–ASSIGN16

For each parameter, you can specify, in detail, which controller will control which parameter. You can create 16 sets of such assignments.

Parameter	Value	Explanation
SW	OFF, ON	Turns the ASSIGN1–16 on/off.
TARGET	This selects the parameter to be changed. ➡ "ASSIGN TARGET list" (p. 54)	
MIN *1	This sets the minimum value for the range in which the parameter can change. The value differs depending on the parameter assigned for TARGET parameter.	
MAX *1	This sets the maximum value for the range in which the parameter can change. The value differs depending on the parameter assigned for TARGET parameter.	
SOURCE *1	Selects the controller that operates the parameter. ➡ "SOURCE list" (p. 40) * Enabled when SOURCE is [▼]DOWN, [▲]UP or CTL1 and FOOT SW MODE (p. 52) is UP/DOWN.	
MODE *1	TOGGLE	The setting is toggled OFF (minimum value) or ON (maximum value) with each operation.
	MOMENT	The normal state is OFF (minimum value), and is ON (maximum value) only while the controller is operated.
ACT LOW	0–126	You can set the controllable range for target parameters within the source's operational range. Target parameters are controlled within the range set with Act Low and Act High. You should normally set Act Low to "0" and Act High to "127".
ACT HIGH	1–127	
RISE TIME *1,*2	0–100	Adjusts how long it takes for the target to transition from minimum to maximum. When you want to make the value change instantly, such as for parameters with on/off values or tap input, set this to "0".
FALL TIME *1,*2	0–100	Adjusts how long it takes for the target to transition from maximum to minimum. When you want to make the value change instantly, such as for parameters with on/off values or tap input, set this to "0".
INPUT SENS	0–100	Adjusts the input sensitivity when STRING1–STRING7, STR HiC–STR LowB, STRING ALL, or NORMAL IN is selected as the SOURCE.
WAVE PEDAL FORM	SAW	
	TRI	
	SINE	
WAVE PEDAL RATE	0–100, BPM	This determines the time spend for one cycle of the assumed EXP Pedal.
MIDI CH *3,*4	SYSTEM	Transmits a message on the MIDI channel specified by the parameter TX CHANNEL in "MIDI SETTING".
	1–16	The message is transmitted on the specified MIDI channel.

Parameter list

Parameter	Value	Explanation
MIDI CC# *3	0–127	The message is transmitted using the specified controller number.
MIDI CC# MIN *3	0–127	Selects the minimum value of the transmitted CC# message.
MIDI CC# MAX *3	0–127	Selects the maximum value of the transmitted CC# message.
MIDI PC# *4	1–128	Specifies the program number that is transmitted.
MIDI PC# BANK MSB *4	OFF, 0–127	Specifies the bank select MSB that is transmitted. If this is OFF, the bank select MSB is not transmitted.
MIDI PC# BANK LSB *4	OFF, 0–127	Specifies the bank select LSB that is transmitted. If this is OFF, the bank select LSB is not transmitted.

*1 Enabled when TARGET is not BPM TAP or MIDI PC#

*2 Enabled when SOURCE is not EXP1, EXP2, GK VOL or MIDI CC#

*3 Enabled when TARGET is MIDI CC#

*4 Enabled when TARGET is MIDI PC#

SOURCE list

Value	Explanation
[▼] DOWN	Assigns the [▼] switch on this unit.
[▲] UP	Assigns the [▲] switch on this unit.
CTL1	Assigns the [CTL 1] switch on this unit.
CTL2, CTL3	Assigns the footswitch connected to the CTL 2, 3/ EXP 1 jack.
CTL4, CTL5	Assigns the footswitch connected to the CTL 4, 5/ EXP 2 jack.
EXP1	Assigns the external expression pedal connected to the CTL 2, 3/ EXP 1 jack.
EXP2	Assigns the expression pedal connected to the CTL 4, 5/EXP 2 jack.
CUR NUM	Assigns the same number switch as the selected memory number. * Enabled when FOOT SW MODE (p. 52) is set to "BANK/NUMBER".
GK SW1, GK SW2	Assigns the [S1] and [S2] switch of the divided pickup.
GK VOL	Assigns the volume knob of the divided pickup.
WAVE PEDAL	Assigns the wave pedal. ➡ "Virtual expression pedal system (wave pedal)" (p. 41)
STRING1–STRING7, STRING ALL *1	The assigned target parameter will change according to the input level.
STR HiC–STR LowB, STRING ALL *2	
NORMAL IN	
CC#1–CC#31, CC#64–CC#95	Assigns control change messages from an external MIDI device.

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

Virtual expression pedal system (wave pedal)

By assigning a desired parameter to the virtual expression pedal, you can produce an effect as though you were operating a physical expression pedal to change the volume or tone quality in real time.

The virtual expression pedal system can be specified as a SOURCE for ASSIGN 1–ASSIGN 16.

Wave pedal

If SOURCE is set to "WAVE PEDAL", the virtual expression pedal will cyclically modify the parameter specified by TARGET in a fixed wave form.

Always changes in a fixed curve regardless of the actual pedal

STRING1–STRING6, STR HiC–STR LowB, STRING ALL, NORMAL IN

The parameter set as the target changes in response to the input level.

MEMO

If you want to adjust the input sensitivity, set the INPUT SENS.

INPUT SENS

Parameter	Value	Explanation
INPUT SENS	0–100	Adjusts the input sensitivity when STRING1–STRING7, STR HiC–STR LowB, STRING ALL, or NORMAL IN is selected as the SOURCE.

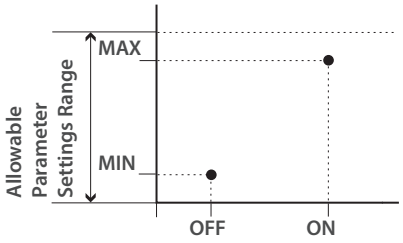
About the range of a target's change

The target's value changes between MIN (the minimum value) and MAX (the maximum value).

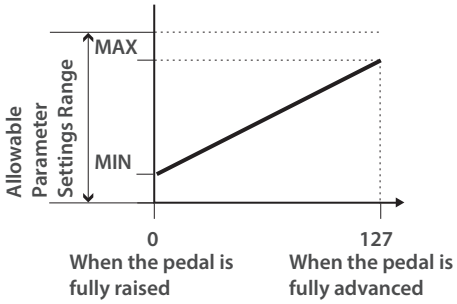
When using an external footswitch, or other controller that acts as an on/off switch, "Min" is selected with Off (CLOSED), and "Max" is selected with On (OPEN).

When using an external expression pedal or other controller that generates a consecutive change in the value, the value of the setting changes accordingly, within the range set by the minimum and maximum values. Also, when the target is of an on/off type, the median value of the received data is used as the dividing line in determining whether to switch it on or off.

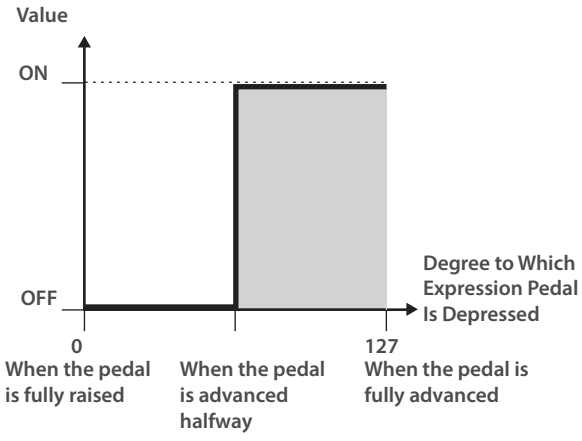
When using the footswitch:



When using the expression pedal:



When controlling the On/Off target with the expression pedal:



* The range that can be selected changes according to the target setting.

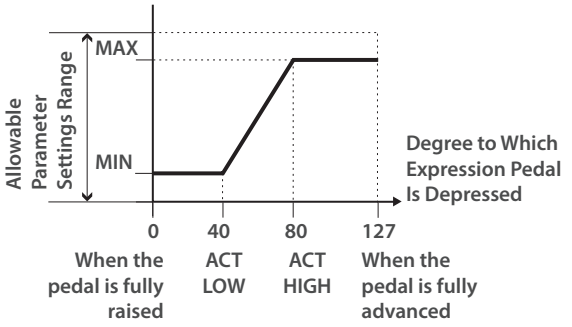
* When the "minimum" is set to a higher value than the "maximum", the change in the parameter is reversed.

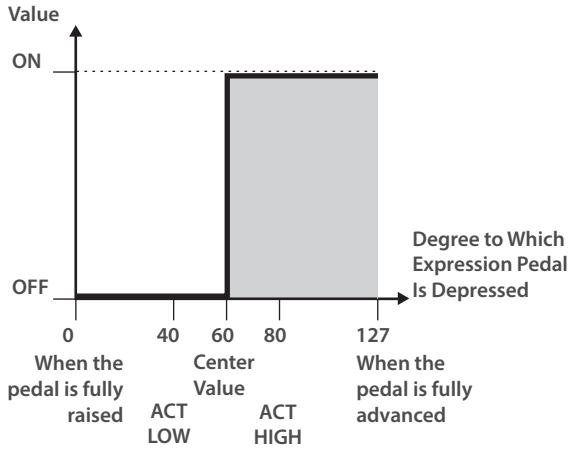
* The values of settings can change if the target is changed after the "minimum" and "maximum" settings have been made. If you've changed the target, be sure to recheck the "minimum" and "maximum" settings.

About the Range of a Controller's Change

This sets the operational range within which the value of the setting changes when an expression pedal or other controller that changes the value consecutively is used as the source. If the controller is moved outside the operational range, the value does not change, it stops at "minimum" or "maximum".

(Example) With ACT LOW: 40, ACT HIGH: 80





* When using a footswitch or other on/off switching controller as the source, leave these at "ACT LOW: 0" and "ACT HIGH: 127". With certain settings, the value may not change.

MEMORY MIDI

When you change memories, a program number and bank select message are transmitted to an external MIDI device.

* If the TX PC MAP setting in MIDI SETTING is "FIX", the MEMORY MIDI function does not operate. Change the setting to "MEMORY MIDI".

Parameter	Value	Explanation
CHANNEL (CH)	OFF, 1–16	Specifies the transmit channel for MIDI messages. If this is OFF, no MIDI message is transmitted.
PC#	OFF, 1–128	Specifies whether a program number is transmitted when you switch memories. If this is OFF, no program number is transmitted.
BANK MSB **BANK LSB**	OFF, 0–127	Specifies whether bank select messages are transmitted when you switch memories. * It is not possible to transmit only BANK LSB. * Not transmitted if PC# is OFF. * It is not possible to transmit only bank select. Bank select is always transmitted in conjunction with program numbers.
CC1# **CC2#**	OFF, 0–127	Specifies whether a control change is transmitted when you switch memories. If this is OFF, no control change is transmitted.
CC1 VALUE **CC2 VALUE**	0–127	Specifies the value of the control change.

GUITAR TO MIDI/BASS TO MIDI

These parameters are set for the GUITAR TO MIDI/BASS TO MIDI function for each scene.

To use GUITAR TO MIDI/BASS TO MIDI, set the system parameter for GUITAR TO MIDI/BASS TO MIDI On/Off to "ON".

Refer to the SYSTEM parameters for the parameters that work globally across the VG-800 for the GUITAR TO MIDI/BASS TO MIDI function.

Parameter	Value	Explanation
MONO/POLY	Specifies how MIDI messages are transmitted.	
	MONO	One channel is used per string. Since you can use a different MIDI channel for each string, you can select a different tone for each string, and you can use bending techniques to apply continuous change in pitch data to specific strings. When doing so, the sound module you're using must support multitimbral playing.
	POLY	Transmits the data for all strings via one channel. Although this lets you easily configure the sound module to transmit MIDI data for each string via a single channel, you are limited to selecting only the same tone for all strings.
ALT TUNE	OFF, ON	Specifies whether the INST's ALT TUNE information is applied to GUITAR TO MIDI. The ALT TUNE for GUITAR/BASS "A" is applied when INST TYPE is DUAL GUITAR or DUAL BASS.
CHROMATIC	With the Chromatic setting, changes in pitch bend MIDI data are transmitted in half step intervals when you use bending techniques or the like to gradually change the pitch on your guitar/bass.	
	OFF	Pitch bend data is output as normal. The pitch changes continuously when you are bending the strings or playing vibrato.
	TYPE1	When the pitch changes, the sound that's playing does not stop, and only the pitch bend data is applied. No attack sound is heard when the pitch changes, and instead the pitch characteristically changes as if you're playing slurred notes on a recorder.
	TYPE2	When the pitch changes, the note is retriggered at the new pitch, and the pitch changes in half steps. As a result, the attack sound plays whenever the pitch changes. The retriggered notes get softer as the string vibration attenuates.
	TYPE3	As with Chromatic TYPE 2, the note is retriggered at the new pitch, and the pitch changes in half steps. However, the note is retriggered at the same volume (strength) at which you first played, even after the string vibration attenuates.
DYNAMICS	1–10	Sets the sensitivity used for the output data (velocity). Larger values make it easier to trigger higher velocities.
PLAY FEEL	You can achieve more natural dynamics by changing the Play Feel setting, according to how you play your guitar or bass.	
	FEEL1–FEEL4	FEEL1 is the mode that gives the most expression in terms of how the volume changes according to your picking dynamics. Larger values make it easier to play louder notes with less picking effort. This gives you more uniform volume, even when you're using tapping techniques or picking with varied strengths.
	NO DYNA	The volume is always the same in this mode, regardless of your picking dynamics.
NO DYNA VELOCITY	0–127	Sets the fixed velocity value when Play Feel is set to "NO DYNA".
LOW VELO CUT	OFF, 1–10	Adjust this setting if the unit triggers notes even when you're just touching a string. Larger values make the notes harder to trigger.
TRANSPOSE	-36–+36	Shifts the outputted note data of the notes you play on the guitar in half-step intervals.
BEND RANGE	0–24	Sets the maximum amount of change for pitch bend messages.
HOLD TYPE	This selects how the hold effect is applied.	
	HOLD1	The note-on data is held when you use a controller to turn the hold function on. If you keep playing with the hold function on, the note-on data keeps holding. However, if a note message is triggered on the same string, the note message previously triggered on that string is turned off and the new note-on message is triggered. This lets you play notes on different frets, without breaks in the sound.
	HOLD2	The note-on data is held when you use a controller to turn the hold function on. Note that any note-on messages you play afterwards with the hold function on are not output.
	HOLD3	The note-on data is held when you use a controller to turn the hold function on. If you keep playing with the hold function on, you can still output note-on messages for strings other than the ones that are held, but those notes are not held.
	HOLD4	The note-on data is held when you use a controller to turn the hold function on. If you keep playing with the hold function on, the note-on messages are subsequently held. This works like the damper pedal on a piano.
STRING MUTE 1(HIC)–STRING MUTE 6 (LOWB), STRING MUTE 7	OFF, ON	Sets mute on/off for the string.

Parameter	Value	Explanation
POSITION LIMIT SW	OFF, ON	Turns the position limit function on/off.
POSITION LIMIT LOW	NO LIMIT, 0–24FRET	Sets the fret range within which the sound plays.
POSITION LIMIT HIGH	0–24FRET, NO LIMIT	
CC1:SOURCE CC2:SOURCE	GK VOL, GK SW1–2, CTL1–5, EXP1–2	You can output controller motions specified in SOURCE as control change messages. * Enabled when SOURCE is CTL1 and FOOT SW MODE (p. 52) is UP/DOWN.
CC1:CC# CC2:CC#	OFF, CC#1–31, 64–95	Specifies the control change message number to be output. For POLY mode, BASIC CH is used; and for MONO mode, six channels from BASIC CH are used for output.
BANK MSB *1	OFF, 0–127	Specifies the bank select (MSB) that is output.
STR1: BANK MSB(HIC)–STR6: BANK MSB(LOWB), STR7: BANK MSB *2		
BANK LSB *1	OFF, 0–127	Specifies the bank select (LSB) that is output.
STR1: BANK LSB(HIC)–STR6: BANK LSB(LOWB), STR7: BANK LSB *2		
PC *1	OFF, 1–128	Specifies the program number that is output.
STR1: PC(HIC)–STR6: PC(LOWB), STR7: PC *2		

*1 Enabled when MODE is set to POLY.

*2 Enabled when MODE is set to MONO.

LED COLOR

You can specify the color of the LED for each footswitch.

[▼], [▲], [CTL1]

Value	Explanation
RED **BLUE** **LIGHT BLUE** **GREEN** **YELLOW** **WHITE** **PURPLE**	Specify the color of LED illumination.

SYSTEM paremeters

GK SETTING paremeters

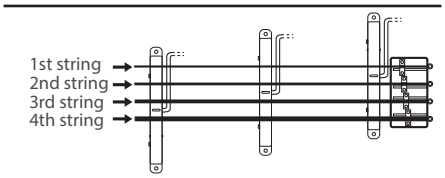
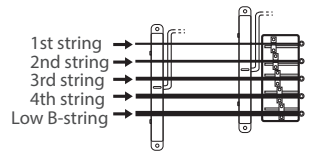
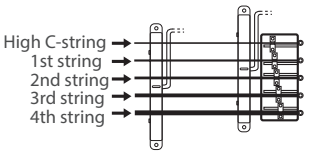
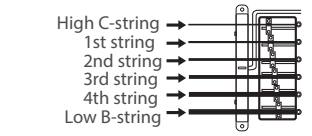
Configure the divided pickup settings so that the VG-800 is always in the best condition when you play.

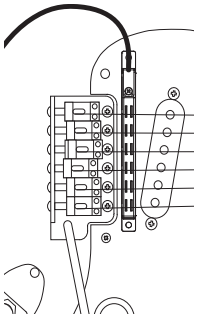
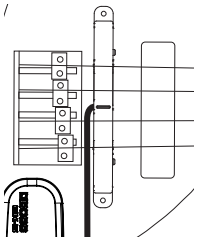
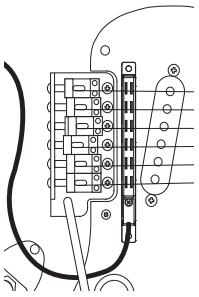
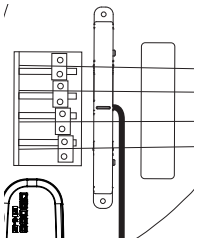
You need to make these settings in situations such as when you've newly installed a divided pickup on your guitar/bass, or when you've changed the height of the divided pickup.

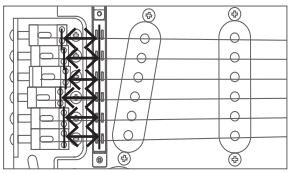
You can save up to 10 of these settings (GK SETTINGS) for the VG-800.

By saving the settings for multiple guitars/basses with the GK SETTING, you can quickly recall different settings when you're switching between guitars/basses during a performance.

The GK SETTINGS are saved even after you turn off the power. For this reason, you don't need to reconfigure the settings each time you play.

Parameter	Value	Explanation
GK SET SELECT	1-10	Selects the GK SET that's used when you set the GK SET to "SYSTEM" in EFFECTS parameters → MASTER parameters (p. 37). Each of the parameters you set in GK SETTING are saved in the GK SET number that you selected here.
NAME	Sets the GK set name (up to eight characters).	
GK TYPE *1	GK-5	Select this when you're using the BOSS GK-5.
	GK5KIT-6	Choose this if you're using a guitar with a BOSS GK5-KIT (6 strings).
	GK5KIT-7	Choose this if you're using a guitar with a BOSS GK5-KIT (7 strings).
	GK-3 *3	Select this when you're using the Roland GK-3.
	GK-2A *3	Select this when you're using the Roland GK-2A, or a commercially available guitar with a built-in divided pickup (13 pin type).
	GC-1 *3	Select this when you're using the Roland V-Guitar GC-1.
	PIEZO *3	Select this when using a guitar with a piezo pickup (flat response).
	PIEZO F *3	Select this when using a guitar with a piezo pickup (Fishman).
	PIEZO G *3	Select this when using a guitar with a piezo pickup (Graph Tech).
	PIEZO L *3	Select this when using a guitar with a piezo pickup (L.R. Baggs).
	PIEZO R *3	Select this when using a guitar with a piezo pickup (RMC).
GK TYPE *2	GK-5B	Select this when you're using the BOSS GK-5B.
	GK5KIT-B	Choose this if you're using a bass with a BOSS GK5-KIT.
	GK-3B *3	Select this when you're using the Roland GK-3B.
GK TYPE *2	GK-2B *3	Select this when you're using the Roland GK-2B, or a commercially available bass guitar with a built-in divided pickup (13 pin type).
	PIEZO(B) *3	Select this when using a bass guitar with a piezo pickup (flat response).
	PIEZO G(B) *3	Select this when using a bass guitar with a piezo pickup (Graph Tech).
	PIEZO R(B) *3	Select this when using a bass guitar with a piezo pickup (RMC).
SCALE *1	500–660 mm, ST(648 mm), LP(628 mm)	Sets the scale length of the guitar you're using.
SCALE *2	710–940 mm, SHORT (760 mm), MEDIUM (812 mm), LONG JB/PB (864 mm), EXTRA LONG (914 mm)	Sets the scale length of the bass guitar you're using.
GK PU POSITION *2	Sets the divided pickup position. **This is the position for a four-string bass guitar.** **GK PU POSITIO** 4STR-1 4STR-2 4STR-3  **This is the position for a five-string bass guitar (low B to G).** **GK PU POSITION** 5STR-Lo1 5STR-Lo2  **This is the position for a five-string bass guitar (E to high C).** **GK PU POSITION** 5STR-Hi1 5STR-Hi2  **This is the position for a six-string bass guitar.** **GK PU POSITION** 6STR  	

Parameter	Value	Explanation
PU DIRECTION	This sets the direction you use to install the divided pickup.	
	NORMAL	In this mode, the cable comes out from the sixth-string side. (GUITAR MODE)  In this mode, the cable comes out from the bridge side. (BASS MODE) 
	REVERSE	In this mode, the cable comes out from the first-string side. (GUITAR MODE)  In this mode, the cable comes out from the neck side. (BASS MODE) 
PU PHASE	NORMAL, INVERSE	Sets the phase of the divided pickup and of the guitar/bass guitar normal pickup. If this is set to "NORMAL" and the low frequency range is getting cut, set this to "INVERSE".
S1/S2 POSITION	NORMAL, REVERSE	Switches between guitars/bass guitars on which a GK5-KIT is installed, GK-3, GK-2A, GK-3B and GK-2B [S1], [S2] switch.

Parameter	Value	Explanation
TUNING STYLE	Sets the tuning you're using on your guitar/bass.	
	NORMAL	Regular tuning.
	OPEN D, OPEN E, OPEN G, OPEN A *3	A tuning with which the open strings play a major chord.
	DROP D–A *3	With "DROP D", the sixth string is tuned to a lower D. For the other tunings, the DROP D tunings are lowered even further.
	D-MODAL *3	A tuning that drops the first, second and sixth strings a whole step for an ethnic feel.
	NASHVL *3	A tuning that raises the third, fourth, fifth and sixth strings one octave, giving the effect of playing just the secondary strings on a 12-string guitar.
	4TH *3	A tuning in fourths that raises the first and second strings by a half step.
	-5–-1 STEP	A tuning that lowers all strings in half steps.
GAIN	1–4	Adjusts the gain when a GKC-AD is connected. Lower the Gain setting when the input sensitivity doesn't decrease even after you've lowered the Sens value, or if the sound distorts when you play strongly.
NORMAL PU GAIN	-20–+20 dB	Adjusts the input level of the normal pickup. When making this setting, set the divided pickup's select switch to "MIX".
PIEZO TONE L *4	-10–+10 dB	Adjusts the low frequency range.
PIEZO TONE H *4	-10–+10 dB	Adjusts the high frequency range.
DISTANCE 1–DISTANCE 7 *1	10.0–30.0 mm	Sets the distances for the divided pickup and the bridge respectively.  * This does not need to be set if the pickup type is set to "GC-1" or to a piezo-type pickup.
DISTANCE HiC–DISTANCE LowB *2	5.5–55.5 mm	
SENS 1(HiC)–SENS 6(LowB), SENS 7	0–100	Sets the various input sensitivities for the divided pickup.

*1 Enabled for GUITAR MODE.

*2 Enabled for BASS MODE.

*3 Use this with the GKC-AD (sold separately).

*4 Enables when GK TYPE is set to a piezo-type pickup.

IN/OUT SETTING paremeters

OUTPUT SELECT

These settings specify the device (amp) that's connected to the OUTPUT jacks.

Value	Explanation
LINE/PHONES (RECORDING)	Choose this setting if you're using headphones, or if the VG-800 is connected to a keyboard amp, mixer, or digital recorder.
JC-120 RETURN	Choose this setting if the VG-800 is connected to the RETURN jack of the Roland JC-120 guitar amp.
JC-120 INPUT	Choose this setting if the VG-800 is connected to the guitar input of a JC-120 guitar amp.
KATANA-100/212 RETURN	Choose this setting if the VG-800 is connected to the RETURN jack of the KATANA-100/212 guitar amp.
KATANA-100/212 INPUT	Choose this setting if the VG-800 is connected to the guitar input of a KATANA-100/212 guitar amp.
KATANA-100 RETURN	Choose this setting if the VG-800 is connected to the RETURN jack of the KATANA-100 guitar amp.
KATANA-100 INPUT	Choose this setting if the VG-800 is connected to the guitar input of a KATANA-100 guitar amp.
TUBE COMBO 212 RETURN	This setting is for cases other than the above when connecting to the RETURN of a vacuum tube combo amp (in which the amp and speakers are in a single unit) equipped with one 12" speaker.
TUBE COMBO 212 INPUT	This setting is for cases other than the above when connecting to the INPUT of a vacuum tube combo amp (in which the amp and speakers are in a single unit) equipped with one 12" speaker.
TUBE COMBO 112 RETURN	This setting is for cases other than the above when connecting to the RETURN of a vacuum tube combo amp (in which the amp and speakers are in a single unit) equipped with one 12" speaker.
TUBE COMBO 112 INPUT	This setting is for cases other than the above when connecting to the INPUT of a vacuum tube combo amp (in which the amp and speakers are in a single unit) equipped with one 12" speaker.
TUBE STACK 412 RETURN	This setting is for cases other than the above when connecting to the RETURN of a vacuum tube stack guitar amp (in which the amp and speakers are separate units). This assumes that the connected speaker cabinet is equipped with four 12-inch speakers.
TUBE STACK 412 INPUT	This setting is for cases other than the above when connecting to the INPUT of a vacuum tube stack guitar amp (in which the amp and speaker are separate units). This assumes that the connected speaker cabinet is equipped with four 12-inch speakers.
BASS AMP WITH TWEETER	Use this setting when connecting to a tweeter-equipped bass amp.
BASS AMP NO TWEETER	Use this setting when connecting to a bass amp that has no tweeter.

GLOBAL EQ

This adjusts the tone of the OUTPUT regardless of the equalizer on/off settings of individual memories. You can save three types of GLOBAL EQ settings.

Parameter	Value	Explanation
SWITCH	OFF, ON	Turns this effect on/off.
EQ SET SELECT	EQ1–EQ3	Selects the EQ settings.
LOW CUT	FLAT, 20.0 Hz–16.0 kHz	Cuts the frequencies below the frequency that you set. When FLAT is selected, the low cut filter will have no effect.
LOW GAIN	-20–+20 dB	Adjusts the low frequency range tone.
LOW-MID FREQ	20.0 Hz–16.0 kHz	Specifies the center of the frequency range to 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.
LOW-MID GAIN	-20–+20 dB	Adjusts the tonal quality of the low to midrange frequencies.
HIGH-MID FREQ	20.0 Hz–16.0 kHz	Specifies the center of the frequency range to 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.
HIGH-MID GAIN	-20–+20 dB	Adjusts the tonal quality of the mid- to high-frequency range.
HIGH GAIN	-20–+20 dB	Adjusts the tonal character of the high frequencies.
HIGH CUT	20.0 Hz–16.0 kHz, FLAT	Cuts the frequencies above the frequency that you set. When FLAT is selected, the high cut filter will have no effect.
LEVEL	-20–+20 dB	Adjusts the overall volume level of the equalizer.

TOTAL

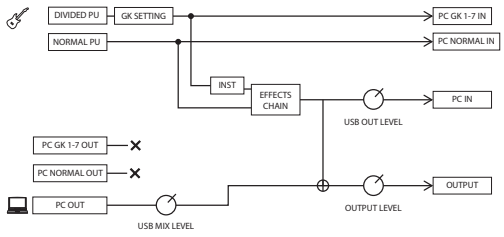
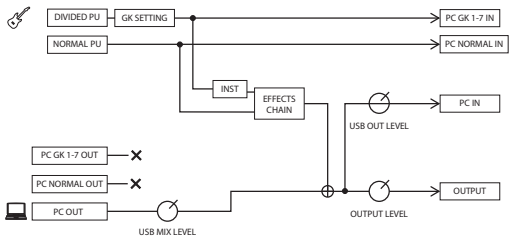
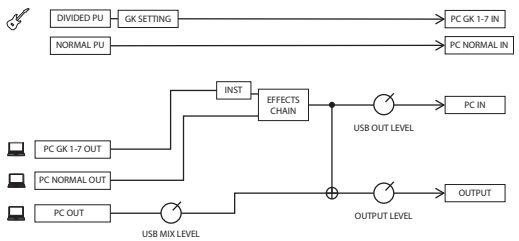
These parameters control the threshold level of the noise suppressor used by each patch, the overall reverb level, and the overall output. This does not affect the settings of each memory.

Parameter	Value	Explanation
TOTAL NS THRESHOLD	-20 dB–+20 dB	Control the threshold level of the noise suppressor used by each memory. It is effective to adjust this when you switch to connecting a different guitar/bass guitar, or according to the amount of noise in the place where you're playing. This does not affect the settings of each memory. * If you want to use the settings specified for each memory, set this to 0 dB.

Parameter	Value	Explanation
TOTAL REVERB LEVEL	0%–200%	Adjusts the reverb level specified for each memory. It is useful to adjust the reverb level appropriately for the space in which you're performing. This does not affect the settings of each memory. * If you want to use the settings specified for each memory, set this to 100%.

USB AUDIO

Here you can make USB-related settings for when the VG-800 is connected to a computer via USB.

Parameter	Value	Explanation
AUDIO ROUTING	STANDARD	Use this setting when playing along with a song (backing tracks) on your computer. This mixes the sound of the VG-800 with that of your computer, and outputs the result to the OUTPUT jacks of the VG-800. In this case, the audio signal output from the USB port is only that of the VG-800. 
	MIX	Use this setting when playing along with a song (backing tracks or other audio source) on your computer. This mixes the sound of the VG-800 with that of your computer, and outputs the result to the OUTPUT jacks and the USB port of the VG-800. 
	RE-GUITAR/ RE-BASS *1	Use this setting when resynthesizing the original sound of the divided pickup that's played by your computer, which is input to the VG-800. 
MIX LEVEL	0–200	Adjusts the level of signal input from the computer.
OUT LEVEL	0–200	Adjusts the level of signal output to the computer.
DRIVER MODE	Changes the USB driver operation mode. This setting can't be changed when the unit is connected via USB. To switch driver modes in this case, unplug the USB cable.	
	VENDOR	This uses a dedicated driver.
	GENERIC	This uses the standard driver of the respective OS.

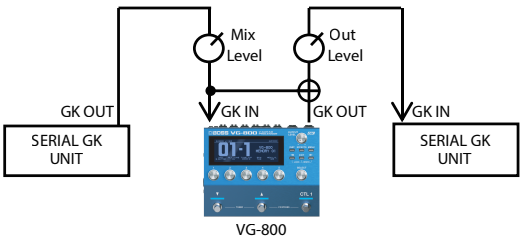
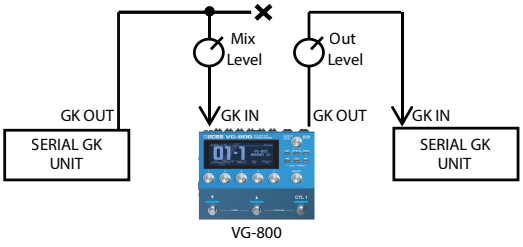
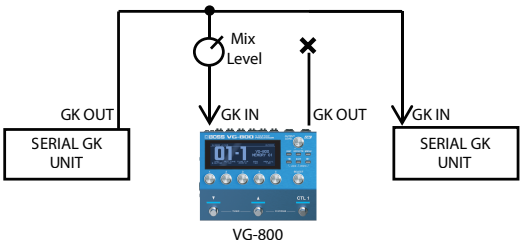
*1 This is enabled when the DRIVER MODE is "VENDOR".

The "re-guitar" or "re-bass" technique is used to create sounds by recording the INST or original sound without effects into a DAW, and using the INST sound or effect after that. This lets you redo just the sound that's produced after you've recorded your parts.

GK AUDIO

You can transmit the output sound from the VG-800 (stereo audio) to another VG-800 or other serial GK device, or mix the audio signal from another serial GK device with the sound of this unit.

The setting can be changed for each memory. Refer to the EFFECTS parameters → MASTER parameters (p. 37) for details.

Parameter	Value	Explanation
AUDIO MODE	Selects the GK AUDIO signal flow.	
	OFF	GK AUDIO is not used.
	MIX	The serial GK audio signal that's input to the GK IN jack of this unit is mixed with this unit's stereo output. The mixed audio signal is sent to the serial GK device that's connected to the GK OUT jack of this unit. 
	OUT	The stereo output of this unit is sent to the serial GK device that's connected to the GK OUT jack of this unit. 
	THRU	The serial GK audio signal that's input to the GK IN jack of this unit is sent to the serial GK device that's connected to the GK OUT jack of this unit. 
MIX LEVEL	0–200	Adjusts the level of audio signal input to the GK IN jack on this unit.
OUT LEVEL	0–200	Adjusts the level of audio signal output from the GK OUT jack on this unit.

HARDWARE SETTING paremeters

KNOB SETTING

Parameter	Value	Explanation
KNOB1–KNOB5	Here you can assign the desired parameters to knobs [1]–[5] in the Play Screen. * The settings you make here are only for the knobs in the Play Screen.	
KNOB LOCK	OFF, ON	When this is ON, knob operations are disabled on the Play Screen.

KNOB1–KNOB5

CATEGORY	PARAMETER
TUNER	ON/OFF
FX BYPASS	ON/OFF
MASTER	BPM
	KEY
	MEMORY LEVEL
INST	INST SW
	INST TYPE
ALT TUNE	ALT TUNE SW(A)
	ALT TUNE MODE(A)
	ALT TUNE TYPE (A)
	ALT TUNE SW B
	ALT TUNE MODE B
	ALT TUNE TYPE B
FX1	ON/OFF
	FX TYPE
FX2	ON/OFF
	FX TYPE
FX3	ON/OFF
	FX TYPE
AMP1	ON/OFF
	TYPE
	GAIN
	LEVEL
	BASS
	MIDDLE
	TREBLE
	PRESENCE
AMP2	ON/OFF
	TYPE
	GAIN
	LEVEL
	BASS
	MIDDLE
	TREBLE
	PRESENCE
CHORUS	ON/OFF
	MODE
	RATE
	DEPTH
COMPRESSOR	ON/OFF
	TYPE
	SUSTAIN
	ATTACK
	EFFECT LEVEL
DISTORTION	ON/OFF
	TYPE
	DRIVE
	TONE
	LEVEL
DELAY1	ON/OFF
	DELAY TYPE
	DELAY TIME
	FEE dBACK
	EFFECT LEVEL
DELAY2	ON/OFF
	DELAY TYPE
	DELAY TIME
	FEE dBACK
	EFFECT LEVEL
REVERB	ON/OFF
	TYPE
	EFFECT LEVEL
GK SETTING	GK SET
OUTPUT SETTING	OUTPUT SELECT
	OUTPUT LEVEL
TOTAL	TOTAL REVERB LEVEL
	TOTAL NS THRESHOLD
GLOBAL EQ	ON/OFF
	EQ SET
	1:LEVEL
	1:LOW CUT
	1:LOW GAIN
	1:LOW-MID FREQ
	1:LOW-MID Q
	1:LOW-MID GAIN
	1:HIGH-MID FREQ
	1:HIGH-MID Q
	1:HIGH-MID GAIN
	1:HIGH GAIN
	1:HIGH CUT
	2:LEVEL
	2:LOW CUT
	2:LOW GAIN
	2:LOW-MID FREQ
	2:LOW-MID Q
	2:LOW-MID GAIN
	2:HIGH-MID FREQ
	2:HIGH-MID Q
	2:HIGH-MID GAIN
	2:HIGH GAIN
	2:HIGH CUT
	3:LEVEL
	3:LOW CUT
	3:LOW GAIN
	3:LOW-MID FREQ
	3:LOW-MID Q
	3:LOW-MID GAIN
	3:HIGH-MID FREQ
	3:HIGH-MID Q
	3:HIGH-MID GAIN
	3:HIGH GAIN
	3:HIGH CUT

CATEGORY	PARAMETER
USB AUDIO	USB AUDIO ROUTING
	MIX LEVEL
	OUT LEVEL
GK AUDIO	AUDIO MODE
	MIX LEVEL
	OUT LEVEL
GUITAR TO MIDI/ BASS TO MIDI	ON/OFF

ASSIGN HOLD

Parameter	Value	Explanation
EXP 1 EXP 2 GK VOL *1	OFF	When you switch to a different memory, the values for EXP1, EXP2 and GK VOL are set to the values saved for that memory.
	ON	When you switch to a different memory, if the parameters assigned to EXP1, EXP2 and GK VOL are the same as the previous memory, the values stay the same.

*1 Enabled when GK TYPE (p. 45) is set to a value other than GK-5 or GK-5B.

GROUND LIFT

Parameter	Value	Explanation
RETURN	Specifies whether the ground of the RETURN jack is connected to the VG-800's chassis or is disconnected.	
	GND	The ground of the RETURN jack is connected to the chassis (no ground lift).
	LIFT	The ground of the RETURN jack is disconnected from the chassis.

AUTO OFF

The power to this unit turns off automatically to save energy after a certain amount of time (20 minutes by default) has passed since it was last used or since its buttons or controls were operated.

- If the power automatically turns off, any unsaved data is lost. Before the power turns off, save the data that you want to keep.
- If you don't want the unit to turn off automatically, turn this setting off. Note that when the setting is turned off, the unit may consume more power.
- You can simply turn the power back on after it has turned off automatically.

Parameter	Value	Explanation
AUTO OFF	20 MIN	The power will turn off automatically when 20 minutes have passed since you last played or operated the unit. * This is the factory setting.
	1 HOUR	The power will turn off automatically when 1 hour has passed since you last played or operated the unit.
	5 HOURS	The power will turn off automatically when 5 hours have passed since you last played or operated the unit.
	10 HOURS	The power will turn off automatically when 10 hours have passed since you last played or operated the unit.
	OFF	The power will not turn off automatically.

OTHER

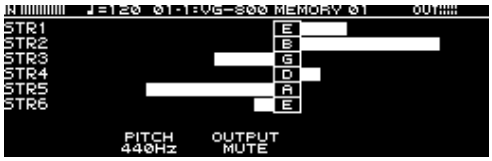
Parameter	Value	Explanation
LCD CONTRAST	1–10	Here you can adjust the brightness of the characters in the display.

TUNER paremeters

The VG-800 tuner features three modes: single mode for tuning individual strings, multi mode for determining the pitch of all strings at the same time, and TT mode for tuning guitars/bass guitars that use true temperament.

You can use the [◀] [▶] buttons on the tuner screen to switch between modes.

MULTI MODE



SINGLE MODE

TT MODE

* TT mode only allows for regular tuning.

Parameter	Value	Explanation
PITCH	435–445 Hz	Specifies the reference pitch.
OUTPUT	MUTE	Sound will not be output while tuning.
	BYPASS	While tuning, the sound of the divided pickup being input to the VG-800 is output without change.
	THRU	Lets you tune your guitar while outputting the sound of the current memory. * When ALT TUNE is on, the alternate tuning is applied to the outputted sound.

FX BYPASS paremeters

FX BYPASS is a function that bypasses all effects and outputs only the INST sound.

You can use this to check only the INST sound without having to turn off each effect.

Parameter	Value	Explanation
FX BYPASS	OFF, ON	When this is "ON", only the INST sound is output.

PLAY OPTION paremeters

Here you can specify how the pedals will work during performance.

Parameter	Value	Explanation
FOOT SWITCH MODE	UP/DOWN	Use this mode to switch consecutively between the memories stored in this unit. Press the [▼] pedal to switch to the previous memory. Press the [▲] pedal to switch to the next memory.
	BANK/NUMBER	Use this mode to switch between the three memories stored in this unit. Press the [▼] pedal to switch to the first memory in the same bank. Press the [▲] pedal to switch to the second memory in the same bank. Press the [CTL1] pedal to switch to the third memory in the same bank. Press the [▼] and [▲] pedals at the same time to switch to the previous bank. Press the [▲] and [CTL1] pedals at the same time to switch to the next bank. **MEMO** • You can use the BANK MODE setting to set whether the memory changes instantly when you switch to a different bank, or after you actually select the memory. • The CURRENT NUMBER (CUR NUM) function is available only in BANK/NUMBER mode.
MEMORY EXTENT MIN *1	01-1–50-3	Sets the lower limit for the memories
MEMORY EXTENT MAX *1	01-1–50-3	Sets the upper limit for the memories.
DOWN&UP SWITCH *1	OFF, TUNER, FX BYPASS, MEMORY -1, MEMORY +1	Specifies what happens when you press the pedals on this unit at the same time.
UP&CTL SWITCH *1		
BANK MODE *2	WAIT	When you switch to a different bank, the display changes but the memory does not change yet. Once you press a pedal on the unit, the bank and number are confirmed, which switches to the next memory.
	I mmED	The unit switches to the next memory instantly when any pedal is pressed.
BANK EXTENT MIN *2	01–50	Sets the lower limit for the banks.
BANK EXTENT MAX *2	01–50	Sets the upper limit for the banks.

*1 Enabled when FOOT SWITCH MODE is set to UP/DOWN.

*2 Enabled when FOOT SWITCH MODE is set to BANK/NUMBER.

MIDI paremeters

MIDI SETTING

These parameters let you make settings for using MIDI, with the VG-800 connected to an external MIDI device or a computer.

Parameter	Value	Explanation
RX CHANNEL	This sets the MIDI channel used for receiving MIDI messages.	
	Ch1–Ch16	Specifies the receive channel.
TX CHANNEL	Sets the MIDI channel used for transmitting MIDI messages.	
	Ch1–Ch16	Specifies the transmit channel.
	RX	Transmits on the same channel as the RX CHANNEL.
DEVICE ID	This sets the MIDI Device ID used for transmitting and receiving Exclusive messages.	
	1–32	Sets the MIDI Device ID.
MIDI IN THRU	This specifies the jack from which to output the MIDI messages that are received at the MIDI IN jack.	
	OFF	MIDI messages are not transmitted.
	MIDI OUT	Messages are transmitted from the MIDI OUT connector.
	USB OUT	Messages are transmitted from the USB port.
	USB/MIDI	Output from the USB port and the MIDI OUT connector.
USB IN THRU	This specifies the jack from which to output the MIDI messages that are received at the USB port.	
	OFF	MIDI messages are not transmitted.
	MIDI OUT	Messages are transmitted from the MIDI OUT connector.
	USB OUT	Messages are transmitted from the USB port.
	USB/MIDI	Output from the USB port and the MIDI OUT connector.
SYNC CLOCK	This setting determines the basis used for synchronizing the timing for effect modulation rates and other time-based parameters. * When SYNC CLOCK is set to "AUTO", "MIDI-AUTO" or "USB-AUTO" and an external MIDI device is connected, this unit synchronizes with the tempo of the external MIDI device. In this case, the BPM parameter for the scene is disabled. When you want to use this unit's BPM setting as the basis for synchronization (by enabling the BPM parameter), set SYNC CLOCK to "INTERNAL". * When synchronizing performances to the MIDI Clock signal from an external MIDI device, timing problems in the performance may occur due to errors in the MIDI Clock.	
	AUTO	Operations are synchronized to MIDI clock messages received via MIDI or USB. However, operations are automatically synchronized to the VG-800's internal clock if it is unable to receive the external Clock.
	INTERNAL	Operations are synchronized to the VG-800's internal Clock.
	MIDI-AUTO	Operations are synchronized to the MIDI Clock received via MIDI. However, operations are automatically synchronized to the VG-800's internal clock if it is unable to receive the external Clock.

Parameter	Value	Explanation
SYNC CLOCK	USB-AUTO	Operations are synchronized to the USB Clock received via USB. However, operations are automatically synchronized to the VG-800's internal clock if it is unable to receive the external Clock.
CLOCK OUT	Specifies whether MIDI clock will be output from the VG-800.	
	OFF	MIDI clock is not output.
	ON	MIDI clock is output.
PC OUT	Sets whether program change messages are output or not when the memory changes.	
	OFF	MIDI data for MEMORY MIDI is not output (CC data for MEMORY MIDI is also not output).
	ON	Program change messages are output.
TX PC MAP	Sets the program change message that's output when you switch memories on the VG-800.	
	FIX	Transmits a program change message that's set beforehand for each memory number, regardless of the memory settings.
	MEMORY MIDI	Transmits the MIDI message for MEMORY MIDI (including CC messages) that's set for each memory.
RX PC MAP	You can choose whether this unit switches to the memory corresponding to the program change message that's received, or switches to the memory that's specified in "PROGRAM MAP BANK1–BANK2" when the VG-800 receives a program change message.	
	FIX	Switches to the memory that corresponds to the received program change message. In this case, "PROGRAM MAP BANK1–BANK2" is disabled.
	PROG	Switches to the memory specified by "PROGRAM MAP BANK1–BANK2".
DOWN CC# **UP CC#** **CTL1 CC#** **CTL2 CC#** **CTL3 CC#** **CTL4 CC#** **CTL5 CC#** **EXP1 CC#** **EXP2 CC#** **GK VOL CC#** **GK SW1 CC#** **GK SW2 CC#**	Specifies the controller number when transmitting pedal operations as control change messages.	
	OFF	Control Change messages are not output.
	CC#1–31, 64–95	Pedal operations are transmitted using the specified controller number. * DOWN CC#, UP CC#, CTL1 CC# are enabled when FOOT SW MODE (p. 52) is set to "UP/DOWN".

PROGRAM MAP BANK1–BANK2

You can freely set which program change message received by the VG-800 corresponds to which memory to switch to, when switching memories in response to a program change message transmitted by an external MIDI device.

Parameter	Value	Explanation
PC#1–PC#128	01-1–50-3	Sets the memory number (from 01-1 to 50-3) that corresponds to the program change message.

GUITAR TO MIDI/BASS TO MIDI

Parameter	Value	Explanation
ON/OFF	OFF, ON	Sets the GUITAR TO MIDI/BASS TO MIDI function ON/OFF. When set to OFF, all MIDI messages related to GUITAR TO MIDI/BASS TO MIDI are no longer output.
BASIC CHANNEL	Ch1–Ch10	Sets the MIDI transmit channel used by the GUITAR TO MIDI/BASS TO MIDI function.
BEND THIN	OFF, ON	When set to ON, this reduces (thins out) the amount of pitch bend messages, which in turn reduces the overall MIDI data load.
PC MASK	OFF, ON	When this is set to ON, bank select and program change messages for the GUITAR TO MIDI/BASS TO MIDI function are not transmitted when the scene changes.
HOLD CONTROL	CTL1, CTL2, CTL3, CTL4, CTL5, GK SW1, GK SW2	Sets the controller used to control the hold function. * When this is set to "CTL1", you can't use this function while FOOT SW MODE (p. 52) is set to "BANK/NUMBER".

FACTORY RESET paremeters

Initializes the VG-800 to its factory-set condition.

MEMO

This initializes only the currently selected mode.

When performing a factory reset in guitar mode, the bass mode settings are not initialized.

Parameter	Value	Explanation
FROM, TO	SYSTEM	Initializes the system parameters.
	01-1–50-3	The settings for memories 01-1 through 50-3 are initialized.

MODE SETTING

You can select whether to connect a guitar or a bass guitar when using the VG-800.

When using a guitar, use guitar mode (GUITAR); and when using a bass guitar, use bass mode (BASS).

MEMO

- This is set to "GUITAR" when using the factory settings.
- The VG-800 starts up using the selected mode until the next time you switch modes.
- The parameter display may change depending on the mode you select.
- Memories are saved for guitar mode and bass mode respectively.

ASSIGN TARGET list

GUITAR MODE

CATEGORY	PARAMETER
TUNER	ON/OFF
MASTER	BPM
	KEY
	MEMORY LEVEL
TAP	BPM TAP
	DLY1 TAP
	DLY2 TAP
	FX1 DLY TAP
	FX2 DLY TAP
	FX3 DLY TAP
INST	ON/OFF
	TYPE
	INST LEVEL
	NOR MIX SW
	NOR MIX LEVEL
INST:ALT TUNE (A)	ON/OFF
	MODE
	TYPE
	PITCH 1
	PITCH 2
	PITCH 3
	PITCH 4
	PITCH 5
	PITCH 6
	PITCH 7
	FINE 1
	FINE 2
	FINE 3
	FINE 4
	FINE 5
	FINE 6
	FINE 7
INST:ALT TUNE B	ON/OFF
	MODE
	TYPE
	PITCH 1
	PITCH 2
	PITCH 3
	PITCH 4
	PITCH 5
	PITCH 6
	PITCH 7
	FINE 1
	FINE 2
	FINE 3
	FINE 4
	FINE 5
	FINE 6
	FINE 7
INST:HARMONY	(A)HARMO
	B:HARMO
INST:HARMONY:DUAL	A:DELAY 1
	A:DELAY 2
	A:DELAY 3
	A:DELAY 4
	A:DELAY 5
	A:DELAY 6
	A:DELAY 7
	B:DELAY 1
	B:DELAY 2
	B:DELAY 3
	B:DELAY 4
	B:DELAY 5
	B:DELAY 6
	B:DELAY 7
INST:12STR	(A)ON/OFF
	B:ON/OFF
	12STR TYPE
	12STR PITCH 1
	12STR PITCH 2
	12STR PITCH 3
	12STR PITCH 4
	12STR PITCH 5
	12STR PITCH 6
	12STR PITCH 7
	12STR FINE 1
	12STR FINE 2
	12STR FINE 3
	12STR FINE 4
	12STR FINE 5
	12STR FINE 6
	12STR FINE 7
	12STR LEVEL 1
	12STR LEVEL 2
	12STR LEVEL 3
	12STR LEVEL 4
	12STR LEVEL 5
	12STR LEVEL 6
	12STR LEVEL 7
	12STR DELAY 1
	12STR DELAY 2
	12STR DELAY 3
	12STR DELAY 4
	12STR DELAY 5
	12STR DELAY 6
	12STR DELAY 7
INST:STR BEND (A)	ON/OFF
	BEND DEPTH 1
	BEND DEPTH 2
	BEND DEPTH 3
	BEND DEPTH 4
	BEND DEPTH 5
	BEND DEPTH 6
	BEND DEPTH 7
	BEND CONTROL

CATEGORY	PARAMETER
INST:STR BEND B	ON/OFF
	BEND DEPTH 1
	BEND DEPTH 2
	BEND DEPTH 3
	BEND DEPTH 4
	BEND DEPTH 5
	BEND DEPTH 6
	BEND DEPTH 7
	BEND CONTROL
INST:STRING(A)	STRING LEVEL 1
	STRING LEVEL 2
	STRING LEVEL 3
	STRING LEVEL 4
	STRING LEVEL 5
	STRING LEVEL 6
	STRING LEVEL 7
	STRING PAN 1
	STRING PAN 2
	STRING PAN 3
	STRING PAN 4
	STRING PAN 5
	STRING PAN 6
	STRING PAN 7
INST:STRING B	STRING LEVEL 1
	STRING LEVEL 2
	STRING LEVEL 3
	STRING LEVEL 4
	STRING LEVEL 5
	STRING LEVEL 6
	STRING LEVEL 7
	STRING PAN 1
	STRING PAN 2
	STRING PAN 3
	STRING PAN 4
	STRING PAN 5
	STRING PAN 6
	STRING PAN 7
INST:STRING:DUAL	A:POSITION LIMIT SW
	A:POSITION LIMIT LOW
	A:POSITION LIMIT HIGH
	B:POSITION LIMIT SW
	B:POSITION LIMIT LOW
	B:POSITION LIMIT HIGH
INST:EQ (A)	ON/OFF
	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL

CATEGORY	PARAMETER
INST:EQ B	ON/OFF
	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL
INST:NS (A)	ON/OFF
	THRESHOLD
	RELEASE
INST:NS B	ON/OFF
	THRESHOLD
	RELEASE
INST:E.GTR	TYPE
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	VOLUME
	TONE
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:ACOUSTIC	TYPE
	BODY
	ATTACK
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	SENS
	COLOR
	DECAY
	BUZZ
	RESONANCE
	SUSTAIN
	VOLUME
	TONE
INST:DUAL GUITAR	MODE
	GUITAR SELECT
	A/B BALANCE
	A:TYPE
	B:TYPE

CATEGORY	PARAMETER
INST:DUAL GTR:E.GTR	A:PICKUP SELECT
	A:VOLUME
	A:TONE
	A:TONE TYPE
	A:SENS
	A:DEPTH
	A:ATTACK
	A:RESONANCE
	A:DIRECT MIX
	B:PICKUP SELECT
	B:VOLUME
	B:TONE
	B:TONE TYPE
	B:SENS
	B:DEPTH
	B:ATTACK
	B:RESONANCE
	B:DIRECT MIX
INST:DUAL GTR:ACO	A:BODY
	A:ATTACK
	A:PICKUP SELECT
	A:SENS
	A:COLOR
	A:DECAY
	A:BUZZ
	A:RESONANCE
	A:SUSTAIN
	A:VOLUME
	A:TONE
	B:BODY
	B:ATTACK
	B:PICKUP SELECT
	B:SENS
	B:COLOR
	B:DECAY
	B:BUZZ
	B:RESONANCE
	B:SUSTAIN
	B:VOLUME
	B:TONE

CATEGORY	PARAMETER
INST:DUAL GTR:E.BASS	A:VOLUME
	A:TONE
	A:REAR VOLUME
	A:FRONT VOLUME
	A:TONE TYPE
	A:SENS
	A:DEPTH
	A:ATTACK
	A:RESONANCE
	A:DIRECT MIX
	B:VOLUME
	B:TONE
	B:REAR VOLUME
	B:FRONT VOLUME
	B:TONE TYPE
	B:SENS
	B:DEPTH
	B:ATTACK
	B:RESONANCE
	B:DIRECT MIX
INST:E.BASS	TYPE
	VOLUME
	TONE
	REAR VOLUME
	FRONT VOLUME
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:VIO GUITAR:GUITAR	TYPE
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	VOLUME
	TONE
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:VIO GUITAR:HARMO	PITCH
	GAIN
	ATTACK
	DIRECT LEVEL
INST:VIO GUITAR:FILTER	OVERTONE
	ATTACK
	POWER BEND
	SLIDE TIME
	OCTAVE
	COLOR
	TOUCH SENS
	LEAD EMPHASIS
	DRY LEVEL
INST:SYNTH	TYPE
	VOLUME

CATEGORY	PARAMETER
INST:SYN:GR-300	MODE
	COMP SW
	CUTOFF
	RESONANCE
	ENV MOD SW
	ENV MOD SENS
	ENV MOD ATTACK
	PITCH SW
	PITCH A
	FINE A
	PITCH B
	FINE B
	DUET SW
	SWEEP SW
	SWEEP RISE
	SWEEP FALL
	VIBRATO SW
	VIBRATO RATE
	VIBRATO DEPTH
	LOW CUT
	HIGH CUT
INST:SYN:SOLO	CUTOFF
	RESONANCE
	TOUCH SENS
	COLOR
	SUSTAIN
INST:SYN:FILTER BASS	CUTOFF
	RESONANCE
	TOUCH SENS
	DECAY
	COLOR
INST:SYN:CRYSTAL	ATTACK LENGTH
	MOD TUNE
	MOD DEPTH
	ATTACK LEVEL
	BODY LEVEL
	SUSTAIN
INST:SYN:ORGAN	FEET 16
	FEET 5+1/3
	FEET 8
	FEET 4
	FEET 2+2/3
	FEET 2
	FEET 1+3/5
	FEET 1+1/3
	FEET 1
	SUSTAIN

MEMO

See "Common for GUITAR MODE/BASS MODE" (p. 61) for the other ASSIGN TARGET for GUITAR mode.

BASS MODE

CATEGORY	PARAMETER
TUNER	ON/OFF
MASTER	BPM
	KEY
	MEMORY LEVEL
TAP	BPM TAP
	DLY1 TAP
	DLY2 TAP
	FX1 DLY TAP
	FX2 DLY TAP
	FX3 DLY TAP
INST	ON/OFF
	TYPE
	INST LEVEL
	NOR MIX SW
	NOR MIX LEVEL
INST:ALT TUNE (A)	ON/OFF
	MODE
	TYPE
	PITCH HiC
	PITCH 1st
	PITCH 2nd
	PITCH 3rd
	PITCH 4th
	PITCH LowB
	FINE HiC
	FINE 1st
	FINE 2nd
	FINE 3rd
	FINE 4th
	FINE LowB
INST:ALT TUNE B	ON/OFF
	MODE
	TYPE
	PITCH HiC
	PITCH 1st
	PITCH 2nd
	PITCH 3rd
	PITCH 4th
	PITCH LowB
	FINE HiC
	FINE 1st
	FINE 2nd
	FINE 3rd
	FINE 4th
	FINE LowB
INST:HARMONY	(A)HARMO
	B:HARMO

CATEGORY	PARAMETER
INST:HARMONY:DUAL	A:DELAY HiC
	A:DELAY 1st
	A:DELAY 2nd
	A:DELAY 3rd
	A:DELAY 4th
	A:DELAY LoB
	B:DELAY HiC
	B:DELAY 1st
	B:DELAY 2nd
	B:DELAY 3rd
	B:DELAY 4th
	B:DELAY LoB
INST:12STR	(A)ON/OFF
	B:ON/OFF
	12STR TYPE
	12STR PITCH HiC
	12STR PITCH 1st
	12STR PITCH 2nd
	12STR PITCH 3rd
	12STR PITCH 4th
	12STR PITCH LowB
	12STR FINE HiC
	12STR FINE 1st
	12STR FINE 2nd
	12STR FINE 3rd
	12STR FINE 4th
	12STR FINE LowB
	12STR LEVEL HiC
	12STR LEVEL 1st
	12STR LEVEL 2nd
	12STR LEVEL 3rd
	12STR LEVEL 4th
	12STR LEVEL LowB
	12STR DELAY HiC
	12STR DELAY 1st
	12STR DELAY 2nd
	12STR DELAY 3rd
	12STR DELAY 4th
	12STR DELAY LowB
INST:STR BEND (A)	ON/OFF
	BEND DEPTH HiC
	BEND DEPTH 1st
	BEND DEPTH 2nd
	BEND DEPTH 3rd
	BEND DEPTH 4th
	BEND DEPTH LowB
	BEND CONTROL
INST:STR BEND B	ON/OFF
	BEND DEPTH HiC
	BEND DEPTH 1st
	BEND DEPTH 2nd
	BEND DEPTH 3rd
	BEND DEPTH 4th
	BEND DEPTH LowB
	BEND CONTROL

CATEGORY	PARAMETER
INST:STRING(A)	STRING LEVEL HiC
	STRING LEVEL 1st
	STRING LEVEL 2nd
	STRING LEVEL 3rd
	STRING LEVEL 4th
	STRING LEVEL LowB
	STRING PAN HiC
	STRING PAN 1st
	STRING PAN 2nd
	STRING PAN 3rd
	STRING PAN 4th
	STRING PAN LowB
INST:STRING B	STRING LEVEL HiC
	STRING LEVEL 1st
	STRING LEVEL 2nd
	STRING LEVEL 3rd
	STRING LEVEL 4th
	STRING LEVEL LowB
	STRING PAN HiC
	STRING PAN 1st
	STRING PAN 2nd
	STRING PAN 3rd
	STRING PAN 4th
	STRING PAN LowB
INST:STRING:DUAL	A:POSITION LIMIT SW
	A:POSITION LIMIT LOW
	A:POSITION LIMIT HIGH
	B:POSITION LIMIT SW
	B:POSITION LIMIT LOW
	B:POSITION LIMIT HIGH
INST:EQ (A)	ON/OFF
	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL
INST:EQ B	ON/OFF
	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL
INST:NS (A)	ON/OFF
	THRESHOLD
	RELEASE

CATEGORY	PARAMETER
INST:NS B	ON/OFF
	THRESHOLD
	RELEASE
INST:E.BASS	TYPE
	MASTER VOLUME
	REAR VOLUME
	FRONT VOLUME
	VOLUME
	TONE
	REAR TONE
	FRONT TONE
	TREBLE
	BASS
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	TREBLE ON
	BASS ON
	RHYTHM/SOLO
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:AC BASS	VOLUME
	BODY
	RESONANCE
	SIZE
	ATTACK
	BOTTOM
	BUZZ SENS
	DECAY
INST:DUAL BASS	MODE
	BASS SELECT
	A/B BALANCE
	A:TYPE
	B:TYPE

CATEGORY	PARAMETER
INST:DUAL BSS:E.BASS	A:MASTER VOLUME
	A:REAR VOLUME
	A:FRONT VOLUME
	A:VOLUME
	A:TONE
	A:REAR TONE
	A:FRONT TONE
	A:TREBLE
	A:BASS
	A:PU SELECT
	A:TREBLE ON
	A:BASS ON
	A:RHYTHM/SOLO
	A:TONE TYPE
	A:SENS
	A:DEPTH
	A:ATTACK
	A:RESONANCE
	A:DIRECT MIX
	B:MASTER VOLUME
	B:REAR VOLUME
	B:FRONT VOLUME
	B:VOLUME
	B:TONE
	B:REAR TONE
	B:FRONT TONE
	B:TREBLE
	B:BASS
	B:PU SELECT
	B:TREBLE ON
	B:BASS ON
	B:RHYTHM/SOLO
	B:TONE TYPE
	B:SENS
	B:DEPTH
	B:ATTACK
	B:RESONANCE
	B:DIRECT MIX
INST:DUAL BSS:AC BASS	A:VOLUME
	A:BODY
	A:RESONANCE
	A:SIZE
	A:ATTACK
	A:BOTTOM
	A:BUZZ SENS
	A:DECAY
	B:VOLUME
	B:BODY
	B:RESONANCE
	B:SIZE
	B:ATTACK
	B:BOTTOM
	B:BUZZ SENS
	B:DECAY

CATEGORY	PARAMETER
INST:DUAL BSS:E.GTR	A:PICKUP SELECT
	A:VOLUME
	A:TONE
	A:TONE TYPE
	A:SENS
	A:DEPTH
	A:ATTACK
	A:RESONANCE
	A:DIRECT MIX
	B:PICKUP SELECT
	B:VOLUME
	B:TONE
	B:TONE TYPE
	B:SENS
	B:DEPTH
	B:ATTACK
	B:RESONANCE
	B:DIRECT MIX
INST:E.GTR	TYPE
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	VOLUME
	TONE
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:VIO BASS:BASS	TYPE
	MASTER VOLUME
	REAR VOLUME
	FRONT VOLUME
	VOLUME
	TONE
	REAR TONE
	FRONT TONE
	TREBLE
	BASS
	PU SELECT
	PU SELECT UP
	PU SELECT DOWN
	TREBLE ON
	BASS ON
	RHYTHM/SOLO
	TONE TYPE
	SENS
	DEPTH
	ATTACK
	RESONANCE
	DIRECT MIX
INST:VIO BASS:HARMO	PITCH
	GAIN
	ATTACK
	DIRECT LEVEL

CATEGORY	PARAMETER
INST:VIO BASS:FILTER	OVERTONE
	ATTACK
	POWER BEND
	SLIDE TIME
	OCTAVE
	COLOR
	TOUCH SENS
	LEAD EMPHASIS
	DRY LEVEL
INST:SYNTH	TYPE
	VOLUME
INST:SYN:ANALOG GR	MODE
	COMP SW
	CUTOFF
	RESONANCE
	ENV MOD SW
	ENV MOD SENS
	ENV MOD ATTACK
	PITCH SW
	PITCH A
	FINE A
	PITCH B
	FINE B
	DUET SW
	SWEEP SW
	SWEEP RISE
	SWEEP FALL
	VIBRATO SW
	VIBRATO RATE
	VIBRATO DEPTH
	LOW CUT
	HIGH CUT
INST:SYN:SOLO	CUTOFF
	RESONANCE
	TOUCH SENS
	COLOR
	SUSTAIN
INST:SYN:FILTER BASS	CUTOFF
	RESONANCE
	TOUCH SENS
	DECAY
	COLOR
INST:SYN:CRYSTAL	ATTACK LENGTH
	MOD TUNE
	MOD DEPTH
	ATTACK LEVEL
	BODY LEVEL
	SUSTAIN
INST:SYN:ORGAN	FEET 16
	FEET 5+1/3
	FEET 8
	FEET 4
	FEET 2+2/3
	FEET 2
	FEET 1+3/5
	FEET 1+1/3
	FEET 1
	SUSTAIN

MEMO

See "Common for GUITAR MODE/BASS MODE" (p. 61) for the other ASSIGN TARGET for BASS mode.

Common for GUITAR MODE/BASS MODE

CATEGORY	PARAMETER
FX1, FX2, FX3	ON/OFF
	TYPE
FX1:AC RESONANCE FX2:AC RESONANCE FX3:AC RESONANCE	TYPE
	RESONANCE
	TONE
	LEVEL
FX1:AUTO WAH FX2:AUTO WAH FX3:AUTO WAH	FILTER MODE
	RATE
	DEPTH
	EFFECT LEVEL
	FREQUENCY
	RESONANCE
	WAVEFORM
	DIRECT MIX
FX1:CHORUS FX2:CHORUS FX3:CHORUS	MODE
	RATE
	DEPTH
	PRE-DELAY
	EFFECT LEVEL
	WAVEFORM
	LOW CUT
	HIGH CUT
	DIRECT LEVEL
	RATE1
	DEPTH1
	PRE-DELAY1
	EFFECT LEVEL1
	WAVEFORM1
	LOW CUT1
	HIGH CUT1
	RATE2
	DEPTH2
	PRE-DELAY2
	EFFECT LEVEL2
	WAVEFORM2
	LOW CUT2
	HIGH CUT2
	OUTPUT MODE
FX1:CLASSIC-VIBE FX2:CLASSIC-VIBE FX3:CLASSIC-VIBE	RATE
	DEPTH
	EFFECT LEVEL
FX1:COMPRESSOR FX2:COMPRESSOR FX3:COMPRESSOR	TYPE
	SUSTAIN
	ATTACK
	EFFECT LEVEL
	DIRECT MIX
	TONE
FX1:DEFRETTER FX2:DEFRETTER FX3:DEFRETTER	SENS
	DEPTH
	TONE
	EFFECT LEVEL
	ATTACK
	RESONANCE
	DIRECT MIX
FX1:DEFRETTER BASS FX2:DEFRETTER BASS FX3:DEFRETTER BASS	SENS
	ATTACK
	TONE
	EFFECT LEVEL
	DIRECT MIX
FX1:DELAY FX2:DELAY FX3:DELAY	TYPE
	TIME
	FEE dBACK
	EFFECT LEVEL
	HIGH CUT
	DIRECT LEVEL
	TAP TIME
	TRIGGER
	CARRY OVER
FX1:DELAY:DUAL FX2:DELAY:DUAL FX3:DELAY:DUAL	D1 TIME
	D1 FEE dBACK
	D1 HIGH CUT
	D1 EFFECT LEVEL
	D2 TIME
	D2 FEE dBACK
	D2 HIGH CUT
	D2 EFFECT LEVEL
FX1:DELAY:MOD FX2:DELAY:MOD FX3:DELAY:MOD	MOD RATE
	MOD DEPTH
FX1:DELAY:TWIST FX2:DELAY:TWIST FX3:DELAY:TWIST	MODE
	RISE TIME
	FALL TIME
	FADE TIME
FX1:FLANGER FX2:FLANGER FX3:FLANGER	RATE
	DEPTH
	RESONANCE
	MANUAL
	SEPARATION
	LOW CUT
	HIGH CUT
	EFFECT LEVEL
	DIRECT MIX
FX1:FLANGER BASS FX2:FLANGER BASS FX3:FLANGER BASS	RATE
	DEPTH
	RESONANCE
	MANUAL
	SEPARATION
	LOW CUT
	HIGH CUT
	EFFECT LEVEL
	DIRECT LEVEL
FX1:FOOT VOLUME FX2:FOOT VOLUME FX3:FOOT VOLUME	VOLUME MIN
	VOLUME MAX
	VOLUME CURVE
	PEDAL POSITION

CATEGORY	PARAMETER
FX1:GRAPHIC EQ FX2:GRAPHIC EQ FX3:GRAPHIC EQ	100 Hz
	200 Hz
	400 Hz
	800 Hz
	1.6 kHz
	3.2 kHz
	6.4 kHz
	LEVEL
FX1:HARMONIST FX2:HARMONIST FX3:HARMONIST	VOICE
	HR1:HARMONY
	HR2:HARMONY
	HR1:LEVEL
	HR1:PRE-DELAY
	HR1:FEE dBACK
	DIRECT LEVEL
	HR2:LEVEL
	HR2:PRE-DELAY
FX1:HUMANIZER FX2:HUMANIZER FX3:HUMANIZER	MODE
	VOWEL1
	VOWEL2
	SENS
	RATE
	DEPTH
	MANUAL
	EFFECT LEVEL
FX1:ISOLATOR FX2:ISOLATOR FX3:ISOLATOR	BAND
	RATE
	DEPTH
	BAND LEVEL
FX1:LIMITER FX2:LIMITER FX3:LIMITER	TYPE
	THRESHOLD
	RATIO
	EFFECT LEVEL
	ATTACK
	RELEASE
FX1:LO-FI FX2:LO-FI FX3:LO-FI	BIT DEPTH
	SAMPLE RATE
	BALANCE
FX1:OCTAVE FX2:OCTAVE FX3:OCTAVE	-2OCT
	-1OCT
	DIRECT LEVEL
FX1:OCTAVE BASS FX2:OCTAVE BASS FX3:OCTAVE BASS	-2OCT
	-1OCT
	DIRECT LEVEL
FX1:PAN FX2:PAN FX3:PAN	TYPE
	WAVEFORM
	RATE
	DEPTH
	EFFECT LEVEL
	POSITION

CATEGORY	PARAMETER
FX1:PARAMETRIC EQ FX2:PARAMETRIC EQ FX3:PARAMETRIC EQ	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL
FX1:PEDAL BEND FX2:PEDAL BEND FX3:PEDAL BEND	PITCH
	PEDAL POSITION
	EFFECT LEVEL
	DIRECT MIX
FX1:PHASER FX2:PHASER FX3:PHASER	TYPE
	RATE
	DEPTH
	RESONANCE
	MANUAL
	STEP RATE
	EFFECT LEVEL
	DIRECT MIX
FX1:PITCH SHIFTER FX2:PITCH SHIFTER FX3:PITCH SHIFTER	VOICE
	PS1:PITCH
	PS2:PITCH
	DIRECT LEVEL
	PS1:MODE
	PS1:FINE
	PS1:PRE-DELAY
	PS1:LEVEL
	PS1:FEE dBACK
	PS2:MODE
	PS2:FINE
	PS2:PRE-DELAY
	PS2:LEVEL
FX1:REVERB FX2:REVERB FX3:REVERB	TYPE
	TIME
	PRE-DELAY
	EFFECT LEVEL
	LOW CUT
	HIGH CUT
	DENSITY
	DIRECT LEVEL
	CARRY OVER
	SPRING SENS
FX1:RING MOD FX2:RING MOD FX3:RING MOD	INTELLIGENT
	FREQUENCY
	FREQ MOD RATE
	FREQ MOD DEPTH
	EFFECT LEVEL
	DIRECT MIX

CATEGORY	PARAMETER
FX1:ROTARY FX2:ROTARY FX3:ROTARY	SPEED SELECT
	RATE SLOW
	RATE FAST
	DEPTH
	RISE TIME
	FALL TIME
	EFFECT LEVEL
	DIRECT MIX
FX1:SITAR SIM FX2:SITAR SIM FX3:SITAR SIM	SENS
	DEPTH
	TONE
	EFFECT LEVEL
	RESONANCE
	BUZZ
	DIRECT MIX
FX1:SLICER FX2:SLICER FX3:SLICER	PATTERN
	RATE
	TRIGGER
	EFFECT LEVEL
	ATTACK
	DUTY
	DIRECT MIX
FX1:SLOW GEAR FX2:SLOW GEAR FX3:SLOW GEAR	SENS
	RISE TIME
	EFFECT LEVEL
FX1:SLOW GEAR BASS FX2:SLOW GEAR BASS FX3:SLOW GEAR BASS	SENS
	RISE TIME
	EFFECT LEVEL
FX1:SOUND HOLD FX2:SOUND HOLD FX3:SOUND HOLD	TRIGGER
	RISE TIME
	EFFECT LEVEL
FX1:TOUCH WAH FX2:TOUCH WAH FX3:TOUCH WAH	FILTER MODE
	POLARITY
	SENS
	FREQUENCY
	RESONANCE
	DECAY
	EFFECT LEVEL
	DIRECT MIX
FX1:TOUCH WAH BASS FX2:TOUCH WAH BASS FX3:TOUCH WAH BASS	FILTER MODE
	POLARITY
	SENS
	FREQUENCY
	RESONANCE
	DECAY
	EFFECT LEVEL
	DIRECT MIX
FX1:TREMOLO FX2:TREMOLO FX3:TREMOLO	WAVEFORM
	RATE
	DEPTH
	EFFECT LEVEL
	DIRECT MIX
FX1:VIBRATO FX2:VIBRATO FX3:VIBRATO	RATE
	DEPTH
	TRIGGER
	RISE TIME
	EFFECT LEVEL
	DIRECT MIX

CATEGORY	PARAMETER
FX1:WAH FX2:WAH FX3:WAH	TYPE
	PEDAL POSITION
	PEDAL MIN
	PEDAL MAX
	EFFECT LEVEL
	DIRECT MIX
AMP1 AMP2	ON/OFF
	TYPE
	GAIN
	SAG
	RESONANCE
	LEVEL
	BASS
	MIDDLE
	TREBLE
	PRESENCE
	BRIGHT
	GAIN SW
	SOLO SW
	SOLO LEVEL
	SP TYPE
	MIC TYPE
	MIC DISTANCE
	MIC POSITION
	MIC LEVEL
	DIRECT MIX
COMPRESSOR	ON/OFF
	TYPE
	SUSTAIN
	ATTACK
	EFFECT LEVEL
	DIRECT MIX
	TONE
DISTORTION	ON/OFF
	TYPE
	DRIVE
	TONE
	LEVEL
	BOTTOM
	DIRECT MIX
	SOLO SW
	SOLO LEVEL
EQ1 EQ2	ON/OFF
	LOW CUT
	LOW GAIN
	LOW-MID FREQ
	LOW-MID Q
	LOW-MID GAIN
	HIGH-MID FREQ
	HIGH-MID Q
	HIGH-MID GAIN
	HIGH GAIN
	HIGH CUT
	LEVEL

CATEGORY	PARAMETER
CHORUS	ON/OFF
	MODE
	RATE
	DEPTH
	PRE-DELAY
	EFFECT LEVEL
	WAVEFORM
	LOW CUT
	HIGH CUT
	DIRECT LEVEL
	RATE1
	DEPTH1
	PRE-DELAY1
	EFFECT LEVEL1
	WAVEFORM1
	LOW CUT1
	HIGH CUT1
	RATE2
	DEPTH2
	PRE-DELAY2
	EFFECT LEVEL2
	WAVEFORM2
	LOW CUT2
	HIGH CUT2
	OUTPUT MODE
DELAY1 DELAY2	ON/OFF
	DELAY TIME
	FEE dBACK
	EFFECT LEVEL
	HIGH CUT
	DIRECT LEVEL
	TAP TIME
	CARRY OVER
REVERB	ON/OFF
	TYPE
	TIME
	PRE-DELAY
	EFFECT LEVEL
	LOW CUT
	HIGH CUT
	DENSITY
	DIRECT LEVEL
	CARRY OVER
	SPRING SENS
NOISE SUPPRESSOR1 NOISE SUPPRESSOR2	ON/OFF
	THRESHOLD
	RELEASE
	DETECT
FOOT VOLUME1 FOOT VOLUME2	VOLUME MIN
	VOLUIME MAX
	VOLUME CURVE
	PEDAL POSITION
SEND/RETURN1 SEND/RETURN2	ON/OFF
	MODE
	SEND LEVEL
	RETURN LEVEL
	ADJUST
	PHASE

CATEGORY	PARAMETER
DIVIDER	MODE
	CH SELECT
MIXER	A/B BALANCE
	A:PAN
	B:PAN
BALANCER 1	A/B BALANCE
	A:PAN
	B:PAN
BALANCER 2	A/B BALANCE
	A:PAN
	B:PAN
NORMAL INPUT	ON/OFF
	LEVEL
MIDI	MIDI CC#
	MIDI PC#