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MEMO

-  This effect sound is mono.
-  This effect sound is output with two channels.
-  These effects take a mono input and output it on two channels.

EFFECT

Editing the Effects

To edit the effect settings, use the value knob to select a page in the display, and use knobs [1]–[4] to select the value of each parameter.









MEMO

- For details on basic operation for effects, refer to “Editing: Editing the Effects” (p. 7) in the owner’s manual.
- In each edit screen, you can press the value knob to turn the effect on/off.

COMP

STEREO MONO

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

Knob	Parameter	Value	Explanation
	ON/OFF	OFF, ON	Turns this effect on/off.
Page 1			
[1]	TYPE	BOSS (BOSS COMP) 	This models a BOSS CS-3.
		HI-BAND 	This is a compressor that adds an even stronger effect in the high end.
		LIGHT 	This is a compressor with a light effect.
		D-COMP 	This models a MXR DynaComp.
		ORANGE 	This is modeled on the sound of the Dan Armstrong ORANGE SQUEEZER.
		FAT 	When applied heavily, this compressor effect provides a fat tone with a boosted midrange.
		MILD 	When applied heavily, this compressor effect produces a sweet tone with the high end cut.
		STEREO (STEREO COMP) 	This selects a stereo compressor.
[2]	SUSTAIN	0–100	Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.
[3]	ATTACK	0–100	Adjusts the strength of the picking attack when the strings are played. Higher values result in a sharper attack, creating a more clearly defined sound.
[4]	LEVEL	0–100	Adjusts the volume.
Page 2			
[1]	TONE	-50–+50	This adjusts the tone.

OD/DS

MONO

This effect distorts the sound to create long sustain.

Knob	Parameter	Value	Explanation
	ON/OFF	OFF, ON	Turns this effect on/off.
Page 1			
[1]	TYPE	Refer to OD/DS TYPE	
[2]	DRIVE	0–120	Adjusts the depth of distortion.
[3]	TONE	-50–+50	This adjusts the tone.
[4]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the effect sound.
Page 2			
[1]	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.
[2]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.
[3]	SOL.SW (SOLO SW)	OFF, ON	Switches to a tone that is suitable for solos.
[4]	SOL.LV (SOLO LEVEL)	0–100	Adjusts the volume level when the Solo Sw is ON.

OD/DS TYPE

This is a list of distortion types that can be selected for OD/DS.

Category	Type	Explanation	
ADVANCED	MID BST (MID BOOST)	This is a booster with unique characteristics in the midrange. Making the connection before the COSM amp produces sound suitable for solos.	
	CLN BST (CLEAN BOOST)	This not only functions as a booster, but also produces a clean tone that has punch even when used alone.	
	TRB BST (TREBLE BOOST)	This is a booster that has bright characteristics.	
	CRUNCH	A lustrous crunch sound with an added element of amp distortion.	
	NTRL OD (NATURAL OD)	This is an overdrive sound that provides distortion with a natural feeling.	
	WRM OD (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.	
	METL DS (METAL DS)	This is distortion sound that is ideal for performances of heavy riffs.	
	OCT FUZ (OCT FUZZ)	A fuzz sound with rich harmonic content.	
	A-DIST	This effect uses MDP (Multi-Dimensional Processing) to provide ideal distortion in all pitch ranges of the guitar, from low to high.	
		* Only for OD/DS and SUB OD/DS in FX2	

EFFECT

Category	Type	Explanation
VINTAGE	BLUS OD (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.
	T-SCRM (T-SCREAM)	This models an Ibanez TS-808.
	TURB OD (TURBO OD)	This is the high-gain overdrive sound of the BOSS OD-2.
	DIST (DISTORTION)	This gives a basic, traditional distortion sound.
	RAT	This models a Proco RAT.
	GUV DS	This models a Marshall GUV'NOR.
	DST+	This models a MXR DISTORTION+.
	MTL ZON (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.
	60S FUZ ('60S FUZZ)	This models a FUZZFACE. It produces a fat fuzz sound.
	MUF FUZ (MUFF FUZZ)	This models an Electro-Harmonix Big Muff π.
CUSTOM	Custom OD/DS You can customize it however you like to match the sound you want.	

CUSTOM OD/DS SETTING

Knob	Parameter	Value	Explanation
Page 3 (shown only if OD/DS TYPE is set to "CUSTOM")			
[1]	TYPE (CUSTOM TYPE)	OD-1	This models the sound of the BOSS OD-1.
		OD-2	This is a overdrive sound with high gain.
		CRUNCH	This is a crunch sound.
		DS-1	This gives a basic, traditional distortion sound.
		DS-2	This creates a heavier distortion sound.
		METAL1	This is a metal sound with a characteristic midrange.
		METAL2	This gives a heavy metal sound.
		FUZZ	This gives a basic, traditional fuzz sound.
[2]	CHAR (CUSTOM CHARACTER)	-50+50	+: For soloing -: For backing
[3]	BOTTOM (CUSTOM BOTTOM)	-50+50	This controls the input sound's low-frequency range and adjusts the amount of distortion in the low-frequency range
[4]	TOP (CUSTOM TOP)	-50+50	This controls the input sound's high-frequency range and adjusts the amount of distortion in the high-frequency range.
Page 4 (shown only if OD/DS TYPE is set to "CUSTOM")			
[1]	LOW (CUSTOM LOW)	-50+50	Adjusts the low-range tones after distortion is applied.
[2]	HIGH (CUSTOM HIGH)	-50+50	Adjusts the high-range tones after distortion is applied.

PREAMP (PrA/PrB)

MONO

COSM technology simulates different preamp characteristics, speaker sizes, and cabinet shapes.

Knob	Parameter	Value	Explanation
	ON/OFF	OFF, ON	Turns this effect on/off.
Page 1			
[1]	TYPE	Refer to PREAMP TYPE	
[2]	GAIN	0-120	Adjusts the distortion of the amp.
[3]	T-COMP	-10-0-+10	Adjusts the sense of compression of the amp.
[4]	LEVEL	0-100	Adjusts the volume of the entire preamp. * Be careful not to raise the Level setting too high.
Page 2			
[1]	BASS	0-100	Adjusts the tone for the low frequency range.
[2]	MIDDLE	0-100	Adjusts the tone for the middle frequency range.
[3]	TREBLE	0-100	Adjusts the tone for the high frequency range.
[4]	PRES (PRESENCE)	0-100	Adjusts the tone for the ultra high frequency range. * The PRESENCE parameter functions as a high-cut filter with some PREAMP TYPES.
Page 3			
[1]	BRIGHT	OFF, ON	Turns the bright setting on/off. * The BRIGHT parameter setting is available only with certain PREAMP TYPES.
[2]	GAIN.SW	LOW, MIDDLE, HIGH	Switches the amp's amount of distortion in three steps: LOW, MIDDLE, and HIGH. The steps LOW, MIDDLE, and HIGH provide correspondingly increasing amounts of distortion. * The sound of each Type is created on the basis that the Gain is set to MIDDLE.
[3]	SOL.SW (SOLO SW)	OFF, ON	The tone to one suitable for solos.
[4]	SOL.LV (SOLO LEVEL)	0-100	Adjusts the volume level when the Solo Sw is ON.

Knob	Parameter	Value	Explanation
Page 4			
[1]	SP.TYP (SPEAKER TYPE) *1	Select the speaker type.	
		OFF	This turns off the speaker simulator.
		ORIGIN (ORIGINAL)	This is the built-in speaker of the amp you selected with PREAMP TYPE.
		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 an optimal speaker cabinet for a large enclosed amp with four 10-inch speakers.
		4x12"	This is an optimal speaker cabinet for a large enclosed amp with four 12-inch speakers.
		8x12"	This is a double stack of two cabinets, each with four 12-inch speakers.
CUSTOM	Custom speaker You can customize it however you like to match the sound you want.		
[2]	MIC.TYP (MIC TYPE) *1	This setting selects the simulated mic type.	
		DYN57	This is the sound of the SHURE SM-57. General dynamic mic used for instruments and vocals. Optimal for use in miking guitar amps.
		DYN421	Simulates the sound of the MD-421. Dynamic mic with extended low end.
		CND451	Simulates the sound of the AKG C451B. Small condenser mic for use with instruments.
		CND87	Simulates the sound of the NEUMANN U87. Condenser mic with flat response.
		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).
[3]	MIC.DIS (MIC DISTANCE) *1	Simulates the distance between the mic and speaker.	
		OFF MIC	This setting points the mic away from the speaker.
		ON MIC	Provides conditions whereby the mic is directed more towards the speaker.
[4]	MIC.POS (MIC POSITION) *1	This simulates the mic position.	
		CENTER	Simulates the condition that the mic is set in the middle of the speaker cone.
		1–10 cm	Simulates the condition that the mic is moved away from the center of the speaker cone.
Page 5			
[1]	MIC.LVL (MIC LEVEL) *1	0–100	Adjusts the volume of the mic.
[2]	DIR.MIX (DIRECT MIX) *1	0–100	Adjusts the volume of the direct sound.

*1 This is enabled when the OUTPUT SELECT parameter is set to LINE/PHONE.

PREAMP TYPE

This is a list of the amp types that can be selected for PREAMP.

Category	Type	Explanation
ADVANCED	Ntr/CLN (NATURAL CLEAN)	An unembellished, clean sound that minimizes the amp's idiosyncrasies, such as its trebly character and boomy low end.
	FUL RNG (FULL RANGE)	An amp with a broad frequency range and an extremely flat response. Good for acoustic guitar.
	CB CRNC (COMBO CRUNCH)	Crunch sound that allows the nuances of your picking to be expressed even more faithfully than on conventional combo amps.
	ST CRNC (STACK CRUNCH)	Great-feeling crunch sound that responds well to picking dynamics while retaining all the defining characteristics of a 4 x 12" speaker cabinet.
	HiG STK (HiGAIN STACK)	High-gain sound of a vintage Marshall specially revamped in a way that is possible only with COSM modeling technology.
	PwrDRV (POWER DRIVE)	A straightforward drive sound that is suitable for a wide range of situations from backing to lead, and which could not be obtained from previous combo amps or stack amps.
	XTRM LD (EXTREME LEAD)	A new type of sound that smoothes out the uneven frequency response that is typical of existing large stack amps.
	COR MTL (CORE METAL)	A large stack sound that has been tweaked extensively in the pursuit of the ultimate metal sound.

Category	Type	Explanation
VINTAGE	JC-120	This models the sound of the Roland JC-120.
	CLN TWN (CLEAN TWIN)	This models a Fender Twin Reverb.
	PR CRNC (PRO CRUNCH)	This models a Fender Pro Reverb.
	TWEED	This models a Fender Bassman 4 x 10" Combo.
	DxCRNC (DELUXE CRUNCH)	This models a Fender Deluxe Reverb.
	VO DRIV (VO DRIVE)	This models the drive sound of a VOX AC-30TB. This is a sound that it suited to sixties-style British rock.
	VO LEAD	This models the lead sound of the VOX AC-30TB.
	MATCH (MATCH DRIVE)	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/ Boogie combo amp. The sound of a tube amp typical of the late '70s to '80s.
	BG DRIV (BG DRIVE)	This models a MESA/Boogie with TREBLE SHIFT SW on.
	1959 I (MS1959 I)	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	1959 I+II (MS1959 I+II)	This models the sound of a Marshall 1959's inputs I and II connected in parallel. The sound emphasizes the low end more than I.
	RFR VIN (R-FIER VINTAGE)	Models the sound of the Channel 2 VINTAGE Mode on the MESA/Boogie DUAL Rectifier.
	RFR MDN (R-FIER MODERN)	Models the sound of the Channel 2 MODERN Mode on the MESA/Boogie DUAL Rectifier.
	T-AMP (T-AMP LEAD)	This models a Hughes & Kettner Triamp AMP3.
	SLDN	This models a Soldano SLO-100. This is the typical sound of the eighties.
	5150 (5150 DRIVE)	This models the lead channel of a Peavey EVH 5150.
	BGNR UB (BGNR UB METAL)	This is a heavily distorted sound that models the high gain channel of a Bogner Uberschall.
	ORNG RV (ORNG ROCK REVERB)	This models the dirty channel of an ORANGE ROCKERVERB.
	CUSTOM	This is a custom preamp. You can customize it however you like to match the sound you want.

CUSTOM AMP SETTING

Knob	Parameter	Value	Explanation
Page 6 (shown only if PREAMP TYPE is set to "CUSTOM")			
[1]	TYPE (CUSTOM TYPE)	JC CLEN (JC CLEAN)	This models the sound of the Roland JC-120.
		TW CLEN (TW CLEAN)	This models a Fender Twin Reverb.
		CRUNCH	This is a crunch sound that can faithfully reproduce the nuances of picking.
		CMB DRV (COMBO DRIVE)	This is a combo amp sound that it suited to sixties-style British rock.
		CMB LD (COMBO LEAD)	This is a lead sound of a combo tube amp typical of the late '70s to '80s.
		MS HiG (MS HiGAIN)	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
		MDN STK (MODERN STACK)	This original high-gain amp delivers thick lows and intense distortion while still preserving the sound's clear definition.
[2]	CHAR (CUSTOM CHARACTER)	-50+50	+: For soloing -: For backing
[3]	BOTTOM (CUSTOM BOTTOM)	-50+50	This controls the input sound's low-frequency range and adjusts the amount of distortion in the low-frequency range
[4]	EDGE (CUSTOM EDGE)	-50+50	This controls the input sound's high-frequency range and adjusts the amount of distortion in the high-frequency range.
Page 7 (shown only if PREAMP TYPE is set to "CUSTOM")			
[1]	LOW (CUSTOM PREAMP LOW)	-50+50	Adjusts the preamp section's low-frequency tone.
[2]	HIGH (CUSTOM PREAMP HIGH)	-50+50	Adjusts the preamp section's high-frequency tone.

CUSTOM SPEAKER SETTING

Knob	Parameter	Value	Explanation
Page 8 (shown only if SPEAKER TYPE is set to "CUSTOM")			
[1]	SP.SIZE (CUSTOM SPEAKER SIZE)	5-15"	Selects the size of speaker.
[2]	SP.NUM (CUSTOM SPEAKER NUMBER)	x1, x2, x4, x8	Sets the number of speakers.
[3]	CABINET (CUSTOM CABINET)		Selects the speaker cabinet type.
		OPEN	This is an open-backed cabinet
		CLOSE	This type of cabinet features an enclosed rear panel.
Page 9 (shown only if SPEAKER TYPE is set to "CUSTOM")			
[1]	COLOR.L (CUSTOM COLOR LOW)	-10+10	Adjusts the speaker section's low-frequency tone.
[2]	COLOR.H (CUSTOM COLOR HIGH)	-10+10	Adjusts the speaker section's high-frequency tone.

EQ

STEREO

This adjusts the tone. A parametric type is adopted for the high-middle and low-middle range.

Knob	Parameter	Value	Explanation
	ON/OFF	OFF, ON	Turns this effect on/off.

Page 1

[1]	LO.GAIN (LOW GAIN)	-20→+20 dB	Adjusts the low frequency range tone.
[2]	HI.GAIN (HIGH GAIN)	-20→+20 dB	Adjusts the high frequency range tone.
[4]	LEVEL	-20→+20 dB	Adjusts the overall volume level of the equalizer.

Page 2

[1]	LM.FREQ (LOW-MID FREQUENCY)	20 Hz–10.0 kHz	Specifies the center of the frequency range that will be adjusted by the LOW-MID GAIN.
[2]	LM.Q (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.
[3]	LM.GAIN (LOW-MID GAIN)	-20→+20 dB	Adjusts the middle frequency range tone.

Page 3

[1]	HM.FREQ (HIGH-MID FREQUENCY)	20 Hz–10.0 kHz	Specifies the center of the frequency range that will be adjusted by the HIGH-MID GAIN.
[2]	HM.Q (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.
[3]	HM.GAIN (HIGH-MID GAIN)	-20→+20 dB	Adjusts the low-middle frequency range tone.

Page 4

[1]	LO.CUT (LOW CUT)	FLAT, 20 Hz–800 Hz	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.
[4]	HI.CUT (HIGH CUT)	630 Hz–12.5 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.

FX1/FX2

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

* Some effects can be selected only for FX2.

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

Selecting the TYPE

1. Choose [EFFECT] → "FX1" or "FX2."
2. Select the type using the knob [4].

FX1/FX2 TYPE

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

Effect Name	TYPE	Explanation
T. WAH	(Touch Wah)	You can produce a wah effect with the filter changing in response to the guitar level.
AUTO WAH	(Auto Wah)	This changes the filtering over a periodic cycle, providing an automatic wah effect.
SUB WAH	—	You can use an expression pedal connected to the CTL/EXP jack to control the wah effect in real time.
ADV. COMP	(Advanced 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.
LIMITER	—	The limiter attenuates loud input levels to prevent distortion.
SUB OD/DS	—	This effect distorts the sound to create long sustain.
GRAPHIC EQ	(Graphic Equalizer)	This adjusts the tone. You can adjust the sound quality in ten bands.
PARAMETRIC EQ	(Parametric Equalizer)	This adjusts the tone. You can adjust the sound quality in four bands. You can adjust the sound quality in four bands.
TONE MODIFY	—	This changes the tone of the connected guitar.
GUITAR SIM	(Guitar Simulator)	Simulation of the characteristics of particular guitar components such as pickups and different guitar bodies allows you to switch among a number of different guitar types all while using a single guitar.
AC.GUITAR SIM	—	This transforms the sound of an electric guitar into the sound of an acoustic guitar.
SLOW GEAR	—	This produces a volume-swell effect ("violin-like" sound).
DEFRETTER	—	This simulates a fretless guitar.
WAVE SYNTH	—	This is a synth sound that processes the guitar input signal.
SITAR SIM	(Sitar Simulator)	This simulates the sound of the sitar.
OCTAVE	—	This adds a note one octave lower, creating a richer sound.
PITCH SHIFTER	—	This effect changes the pitch of the original sound (up or down) within a range of two octaves.

EFFECT

Effect Name	TYPE	Explanation
HARMONIST	—	Harmonist is an effect where the amount of shifting is adjusted according to an analysis of the guitar input, allowing you to create harmony based on diatonic scales.
OVERTONE * FX2 only	—	This effect uses MDP technology to add new harmonics to the sound, producing resonance and richness that was not present in the original sound.
SOUND HOLD	—	You can have sound played on the guitar be held continuously. This effect allows you to perform the melody in the upper registers while holding a note in the lower registers.
AC. PROCESSOR	(Acoustic Processor)	This processor allows you to change the sound produced by the pickup on an acoustic electric guitar, creating a richer sound similar to that obtained with a microphone placed close to the guitar.
PHASER	—	By adding varied-phase portions to the direct sound, the phaser effect gives a whooshing, swirling character to the sound.
FLANGER	—	The flanging effect gives a twisting, jet-airplane-like character to the sound.
TREMOLO	—	Tremolo is an effect that creates a cyclic change in volume.
ROTARY 1	—	This produces an effect like the sound of a rotary speaker.
ROTARY 2	—	This provides rotation that has a different feel than Rotary 1.
UNI-V	—	This models a Uni-Vibe. Although this resembles a phaser effect, it also provides a unique undulation that you can't get with a regular phaser.
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.
SLICER	—	This consecutively interrupts the sound to create the impression that a rhythm backing phrase is being played.
VIBRATO	—	This effect creates vibrato by slightly modulating the pitch.
RING MOD	—	This creates a bell-like sound by ring-modulating the guitar sound with the signal from the internal oscillator. The sound can be unmusical and lack distinctive pitches.
HUMANIZER	—	This can create human vowel-like sounds.
2X2 CHORUS	—	This allows you to achieve a more natural chorus sound.
SUB DELAY	—	This is a delay with the maximum delay time of 1,000 ms. This effect is useful for making the sound fatter.
TERA ECHO * FX2 only	—	This effect uses MDP technology to create a unique ambience and a spaciousness that changes according to your picking dynamics.

T. WAH

MONO


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

Knob	Parameter	Value	Explanation
Page 1			
[1]	MODE		Selects the wah mode.
		LPF	Low pass filter. This provides a wah effect over a wide frequency range.
		BPF	Band pass filter. This provides a wah effect in a narrow frequency range.
[2]	POLAR		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.
[3]	SENS	0-100	Specifies the sensitivity with which the filter changes in the direction specified by the POLAR setting. Higher values will produce a stronger tone which emphasizes the wah effect more. With a setting of 0, the strength of picking will have no effect.
[4]	FREQ	0-100	Adjusts the center frequency of the Wah effect.
Page 2			
[1]	PEAK	0-100	Adjusts the way in which the wah effect applies to the area around the center 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.
[3]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.
[4]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

AUTO WAH

MONO

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

Knob	Parameter	Value	Explanation
Page 1			
[1]	MODE		Selects the wah mode.
		LPF	Low pass filter. This provides a wah effect over a wide frequency range.
		BPF	Band pass filter. This provides a wah effect in a narrow frequency range.
[2]	RATE	0-100, BPM 	Adjusts the frequency (speed) of the change. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	DEPTH	0-100	Adjusts the depth of the effect.
[4]	FREQ	0-100	Adjusts the center frequency of the Wah effect.

Page 2

Knob	Parameter	Value	Explanation
[1]	PEAK	0–100	Adjusts the way in which the wah effect applies to the area around the center 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.
[3]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the effect sound.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

SUB WAH

MONO

You can control the wah effect in real time by adjusting the expression pedal connected to the CTL/EXP jack.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the wah mode.	
		CRY (CRY WAH)	This models the sound of the CRY BABY wah pedal popular in the '70s.
		VO (VO WAH)	This models the sound of the VOX V846.
		FAT (FAT WAH)	This is a wah sound featuring a bold tone.
		LIGHT (LIGHT WAH)	This wah has a refined sound with no unusual characteristics.
		7STRING (7STRING WAH)	This expanded wah features a variable range compatible with seven-string and baritone guitars.
		RESO (RESO WAH)	This completely original effect offers enhancements on the characteristic resonances produced by analog synth filters.
[2]	PD.POS (PEDAL POSITION)	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an EXP Pedal or similar controller.
[3]	PD.MIN (PEDAL MIN)	0–100	Selects the tone produced when the heel of the EXP Pedal is depressed.
[4]	PD.MAX (PEDAL MAX)	0–100	Selects the tone produced when the toe of the EXP Pedal is depressed.
Page 2			
[1]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the effect sound.
[2]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

ADV. COMP

STEREO MONO

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.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the compressor type.	
		BOSS (BOSS COMP)	This models a BOSS CS-3.
		HI-BAND	This is a compressor that adds an even stronger effect in the high end.
		LIGHT	This is a compressor with a light effect.
		D-COMP	This models a MXR DynaComp.
		ORANGE	This is modeled on the sound of the Dan Armstrong ORANGE SQUEEZER.
		FAT	When applied heavily, this compressor effect provides a fat tone with a boosted midrange.
		MILD	When applied heavily, this compressor effect produces a sweet tone with the high end cut.
	STEREO (STEREO COMP)	This selects a stereo compressor.	
[2]	SUSTAIN	0–100	Adjusts the range (time) over which low-level signals are boosted. Larger values will result in longer sustain.
[3]	ATTACK	0–100	Adjusts the attack time.
[4]	LEVEL	0–100	Adjusts the volume.
Page 2			
[1]	TONE	-50+50	This adjusts the tone.

LIMITER

STEREO

The limiter attenuates loud input levels to prevent distortion.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the limiter type.	
		BOSS (BOSS LIMITER)	This selects a stereo limiter.
		160D (RACK 160D)	This models a dbx 160X.
	RACK U (VINAGE RACK U)	This models a UREI 1178.	
[2]	THRESH (THRESHOLD)	0–100	Adjust this as appropriate for the input signal from your guitar. When the input signal level exceeds this threshold level, limiting will be applied.
[3]	RATIO	1:1–INF:1	This selects the compression ratio used with signals in excess of the threshold level.
[4]	LEVEL	0–100	Adjusts the volume.
Page 2			
[1]	ATTACK	0–100	Adjusts the strength of the picking attack when the strings are played. Higher values result in a sharper attack, creating a more clearly defined sound.
[2]	RELEASE	0–100	Adjusts the release time.

EFFECT

SUB OD/DS

MONO

This effect distorts the sound to create long sustain.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Refer to "OD/DS TYPE" (p. 3). * "CUSTOM" is not available. * "A-DIST" can be used only with FX2.	
[2]	DRIVE	0–120	Adjusts the depth of distortion.
[3]	TONE	-50–+50	Adjusts the tone.
[4]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the effect sound.

Page 2			
[1]	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.
[2]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.
[3]	SOL.SW (SOLO SW)	OFF, ON	The tone to one suitable for solos.
[4]	SOL.LV (SOLO LEVEL)	0–100	Adjusts the volume level when the Solo Sw is ON.

GRAPHIC EQ

STEREO

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

Knob	Parameter	Value	Explanation		
Page 1					
[1]	31 Hz	-20–+20 dB			
[2]	62 Hz				
[3]	125 Hz				
[4]	250 Hz				
Page 2					
[1]	500 Hz				
[2]	1 kHz				
[3]	2 kHz				
[4]	4 kHz				
Page 3					
[1]	8 kHz				
[2]	16 kHz				
[4]	LEVEL	-20–+20 dB			

PARAMETRIC EQ

STEREO

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

Knob	Parameter	Value	Explanation
Page 1			
[1]	LO.GAIN (LOW GAIN)	-20–+20 dB	Adjusts the low frequency range tone.
[2]	HI.GAIN (HIGH GAIN)	-20–+20 dB	Adjusts the high frequency range tone.
[4]	LEVEL	-20–+20 dB	Adjusts the overall volume level of the equalizer.

Page 2

Knob	Parameter	Value	Explanation
[1]	LM.FREQ (LOW-MID FREQUENCY)	20 Hz–10.0 kHz	Specifies the center of the frequency range that will be adjusted by the LOW-MID GAIN.
[2]	LM.Q (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.
[3]	LM.GAIN (LOW-MID GAIN)	-20–+20 dB	Adjusts the low-middle frequency range tone.

Page 3

[1]	HM.FREQ (HIGH-MID FREQUENCY)	20 Hz–10.0 kHz	Specifies the center of the frequency range that will be adjusted by the HIGH-MID GAIN.
[2]	HM.Q (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.
[3]	HM.GAIN (HIGH-MID GAIN)	-20–+20 dB	Adjusts the high-middle frequency range tone.

Page 4

[1]	LO.CUT (LOW CUT)	FLAT, 20 Hz–800 Hz	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.
[4]	HI.CUT (HIGH CUT)	630 Hz–12.5 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.

TONE MODIFY

MONO

This changes the tone of the connected guitar.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the type of tone modification.	
		FAT	Fat tone with boosted mid range.
		PRES (PRESENCE)	Bright tone with boosted high-mid range.
		MILD	Mild tone with the high end cut back.
		TIGHT	Tone with the low frequencies cut.
		ENHANC (ENHANCE)	Tone with the high frequencies boosted.
	RESO1 – 3 (RESONATOR1–3)	This produces a tone with greater power and punch by adding resonance in the low-frequency range and midrange.	
[2]	LOW	-50–+50	Adjusts the tone for the low frequency range.
[3]	HIGH	-50–+50	Adjusts the tone for the high frequency range.
[4]	LEVEL	0–100	Adjusts the volume of the effect sound.

Page 2

[1]	RESO	0–100	This adjusts the strength of the low-end and midrange resonance when TYPE is set to RESO 1, 2, or 3.
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GUITAR SIM

MONO

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

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the type of the guitar simulator.	
		S → H	Changes from a single-coil pickup tone to a humbucking pickup tone.
		H → S	Changes from a humbucking pickup tone to a single-coil pickup tone.
		H → HF (HALF TONE)	Changes from a humbucking pickup tone to a single-coil pickup half tone.
		S → HLW (HOLLOW)	Changes a single-coil pickup tone to a hollow body tone with the body resonance added.
		H → HLW	Changes a humbucking pickup tone to a hollow body tone with the body resonance added.
		S → AC (ACOUSTIC)	Changes a single-coil pickup tone to an acoustic guitar tone.
		H → AC (ACOUSTIC)	Changes a humbucking pickup tone to an acoustic guitar tone.
	P → AC (PIEZO → ACOUSTIC)	Changes a piezo pickup tone to an acoustic guitar tone.	
[2]	LOW	-50+50	Adjusts the low frequency range tone.
[3]	HIGH	-50+50	Adjusts the high frequency range tone.
[4]	LEVEL	0-100	Adjusts the volume of the effect sound.
Page 2			
[1]	BODY	0-100	Adjusts the way the body sounds when TYPE is set to SHLW, HHLW, SAC, HAC or PAC. The body sound increases as the value is raised; reducing the value produces a tone similar to that from a piezo pickup.

AC. GUITAR SIM

This effect simulates the tonal character of an acoustic guitar.

Knob	Parameter	Value	Explanation
[1]	BODY	0-100	Adjusts the body resonance.
[2]	LOW	-50+50	Specifies the sense of volume for the low-frequency range.
[3]	HIGH	-50+50	Specifies the sense of volume for the high-frequency range.
[4]	LEVEL	0-100	Specifies the volume of the effect.

SLOW GEAR

STEREO

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

Knob	Parameter	Value	Explanation
[1]	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.
[2]	RISE.TM (RISE TIME)	0-100	Adjusts the time needed for the volume to reach its maximum from the moment you begin picking.
[4]	LEVEL	0-100	Adjusts the volume of the effect sound.

DEFRETTER

MONO

This simulates a fretless guitar.

Knob	Parameter	Value	Explanation
Page 1			
[1]	SENS	0-100	This controls the input sensitivity of the defretter.
[2]	DEPTH	0-100	This controls the rate of the harmonics.
[3]	TONE	-50+50	Adjusts the amount of blurring between the notes.
[4]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.
Page 2			
[1]	ATTACK	0-100	Adjusts the attack of the picking sound.
[2]	RESO	0-100	Adds a characteristically resonant quality to the sound.
[4]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

WAVE SYNTH

MONO

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

* When you use a wave synthesizer, observe the following points.

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

Knob	Parameter	Value	Explanation
Page 1			
[1]	WAVE	Selects a wave type which the synth sound is based.	
		SAW	Creates a synth sound with a saw waveform (▲▲▲▲).
		SQUARE	Creates a synth sound with the square waveform (□□□□).
[2]	CUTOFF	0-100	Adjusts the frequency where the harmonics contents of the sound are cut off.

EFFECT

Knob	Parameter	Value	Explanation
[3]	RESO	0–100	This adjusts the amount of resonance (and the tone coloration) in the synth sound. The higher the value, the more the synth tone coloration is emphasized.
[4]	SENS (FILTER SENS)	0–100	This adjusts the amount of filtering applied in response to the input.

Page 2

[1]	DECAY (FILTER DECAY)	0–100	This sets the time needed for the filter to finish its sweep.
[2]	DEPTH (FILTER DEPTH)	0–100	Adjusts the depth of the filter. When the value is higher, the filter will change more drastically.
[3]	SYN.LVL (SYNTH LEVEL)	0–100	Adjusts the volume of the synth sound.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

SITAR SIM.

MONO

This simulates the sound of the sitar.

Knob	Parameter	Value	Explanation
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Page 1

[1]	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.
[2]	DEPTH	0–100	This adjusts the amount of effect applied.
[3]	TONE	-50+50	This adjusts the tone. The high end is boosted as the value increases.
[4]	E.LEVEL (EFFECT LEVEL)	0–100	Adjust the volume of the sitar sound.

Page 2

[1]	RESO	0–100	This adjusts the undulation of the resonance.
[2]	BUZZ	0–100	Adjusts the amount of characteristic buzz produced by the “buzz bridge” when the strings make contact with it.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

OCTAVE

MONO

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

Knob	Parameter	Value	Explanation
[1]	RANGE		This selects the register to which the effect is applied.
		RANGE 1 (B1–E6)	B1 (corresponds to the sound of an open 7th string) to E6 (corresponds to the 1st string played at the 24th fret)
		RANGE 2 (B1–E5)	B1 (corresponds to the sound of an open 7th string) to E5 (corresponds to the 1st string played at the 12th fret)
		RANGE 3 (B1–E4)	B1 (corresponds to the sound of an open 7th string) to E4 (corresponds to the sound of an open 1st string)
		RANGE 4 (B1–E3)	B1 (corresponds to the sound of an open 7th string) to E3 (corresponds to the 4th string played at the 2nd fret)

Knob	Parameter	Value	Explanation
[3]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the sound one octave below.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.




PITCH SHIFTER

MONO STEREO MONO


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

Knob	Parameter	Value	Explanation
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Page 1

[1]	VOICE		Selects the number of voices for the pitch shift sound.
		1VOICE 	One-voice pitch-shifted sound output in monaural.
		2MONO 	Two-voice pitch-shifted sound (PS1, PS2) output in monaural.
		2STEREO 	Two-voice pitch-shifted sound (PS1, PS2) output through left and right channels.
[2]	1:PITCH	-24+24	Adjusts the amount of pitch shift (the amount of interval) in semitone steps.
[3]	2:PITCH		
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

Page 2/Page 3 (if VOICE is set to “1VOICE”: page 2 only)

[1]	1:MODE 2:MODE		Selection for the pitch shifter mode.
		FAST, MEDIUM, SLOW	The response is slower in the order of FAST, MEDIUM and SLOW, but the modulation is lessened in the same order.
		MONO	MONO is used for inputting single notes. * You may be unable to produce the intended effect when playing chords (two or more notes played simultaneously).
[2]	1:FINE 2:FINE	-50+50	Make fine adjustments to the interval. The amount of the change in the Fine 100 is equivalent to that of the Pitch 1.
[3]	1:P-DLY (1:PRE DELAY) 2:P-DLY (2:PRE DELAY)	0 ms–300 ms, BPM 	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. * When set to BPM, the value of each parameter will be set according to the value of the “MASTER BPM” specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[4]	1:LEVEL 2:LEVEL	0–100	Adjusts the volume of the pitch shifter.

Page 4 (if VOICE is set to “1VOICE”: page 3)


[1]	1:F-BAK (1:FEEDBACK)	0–100	Adjusts the feedback amount of the pitch shift sound.
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HARMONIST

MONO ▶
STEREO MONO

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

- * Because of the need to analyze the pitch, chords (two or more sounds played simultaneously) cannot be played. Be sure to mute all the other strings and play only one note at a time.
- * If the unit cannot detect the attack, it may not sound correctly. If the unit cannot detect the attack, it may not sound correctly.
- * The sensitivity may vary according to the guitar's TONE knob and pickup type.
- * For the USB SECONDARY audio routing (p. 34), the harmonist effect cannot be used on audio from USB IN.

Knob	Parameter	Value	Explanation
Page 1			
[1]	VOICE	Selects the number of voices for the pitch shift sound.	
		1VOICE MONO	One pitch-shifted voice is output in monaural.
		2MONO MONO	Two pitch-shifted voices are output in monaural.
		2STEREO MONO STEREO	Two pitch-shifted voices are output to the L-channel and the R-channel respectively.
[2]	1:HARM	-2 oct~+2 oct, USER	This determines the pitch of the sound added to the input sound, when you are making a harmony.
[3]	2:HARM		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.
[4]	KEY (MASTER KEY)	C (Am)-B (G#m)	The key setting corresponds to the key of the song (#, b) as follows. 

Page 2/Page 3 (if VOICE is set to "1VOICE": page 2 only)

[1]	1:P-DLY (1:PRE DELAY) 2:P-DLY (2:PRE DELAY)	0 ms~300 ms, BPM ♪ - ♪	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. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	1:F-BAK (1:FEEDBACK)	0~100	Adjusts the feedback amount of the harmonist sound.
[3]	1:LEVEL 2:LEVEL	0~100	Adjusts the volume of the harmony sound.
[4]	DIR.MIX (DIRECT MIX)	0~100	Adjusts the volume of the direct sound.

Knob	Parameter	Value	Explanation
For 1VOICE: pages 3~5			
For 2MONO or 2STEREO: pages 4~6 (1:HARM), 7~9 (2:HARM)			
[1]	USER SCALE *1 *2	C	-24▼C~+24▲C
[2]		D \flat	-24▼D \flat ~+24▲D \flat
[3]		D	-24▼D~+24▲D
[4]		E \flat	-24▼E \flat ~+24▲E \flat
[1]		E	-24▼E~+24▲E
[2]		F	-24▼F~+24▲F
[3]		F \sharp	-24▼F \sharp ~+24▲F \sharp
[4]		G	-24▼G~+24▲G
[1]		A \flat	-24▼A \flat ~+24▲A \flat
[2]		A	-24▼A~+24▲A
[3]		B \flat	-24▼B \flat ~+24▲B \flat
[4]		B	-24▼B~+24▲B

You can specify a pitch in the range two octaves above or below the direct sound.

*1 This can be specified if 1:HARM or 2:HARM is "USER."

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

OVERTONE (FX2 Only)

MONO

This effect uses MDP technology to add new harmonics to the sound, producing resonance and richness that was not present in the original sound.

Knob	Parameter	Value	Explanation
Page 1			
[1]	LWR.LVL (LOWER LEVEL)	0~100	Adjusts the volume of the harmonic one octave below.
[2]	UPR.LVL (UPPER LEVEL)	0~100	Adjusts the volume of the harmonic one octave above.
[3]	DIR.MIX (DIRECT MIX)	0~100	Adjusts the volume of the direct sound.
[4]	DETUNE	0~100	Adjusts the amount of the detune effect that adds depth to the sound.

Page 2

[1]	TONE	-50~+50	This adjusts the tone.
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SOUND HOLD

MONO

You can have sound played on the guitar 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.

Knob	Parameter	Value	Explanation
[1]	HOLD	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 HOLD parameter set to Off.
[2]	RISE.TM (RISE TIME)	0~100	Adjusts how rapidly the Sound Hold sound is produced.
[4]	E.LEVEL (EFFECT LEVEL)	0~120	Adjusts the volume of the hold sound.

AC. PROCESSOR

MONO


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.


Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the modeling type.	
		SMALL	This is the sound of a small-bodied acoustic guitar.
		MEDIUM	This is a standard, unadorned acoustic guitar sound.
		BRIGHT	This is a bright acoustic guitar sound.
		POWER	This is a powerful acoustic guitar sound.
[2]	BASS	-50+50	Adjusts the tone for the low frequency range.
[3]	MIDDLE	-50+50	Adjusts the midrange balance.
[4]	M.FREQ (MIDDLE FREQ)	20.0 Hz–10.0 kHz	Specifies the frequency range to be adjusted with Middle.
Page 2			
[1]	TREBLE	-50+50	Adjusts the tone for the high frequency range.
[2]	PRES (PRESENCE)	-50+50	Adjusts the balance in the extended upper range.
[4]	LEVEL	0–100	Adjusts the volume.

PHASER

MONO

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


Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the number of stages that the phaser effect will use.	
		4 STAGE	This is a four-phase effect. A light phaser effect is obtained.
		8 STAGE	This is a eight-phase effect. It is a popular phaser effect.
		12 STAGE	This is a twelve-phase effect. A deep phase effect is obtained.
		BiPHASE	This is the phaser with two phase shift circuits connected in series.
[2]	RATE	0–100, BPM 	This sets the rate of the phaser effect. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	DEPTH	0–100	Determines the depth of the phaser effect.
[4]	RESO (RESONANCE)	0–100	Determines the amount of resonance (feedback). Increasing the value will emphasize the effect, creating a more unusual sound.

Knob	Parameter	Value	Explanation
Page 2			
[1]	MANUAL	0–100	Adjusts the center frequency of the phaser effect.
[2]	STEP.RT (STEP RATE)	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. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the phaser.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

FLANGER

STEREO


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

Knob	Parameter	Value	Explanation
Page 1			
[1]	RATE	0–100, BPM 	This sets the rate of the flanging effect. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	DEPTH	0–100	Determines the depth of the flanging effect.
[3]	RESO (RESONANCE)	0–100	Determines the amount of resonance (feedback). Increasing the value will emphasize the effect, creating a more unusual sound.
[4]	MANUAL	0–100	Adjusts the center frequency at which to apply the effect.
Page 2			
[1]	SEPARAT (SEPARATION)	0–100	Adjusts the diffusion. The diffusion increases as the value increases.
[2]	LO.CUT (LOW CUT)	FLAT, 55 Hz–800 Hz	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.
[3]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the flanger.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

TREMOLO

STEREO

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



Knob	Parameter	Value	Explanation
[1]	WAVE (WAVE SHAPE)	0-100	Adjusts changes in volume level. A higher value will steepen wave's shape.
[2]	RATE	0-100, BPM 	Adjusts the frequency (speed) of the change. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	DEPTH	0-100	Adjusts the depth of the effect.
[4]	LEVEL	0-100	Adjusts the volume.

ROTARY 1/ROTARY 2

MONO
STEREO

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

ROTARY 1 and ROTARY 2 provide a different-feeling sense of rotation.

Knob	Parameter	Value	Explanation
Page 1			
[1]	SPEED	SLOW, FAST	This parameter changes the simulated speaker's rotating speed (SLOW or FAST).
[2]	RATE.S (RATE-SLOW)	0-100, BPM 	This parameter adjusts the SPEED SELECT of rotation when set to "SLOW."
[3]	RATE.F (RATE-FAST)	0-100, BPM 	This parameter adjusts the SPEED SELECT of rotation when set to "FAST." * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[4]	DEPTH	0-100	This parameter adjusts the amount of depth in the rotary effect.
Page 2			
[1]	RISE.TM (RISE TIME)	0-100	This parameter adjusts the time it takes for the rotation SPEED SELECT to change when switched from "SLOW" to "FAST."
[2]	FALL.TM (FALL TIME)	0-100	This parameter adjusts the time it takes for the rotation SPEED SELECT to change when switched from "FAST" to "SLOW."
[3]	B/H.BAL (BASS/HORN BALANCE) *1	100:0-0:100	Adjusts the volume balance between the BASS rotor and the HORN rotor.
[4]	LEVEL	0-100	Adjusts the volume.
Page 3			
[1]	DIR.MIX (DIRECT MIX)*1	0-100	Adjusts the volume of the direct sound.


1 ROTARY 2 only.

UNI-V

MONO

This models a Uni-Vibe.


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

Knob	Parameter	Value	Explanation
[1]	RATE	0-100, BPM 	Adjusts the rate of the UNI-V effect. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	DEPTH	0-100	Adjusts the depth of the UNI-V effect.
[4]	LEVEL	0-100	Adjusts the volume.

PAN

STEREO

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.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	AUTO MANUAL	This varies the volume level on the left and right according to the settings for WAVE SHAPE, RATE, and DEPTH. Output uses the volume balance set with POS.
[2]	WAVE (WAVE SHAPE) *1	0-100	Adjusts changes in volume level. A higher value will steepen wave's shape.
[3]	RATE *1	0-100, BPM 	Adjusts the frequency (speed) of the change. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[4]	DEPTH *1	0-100	Adjusts the depth of the effect.
[2]	POS (POSITION) *2	L 100-CENTER- R 100	This adjusts the volume balance between the left and right channels.
Page 2			
[4]	LEVEL *3	0-100	Adjusts the volume.

*1 Setting available when TYPE is set to AUTO


*2 Setting available when TYPE is set to MANUAL.

*3 If TYPE is set to MANUAL, this is shown in page 1.

SLICER

STEREO


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

Knob	Parameter	Value	Explanation
Page 1			
[1]	PATTERN	P1-P20	Select the slice pattern that will be used to cut the sound.
[2]	RATE	0-100, BPM 	Adjust the rate at which the sound will be cut. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	SENS (TRIGGER SENS)	0-100	Adjust the sensitivity of triggering. With low settings of this parameter, softly picked notes will not retrigger the phrase (i.e., the phrase will continue playing), but strongly picked notes will retrigger the phrase so that it will playback from the beginning. With high settings of this parameter, the phrase will be retriggered even by softly picked notes.
[4]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.
Page 2			
[1]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

VIBRATO

STEREO

This effect creates vibrato by slightly modulating the pitch.

Knob	Parameter	Value	Explanation
Page 1			
[1]	RATE	0-100, BPM 	Adjusts the rate of the vibrato. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	DEPTH	0-100	Adjusts the depth of the vibrato.
[3]	TRIGGER	OFF, ON	This selects on/off of the vibrato. * It is assumed that this parameter will be assigned to the footswitch.
[4]	RISE.TM (RISE TIME)	0-100	This sets the time passing from the moment the Trigger is turned on until the set vibrato is obtained. * When a patch with TRIGGER set to ON is called up, the effect obtained is identical to what happens when TRIGGER is switched from Off to On. If you want the vibrato effect to be produced immediately after the patches are switched, set RISE TIME to 0.
Page 2			
[1]	LEVEL	0-100	Adjusts the volume.

RING MOD

STEREO


The sound can be unmusical and lack distinctive pitches.

Knob	Parameter	Value	Explanation
This selects the mode for the ring modulator.			
		NORMAL	This is a normal ring modulator.
[1]	MODE	INTELLI (INTELLIGENT)	By ring-modulating the input signal, a bell like sound is created. The intelligent ring modulator changes the oscillation frequency according to the pitch of the input sound and therefore produces a sound with the sense of pitch, which is quite different from NORMAL. This effect does not give a satisfactory result if the pitch of the guitar sound is not correctly detected. So, you must use single notes, not chords.
[2]	FREQ (FREQUENCY)	0-100	Adjusts the frequency of the internal oscillator.
[3]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.
[4]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

HUMANIZER

MONO

This can create human vowel-like sounds.

Knob	Parameter	Value	Explanation
Page 1			
This sets the mode that switches the vowels.			
[1]	MODE	PICKING	It changes from VOWEL 1 to VOWEL 2 along with the picking. The time spent for the change is adjusted with the rate.
		AUTO	By adjusting the rate and depth, two vowels (VOWEL 1 and VOWEL 2) can be switched automatically.
[2]	VOWEL 1	a, e, i, o, u	Selects the first vowel.
[3]	VOWEL 2	a, e, i, o, u	Selects the second vowel.
[4]	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.
Page 2			
[1]	RATE	0-100, BPM 	Adjusts the cycle for changing the two vowels. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	DEPTH	0-100	Adjusts the depth of the effect.
[3]	MANUAL *2	0-100	Adjusts the cycle for changing the two vowels. When it is set to lower than 50, the time for VOWEL 1 is shorter. When it is set to higher than 50, the time for VOWEL 1 is longer.
[4]	LEVEL	0-100	Adjusts the volume.



*1 Setting available when MODE is set to PICKING.

*2 Setting available when MODE is set to AUTO.

2X2 CHORUS

MONO
STEREO




This allows you to achieve a more natural chorus sound.

Knob	Parameter	Value	Explanation
Page 1			
[1]	LO.RATE (LOW RATE)	0–100, BPM 	Adjust the speed of the chorus effect for the low frequency range. * When set to BPM, the value of each parameter will be set according to the value of the “MASTER BPM” specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	LO.DPT (LOW DEPTH)	0–100	Adjust the depth of the chorus effect for the low frequency range. If you wish to use this as a doubling effect, use a setting of 0.
[3]	HI.RATE (HIGH RATE)	0–100, BPM 	Adjust the speed of the chorus effect for the high frequency range. * When set to BPM, the value of each parameter will be set according to the value of the “MASTER BPM” specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[4]	HI.DPT (HIGH DEPTH)	0–100	Adjust the depth of the chorus effect for the high frequency range. If you wish to use this as a doubling effect, use a setting of 0.
Page 2			
[1]	LO.PDLY (LOW PRE DELAY)	0.0 ms–40.0 ms	Adjusts the delay of the effect sound in the low-frequency range. Extending the pre-delay will produce the sensation of multiple sounds (doubling effect).
[2]	LO.LVL (LOW LEVEL)	0–100	Adjusts the volume of the effect sound in the low-frequency range.
[3]	HI.PDLY (HIGH PRE DELAY)	0.0 ms–40.0 ms	Adjusts the delay of the effect sound in the high-frequency range. Extending the pre-delay will produce the sensation of multiple sounds (doubling effect).
[4]	HI.LVL (HIGH LEVEL)	0–100	Adjusts the volume of the effect sound in the high-frequency range.
Page 3			
[1]	XOVER (CROSSOVER FREQUENCY)	100 Hz–4.00 kHz	This sets the frequency dividing the low- and high-frequency ranges.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

SUB DELAY

MONO
STEREO MONO

This is a delay with the maximum delay time of 1,000 ms. This effect is useful for making the sound fatter.




Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Use this to choose the type of delay.	
		MONO 	Use this to choose the type of delay.
		PAN 	Provides a tap delay effect that divides the delay time between the left and right channels.
[2]	DLY.TIM (DELAY TIME)	1 ms–1000 ms, BPM 	Adjusts the delay time. * When set to BPM, the value of each parameter will be set according to the value of the “MASTER BPM” specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	FEEDBAK (FEEDBACK)	0–100	Adjusts the volume that is returned to the input. Higher settings will result in more delay repeats.
[4]	E.LEVEL (EFFECT LEVEL)	0–120	Adjusts the volume of the delay sound.
Page 2			
[1]	HI.CUT (HIGH CUT)	630 Hz– 12.5 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.
[2]	TAP TIME *1	0–100%	Adjusts the delay time of the left channel delay. This setting adjusts the L channel delay time relative to the R channel delay time (considered as 100%).
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

*1 Setting available when TYPE is set to PAN.

TERA ECHO (FX2 Only)

MONO
STEREO

This uses MDP technology to create spaciousness and distinctive ambience that varies according to your picking dynamics.

Knob	Parameter	Value	Explanation
Page 1			
[1]	MODE	Selects the mode of the effect sound.	
		MONO 	The L and R channels will both output the same sound.
		STEREO1 	The effect is applied separately to the L and R channels.
		STEREO2 	The L channel outputs the direct sound, and the R channel outputs the effect sound.
[2]	S.TIME	0–100	Adjusts the length of the effect sound.
[3]	FEEDBAK (FEEDBACK)	0–100	Adjusts the decay of the effect sound.

EFFECT

Knob	Parameter	Value	Explanation
[4]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.

Page 2

[1]	TONE	-50-+50	This adjusts the tone.
[2]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.
[4]	HOLD	OFF, ON	The effect sound is held when you turn this on.

DELAY



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

Knob	Parameter	Value	Explanation
	DELAY ON/OFF	OFF, ON	Turns this effect on/off.

Page 1

[1]	TYPE	<p>This selects which type of delay.</p> <p>* If you switch patches with the Type set to either DUAL-S, DUAL-P, or DUAL-L/R and then begin to play immediately after the patches change, you may be unable to attain the intended effect in the first portion of what you perform.</p> <p>* The stereo effect is cancelled if a monaural effect or COSM amp is connected after a stereo delay effect.*</p>	
		SINGLE	<p>This is a simple monaural delay.</p>
		PAN	<p>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.</p>
		STEREO	<p>The direct sound is output from the left channel, and the effect sound is output from the right channel.</p>
		DUAL-S	<p>This is a delay comprising two different delays connected in series. Each delay time can be set in a range from 1 ms to 1000 ms.</p> <p>D1: DELAY 1 D2: DELAY 2</p>
		DUAL-P	<p>This is a delay comprising two delays connected in parallel. Each delay time can be set in a range from 1 ms to 1000 ms.</p>
		DUAL-L/R	<p>This is a delay with individual settings available for the left and right channels. Delay 1 goes to the left channel, Delay 2 to the right.</p>
		REVERSE	<p>This produces an effect where the sound is played back in reverse.</p>
		ANALOG	<p>This gives a mild analog delay sound. The delay time can be set within the range of 1 to 2000 ms.</p>
		TAPE	<p>This setting provides the characteristic wavering sound of the tape echo. The delay time can be set within the range of 1 to 3400 ms.</p>
MOD (MODULATE)	<p>This delay adds a pleasant wavering effect to the sound.</p>		

COMMON

Knob	Parameter	Value	Explanation
Page 1 (if TYPE is set to other than DUAL-S, DUAL-P, or DUAL-L/R)			
[2]	DLY.TIM (DELAY TIME)	1 ms–2000 ms, BPM	Adjusts the delay time. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	FEEDBAK (FEEDBACK)	0–100	Adjusts the volume that is returned to the input. A higher value will increase the number of the delay repeats.
[4]	E.LEVE (EFFECT LEVEL)	0–120	Adjusts the volume of the delay sound.
Page 2 (if TYPE is set to other than DUAL-S, DUAL-P, or DUAL-L/R)			
[1]	HI.CUT (HIGH CUT)	630 Hz– 12.5 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.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

PAN

Knob	Parameter	Value	Explanation
Page 2			
[2]	TAP TIME	0–100%	Adjusts the delay time of the left channel delay. This setting adjusts the L channel delay time relative to the R channel delay time (considered as 100%).

DUAL-S, DUAL-P, DUAL-L/R

Knob	Parameter	Value	Explanation
Page 2, 3 (if TYPE is set to DUAL-S, DUAL-P, or DUAL-L/R)			
[1]	1:TIME 2:TIME	1 ms–1000 ms, BPM	Adjusts the delay time. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[2]	1:F.BAK (FEEDBACK) 2:F.BAK (FEEDBACK)	0–100	Adjusts the amount of feedback of the DELAY 1 (or DELAY 2). A higher value will increase the number of the delay repeats.
[3]	1:HiCUT (HIGH CUT) 2:HiCUT (HIGH CUT)	630 Hz– 12.5 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.
[4]	1:LEVEL 2:LEVEL	0–120	Adjusts the volume of the DELAY 1 (or DELAY 2).

MODULATE

Knob	Parameter	Value	Explanation
Page 3			
[1]	MOD.RT (MODULATION RATE)	0–100	Adjusts the modulation rate of the delay sound.
[2]	MOD.DPT (MODULATION DEPTH)	0–100	Adjusts the modulation depth of the delay sound.

CHORUS



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

Knob	Parameter	Value	Explanation
	CHORUS ON/OFF	OFF, ON	Turns this effect on/off.

Page 1			
[1]	MODE	Selection for the chorus mode. MONO This chorus effect outputs the same sound from both L channel and R channel. STEREO1 This is a stereo chorus effect that adds different chorus sounds to L channel and R channel. STEREO2 This stereo chorus uses spatial synthesis, with the direct sound output in the L channel and the effect sound output in the R channel.	
[2]	RATE	0–100, BPM	Adjust the speed of the chorus effect for the high frequency range. * When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[3]	DEPTH	0–100	Adjusts the depth of the chorus effect. * To use it for doubling effect, set the value to 0.
[4]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the effect sound.
Page 2			
[1]	PRE.DLY (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).
[2]	LO.CUT (LOW CUT)	FLAT, 20 Hz–800 Hz	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.
[3]	HI.CUT (HIGH CUT)	630 Hz– 12.5 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.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

REVERB

MONO
STEREO

This effect adds reverberation to the sound.

Knob	Parameter	Value	Explanation
	REVERB ON/OFF	OFF, ON	Turns this effect on/off.

Page 1

[1]	TYPE	This selects the reverb type. Various different simulations of space are offered.	
		AMBIENC (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.
		HALL 1	Simulates the reverberation in a concert hall. Provides clear and spacious reverberations.
		HALL 2	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 (MODULATE)	This reverb adds the wavering sound found in hall reverb to provide an extremely pleasant reverb sound.	
[2]	TIME (REVERB TIME)	0.1 s–10.0 s	Adjusts the length (time) of reverberation.
[3]	PRE.DLY (PRE DELAY)	0 ms–500 ms	Adjusts the time until the reverb sound appears.
[4]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the reverb sound.

Page 2

[1]	LO.CUT (LOW CUT)	FLAT, 20 Hz–800 Hz	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.
[2]	HI.CUT (HIGH CUT)	630 Hz–12.5 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.
[3]	DENSITY	0–10	Adjusts the density of the reverb sound.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

Page 3

	SPRING (SPRING SENS) (TYPE = SPRING only)	0–100	Adjusts the sensitivity of the spring effect. When the value is set higher, the effect is obtained even with a weak picking.
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PEDAL FX

PEDAL FX is an effect that lets you use an expression pedal connected to the CTL/EXP jack to control WAH or PEDAL BEND. For details on how to edit the effect that's assigned to the expression pedal, refer to "CTL/EXP" (p. 25).

PEDAL BEND

MONO

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

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

* To use PEDAL BEND, set EXP PEDAL's FUNC to PB (PEDAL BEND) or PB/FV (PEDAL BEND/FOOT VOLUME).

Knob	Parameter	Value	Explanation
[1]	PITCH	-24–+24	This sets the pitch at the point where the EXP Pedal is all the way down.
[2]	PD.POS (PEDAL POSITION)	0–100	Adjusts the pedal position for pedal bend. This parameter is used after it's been assigned to an EXP Pedal or similar controller.
[3]	E.LEVEL (EFFECT LEVEL)	0–100	Adjusts the volume of the pitch bend sound.
[4]	DIR.MIX (DIRECT MIX)	0–100	Adjusts the volume of the direct sound.

WAH

MONO

The expression pedal connected to the CTL/EXP jack controls the wah effect in real time.

* To use WAH, set EXP PEDAL's FUNC to WAH or WAH/FV (WAH/FOOT VOLUME).

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	Selects the type of wah.	
		CRY (CRY WAH)	This models the sound of the CRY BABY wah pedal popular in the '70s.
		VO (VO WAH)	This models the sound of the VOX V846.
		FAT (FAT WAH)	This is a wah sound featuring a bold tone.
		LIGHT (LIGHT WAH)	This wah has a refined sound with no unusual characteristics.
		7STRING (7STRING WAH)	This expanded wah features a variable range compatible with seven-string and baritone guitars.
	RESO (RESONANCE WAH)	This completely original effect offers enhancements on the characteristic resonances produced by analog synth filters.	
[2]	PD.POS (PEDAL POS)	0–100	Adjusts the position of the wah pedal. * This parameter is used after it's been assigned to an EXP Pedal or similar controller.
[3]	PD.MIN (PEDAL MIN)	0–100	Selects the tone produced when the heel of the EXP Pedal is depressed.
[4]	PD.MAX (PEDAL MAX)	0–100	Selects the tone produced when the toe of the EXP Pedal is depressed.

Knob	Parameter	Value	Explanation
Page 2			
[1]	E.LEVEL (EFFECT LEVEL)	0-100	Adjusts the volume of the effect sound.
[2]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

FOOT VOLUME

FOOT VOLUME

STEREO

This is a volume control effect.

It's controlled by the expression pedal connected to the CTL/EXP jack.

Knob	Parameter	Value	Explanation
[1]	MIN (VOLUME MIN)	0-100	Sets the volume when the heel of the EXP Pedal is depressed.
[2]	MAX (VOLUME MAX)	0-100	Selects the volume when the toe of the EXP Pedal is depressed.
[3]	CURVE (VOLUME CURVE)	SLOW 1, SLOW 2, NORMAL, FAST	<p>You can select how the actual volume changes relative to the amount the pedal is pressed.</p> <p>Minor When the pedal is fully raised</p> <p>When the pedal is fully advanced</p>
[4]	LEVEL	0-100	Adjusts the volume.

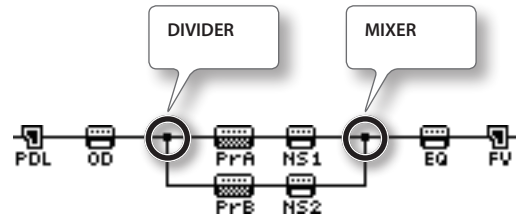
DIVIDER

STEREO

Within the effect chain, the point where the signal is split into channels "A" and "B" is called the "divider," and the point where the two signals are recombined is called the "mixer."

You can use the divider to switch between channels "A" and "B," to assign strongly picked notes and softly picked notes to different channels, or to assign different frequency bands of your guitar sound to different channels.

The mixer lets you adjust the volume balance of channels "A" and "B," place them in the stereo field, or slightly delay the sound of channel "B" to produce a spacious sound.



Knob	Parameter	Value	Explanation
Page 1			
[1]	MODE	SINGLE	Use only one channel, either "A" or "B."
		DUAL	Use the two channels "A" and "B."

SINGLE

If "SINGLE" is selected in [1]

Knob	Parameter	Value	Explanation
Page 1			
[2]	CH.SEL (CHANNEL SELECT)	Ch. A, Ch. B	Selects the channel to use.

DUAL Ch. A, DUAL Ch. B

If "DUAL" is selected in [1]

Knob	Parameter	Value	Explanation
Page 2, 3			
[1]	A:DYN (Ch.A:DYNAMIC) B:DYN (Ch.B:DYNAMIC)	OFF POLAR+ POLAR-	<p>OFF: DYNAMIC will not be used.</p> <p>POLAR+: Only notes picked more strongly than the DYNAMIC SENS setting will be output.</p> <p>POLAR-: Only notes picked more softly than the DYNAMIC SENS setting will be output.</p>
[2]	A:SENS (Ch.A:DYNAMIC SENS) B:SENS (Ch.B:DYNAMIC SENS)	0-100	Specifies the picking sensitivity.
[3]	A:FILTR (Ch.A:FILTER) B:FILTR (Ch.B:FILTER)	OFF LPF HPF	<p>OFF: The filter will not be used.</p> <p>LPF: Only the region below the cutoff frequency will be output.</p> <p>HPF: Only the region above the cutoff frequency will be output.</p>
[4]	A:CUTOF (Ch.A:CUTOFF FREQUENCY) B:CUTOF (Ch.B:CUTOFF FREQUENCY)	100 Hz-4 kHz	Cutoff frequency

MIXER

STEREO

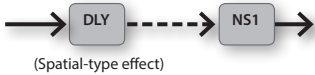
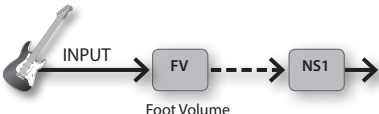
Knob	Parameter	Value	Explanation
[1]	MODE	STEREO	Channels "A" and "B" will be mixed and output in stereo.
		PAN L/R	Channels "A" and "B" will be assigned respectively to the L and R OUTPUT jacks.
[2]	A/B.BAL (Ch.A/B BALANCE)*1	100:0– 0:100	Adjusts the volume balance of channels "A" and "B."
[3]	SPREAD *1	0–100	Slightly delays the sound of channel "B" to make the sound more spacious.

*1 Shown only if DIVIDER MODE is "DUAL."

NS1/NS2

STEREO

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

Knob	Parameter	Value	Explanation
	NS ON/OFF	OFF, ON	Switches the noise suppressor effect on/off.
[1]	THRESH (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. * High settings for the threshold parameter may result in there being no sound when you play with your guitar volume turned down.
[2]	RELEASE	0–100	Adjusts the time from when the noise suppressor begins to function until the noise level reaches "0."
[4]	DETECT		This controls the noise suppressor based on the volume level for the point specified in Detect.
		INPUT	Input volume from input jack. * Ordinarily, DETECT should be set to "INPUT."
		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)
FV OUT	Volume after passing through Foot Volume. * If you want to use FV (Foot Volume) in place of the guitar's volume control, you need to set DETECT to "FV OUT."  Foot Volume		

ACCEL FX

You can use six types of Accel effects in which operating an external pedal connected to the CTL/EXP jack produces time-varying changes in the sound.

* To use the Accel effect, connect a pedal such as the FS-6 to the CTL/EXP jack, and set MENU → CTL/EXP → CTL1/CTL2 to assign the FUNC (FUNCTION) as ACCEL.

Knob	Parameter	Value	Explanation
Page 1			
[1]	TYPE	S-BEND	Applies intense bending.
		LASR BM (LASER BEAM)	Produces a laser beam-like sound.
		RNGMOD (RING MOD)	Produces a metallic sound, creating the impression that the sound is being focused.
		TWIST	Produces an aggressive sense of rotation. Using this in conjunction with distortion will produce an even wilder sense of rotation.
		WARP	Produces a dream-like sound.
		FEEDBKR (FEEDBACKER)	Generates feedback performance.

S-BEND

MONO

Applies intense bending.

Knob	Parameter	Value	Explanation
Page 1			
[2]	PITCH	-3 oct, -2 oct, -1 oct, +1 oct, +2 oct, +3 oct, +4 oct	Adjusts the amount of pitch shift in octave steps.
[3]	RISE.TM (RISE TIME)	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
[4]	FALL.TM (FALL TIME)	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.

LASER BEAM

STEREO

Produces a laser beam-like sound.

Knob	Parameter	Value	Explanation
Page 2			
[1]	RATE	0–100	Adjusts the modulation rate of the sound.
[2]	DEPTH	0–100	Adjusts the modulation depth of the sound.
[3]	RISE.TM (RISE TIME)	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
[4]	FALL.TM (FALL TIME)	0–100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.

RING MOD

STEREO

Produces a metallic sound, creating the impression that the sound is being focused.

Knob	Parameter	Value	Explanation
Page 1			
[2]	FREQ	0-100	Adjusts the frequency of the internal oscillator.
[3]	RISE.TM (RISE TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
[4]	FALL.TM (FALL TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.
Page 2			
[1]	RNG.LVL (RING LEVEL)	0-100	Adjusts the volume of the effect sound.
[2]	OCT.LVL (OCTAVE LEVEL)	0-100	Adjusts the volume of the one octave low sound.
[3]	DIR.MIX (DIRECT MIX)	0-100	Adjusts the volume of the direct sound.

TWIST

STEREO

Produces an aggressive sense of rotation. Using this in conjunction with distortion will produce an even wilder sense of rotation.

Knob	Parameter	Value	Explanation
Page 1			
[2]	RISE.TM (RISE TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
[3]	FALL.TM (FALL TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.
[4]	LEVEL	0-100	Adjusts the volume of the effect sound.

WARP

STEREO

Produces a dream-like sound.

Knob	Parameter	Value	Explanation
Page 1			
[2]	RISE.TM (RISE TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the maximum.
[3]	FALL.TM (FALL TIME)	0-100	This parameter adjusts the amount of time it is to take for the effect to transition to the original.
[4]	LEVEL	0-100	Adjusts the volume of the effect sound.

FEEDBACKER

MONO

Generates feedback performance.

* Note that the notes you want to apply feedback to must be played singly and cleanly.

Knob	Parameter	Value	Explanation
Page 1			
[2]	MODE	NORMAL	Analyzes the pitch of the guitar sound being input, and then creates a feedback sound.
		OSC (OSCILLATOR)	An artificial feedback sound will be created internally. When OSC is selected, the effect is activated after a single note is played and the note stabilizes. A feedback effect is created when the effect switches on; the feedback disappears when the OSC effect switches off.
[3]	DEPTH *1	0-100	Adjusts the ease with which feedback will occur when the FEEDBACKER is on.
[3]	RISE.TM (RISE TIME) *2	0-100	This determines the time needed for the volume of the feedback sound to reach its maximum from the moment the effect is turned on.
[4]	OCT.RTM (OCTAVE RISE TIME) *2	0-100	This determines the time needed for the volume of the one octave higher feedback sound to reach its maximum from the moment the effect is turned on.
Page 2			
[1]	FEEDBK (FEEDBACK LEVEL) *2	0-100	Adjusts the volume of the feedback sound.
[2]	OCT.FBK (OCTAVE FEEDBACK LEVEL) *2	0-100	Adjusts the volume of the one octave higher feedback sound.
[3]	VIB.RAT (VIBRATO RATE) *2	0-100	Adjusts the rate of the vibrato when the FEEDBACKER is on.
[4]	VIB.DPT (VIBRATO DEPTH) *2	0-100	Adjusts the depth of the vibrato when the FEEDBACKER is on.

*1 MODE=NORMAL only

*2 MODE=OSC only

MASTER SETTING

These settings are applied to the overall patch.

MASTER SETTING

Knob	Parameter	Value	Explanation
Page 1			
[1]	PAT.LVL (PATCH LEVEL)	0–200	Adjusts the volume of the patch.
[3]	USB type B (MASTER BPM)	40–250	Adjusts the BPM value for each patch. * BPM (beats per minute) indicates the number of quarter note beats that occur each minute. * When you have an external MIDI device connected, the MASTER BPM synchronizes to the external MIDI device's tempo, making it impossible to set the MASTER BPM. To enable setting of the "SYNC" (p. 36), set to INTERNAL.
[4]	KEY (MASTER KEY)	C (Am) – B (G#m)	This sets the key for the FX HARMONIST. Major C F B ^b E ^b A ^b D ^b Minor Am Dm Gm Cm Fm B ^b m Major C G D A E B F [#] Minor Am Em Bm F [#] m C [#] m G [#] m D [#] m

MASTER EQ

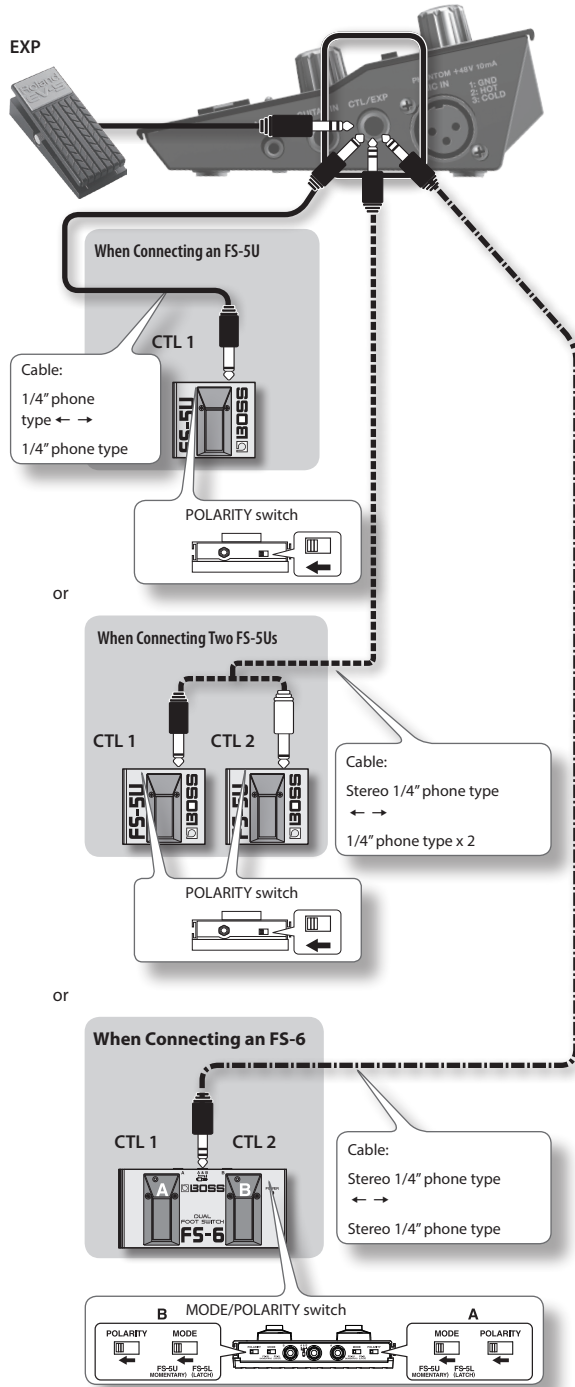
STEREO

Knob	Parameter	Value	Explanation
Page 2			
[1]	LO.GAIN (MASTER LOW GAIN)	-20→+20 dB	Adjusts the low frequency range tone.
[2]	HI.GAIN (MASTER HIGH GAIN)	-20→+20 dB	Adjusts the high frequency range tone.
Page 3			
[1]	MID.FREQ (MASTER MID FREQUENCY)	20.0 Hz–10.0 kHz	Specify the center of the frequency range that will be adjusted by the MASTER MID GAIN.
[2]	MID.Q (MASTER MID Q)	0.5–16	Adjusts the width of the area affected by the EQ centered at the MASTER MID FREQ. Higher values will narrow the area.
[3]	MID.GAIN (MASTER MID GAIN)	-20→+20 dB	Adjusts the middle frequency range tone.

CTL/EXP

Pedal Settings

Connect your footswitch to the CTL/EXP jack as shown in the illustration, and set its POLARITY switch.



Using a Pedal to Control Desired Parameters

Here's how to assign the parameters that will be controlled by the CTL 1, CTL 2 and the expression pedals.

1. Choose [MENU] → "CTL/EXP" → "CTL1", "CTL2", or "EXP"
2. Set the parameter values with knobs [1]-[4].

CTL1, CTL2

Assign the parameters that are controlled by the CTL1 and CTL2 pedals.

Knob	Parameter	Value	Explanation
		OFF	No assignment.
		ACCEL	Switches the ACCEL effect on and off.
		CH SEL (DIV CH SELECT)	Switches between Preamp channel A and B.
		OD SL (OD/DS SOLO)	Switches the OD/DS SOLO on and off.
		A/B SL (A/B SOLO)	Switches the Preamp SOLO on and off.
		A&B SL (A&B SOLO)	Switches the preamp SOLO, for both channel A and B, on and off. If one of the two channels is off, both will be turned on.
		COMP	Switches the COMP on and off.
		OD/DS	Switches the OD/DS on and off.
		PREAMP	Switches the PREAMP/SPEAKER on and off.
		EQ	Switches the EQ on and off.
		FX1	Switches the FX1 on and off.
		FX2	Switches the FX2 on and off.
		DELAY	Switches the DELAY on and off.
		CHORUS	Switches the CHORUS on and off.
		REVERB	Switches the REVERB on and off.
		PEDL FX (PEDAL FX)	Switches the Pedal FX on and off.
		TUNER	Switches the TUNER on and off.
		BPM TAP *1	Used for tap input of the MASTER BPM.
[1]	FUNC	DELY TAP (DELAY TAP) *1	Used for tap input of the delay time.
		MIDI ST (MIDI START)	Controls the Start/Stop of external MIDI devices (such as sequencers).
		MMC PLY (MMC PLAY)	Controls the Play/Stop of external MIDI devices (such as hard disk recorders).
		LVL+10 (LEVEL +10) *1	Increases the patch volume level by 10 units.
		LVL+20 (LEVEL +20) *1	Increases the patch volume level by 20 units.
		LVL-10 (LEVEL -10) *1	Decreases the patch volume level by 10 units.
		LVL-20 (LEVEL -20) *1	Decreases the patch volume level by 20 units.
		NUM INC (NUMBER INC) *1 *2	Switches to the next higher patch number.
		NUM DEC (NUMBER DEC) *1 *2	Switches to the next lowers patch number.
		FAV INC (FAVORITE INC) *2	Switches FAVORITE in the order of A → B → C → D → A...
		FAV DEC (FAVORITE DEC) *2	Switches FAVORITE in the order of D → C → B → A → D...

*1 The function will activate as soon as you press the pedal, regardless of whether the SOURCE MODE parameter is MOMENT or TOGGLE.

*2 To switch patches, use MENU → SYSTEM → PREFERENCE to specify CTL1/2 as SYSTEM, or set CTL1/2's FUNC to NUMBER INC/DEC for all of the patches that you want to switch.

MENU

Knob	Parameter	Value	Explanation
[2]	MIN	OFF, ON (or STOP, START, PLAY)	This sets the value for times when the switch is Off.
[3]	MAX	OFF, ON (or STOP, START, PLAY)	This sets the value for times when the switch is On.
[4]	MODE (SOURCE MODE)	This sets the behavior of the value each time the switch is operation.	
		MOMENT	The normal state is Off (minimum value), with the switch On (maximum value) only while the footswitch is depressed.
		TOGGLE	The setting is toggled On (maximum value) or Off (minimum value) with each press of the footswitch.

EXP

Here's how to assign the parameters that will be controlled by an expression pedal (such as the separately available EV-5) connected to the CTL/EXP jack.

Knob	Parameter	Value	Explanation
[1]	FUNC	OFF	No assignment.
		FV (FOOT VOLUME)	Foot volume will be assigned.
		PB (PEDAL BEND)	Pedal bend will be assigned.
		WAH	Wah will be assigned.
		PB/FV	Pedal bend and foot volume will be assigned.
		WAH/FV	Wah and foot volume will be assigned.
		PAT LV (PATCH LEVEL) *1	Patch level will be assigned.
[3]	MIN (PATCH LEVEL MIN) *2	0–200	Specifies the minimum value.
[4]	MAX (PATCH LEVEL MAX) *2	0–200	Specifies the maximum value.

This is shown only if PERFORMANCE (p. 35) is set to SYSTEM.

*2 Shown only if PATCH LEVEL is selected in FUNC.

Specifying the External Pedal Function for Each Patch (Assign)

Here's how the function of an external pedal (footswitch, expression pedal) connected to the CTL/EXP jack can be specified for each patch. For each patch, you can make eight different assignments (assign number 1–8) that specify which pedal controls which parameter.

* Select each individual parameter to specify which pedal will control each parameter.

1. Choose [MENU] → "CTL/EXP" → "ASSIGN C (COMMON)" or "ASSIGN 1–8."
2. Set the parameter values with knobs [1]–[4].

ASSIGN COMMON





Knob	Parameter	Value	Explanation
[1]	SENS (INPUT SENS)	0–100	This adjusts the input sensitivity when INPUT LEVEL is selected for SOURCE.




ASSIGN 1–8

Knob	Parameter	Value	Explanation
[1]	ASSIGN	OFF, ON	Turns the ASSIGN 1–8 on/off.
[2]	SOURCE	EXP PDL (EXP PEDAL)	Assigns the external footswitch (FS-5U, FS-6; available separately) connected to the CTL/EXP jack.
		CTL1 PDL (CTL1 PEDAL)	Assigns the external footswitch (FS-5U, FS-6; available separately) connected to the CTL/EXP jack.
		CTL2 PDL (CTL2 PEDAL)	Assigns the external footswitch (FS-5U, FS-6; available separately) connected to the CTL/EXP jack.
		INT PDL (INTERNAL PEDAL)	Refer to "Virtual expression pedal system (Internal Pedal / Wave Pedal)" (p. 31)
		WAV PDL (WAVE PEDAL)	Refer to "Virtual expression pedal system (Internal Pedal / Wave Pedal)" (p. 31)
		INPUT (INPUT LEVEL)	The assigned target parameter will change according to the input level.
		CC#1–#31	Control Change messages from an external MIDI device.
	CC#64–#95	Control Change messages from an external MIDI device.	
[3]	MODE (SOURCE MODE)	MOMENT	The normal state is Off (minimum value), with the switch On (maximum value) only while the footswitch is depressed.
		TOGGLE	The setting is toggled On (maximum value) or Off (minimum value) with each press of the footswitch.

Page 2

[1]	CATEGORY (TARGET CATEGORY)	This selects the parameter to be changed.
[2]	TARGET	Refer to TARGET list
[3]	MIN (TARGET MIN)	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.
[4]	MAX (TARGET MAX)	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.

Knob	Parameter	Value	Explanation
Page 3			
[1]	ACT.LO (ACT RANGE LO)	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 LO and ACT HI. You should normally set ACT LO to 0 and ACT HI to 127.
[2]	ACT.HI (ACT RANGE HI)	1-127	
[3]	WAV.RT (WAVE RATE) *1	0-100, BPM 	This determines the time spend for one cycle of the assumed EXP Pedal. When set to BPM, the value of each parameter will be set according to the value of the "MASTER BPM" specified for each patch. This makes it easier to achieve effect sound settings that match the tempo of the song. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
[4]	WAV.FM (WAVE FORM) *1	SAW TRI SINE	  

Page 4			
[1]	TRIGGER (INT PEDAL TRIGGER) *2	PAT CNG (PATCH CHANGE) EXP LO EXP MID EXP HI CTL1 PDL CTL2 PDL CC#1-#31 CC#64-#95	This is activated when a patch is selected. This is activated when an external expression pedal connected to the CTL/EXP jack is set to the minimum position. This is activated when the external expression pedal connected to the CTL/EXP jack is moved through the middle position. This is activated when the external expression pedal connected to the CTL/EXP jack is set to the maximum position. This is activated when an external footswitch connected to the CTL/EXP jack is operated. This is activated when an external footswitch connected to the CTL/EXP jack is operated. This is activated when a control change is received. This is activated when a control change is received.
[2]	TIME (INT PEDAL TIME) *2	0-100	This specifies the time over which the internal pedal will move from the toe-raised position to the toe-down position.
[3]	CURVE (INT PEDAL CURVE) *2	LINEAR SLOW (SLOW RISE) FAST (FAST RISE)	  

*1 The WAVE RT and WAVE FM parameters are enabled when the Source parameter is set to WAVE PDL.

*2 The TRIGGER, TIME, and CURVE parameters are enabled when the SOURCE parameter is set to INT PEDAL.

TARGET list

CATEGORY	TARGET	CATEGORY	TARGET	CATEGORY	TARGET	CATEGORY	TARGET		
COMP	ON/OFF	PRAMP A/B(PREAMP A/B)	TYPE	FX1/FX2	ON/OFF	1/2 PEQ (FX1/FX2 PEQ)	LO CUT (LOW CUT)		
	TYPE		GAIN		TYPE		LO GAIN (LOW GAIN)		
	SUSTAIN		T-COMP		MODE		LM FREQ (LOW-MID FREQUENCY)		
	ATTACK		BASS		POLARTY (POLARITY)		LM Q (LOW-MID Q)		
	TONE		MIDDLE		SENS		LM GAIN (LOW-MID GAIN)		
	LEVEL		TREBLE		FREQ		HM FREQ (HIGH-MID FREQUENCY)		
OD/DS	ON/OFF		PRES (PRESENCE)	LEVEL	1/2 T.WAH (FX1/FX2 T.WAH)		PEAK	HM Q (HIGH-MID Q)	HM GAIN (HIGH-MID GAIN)
	TYPE		LEVEL	BRIGHT			E.LVL (EFFECT LEVEL)	HI CUT (HIGH CUT)	
	DRIVE		BRIGHT	GAIN SW			DIR MIX (DIRECT MIX)	HI GAIN (HIGH GAIN)	
	BOTTOM		BRIGHT	SOL SW (SOLO SW)			MODE	LEVEL	
	TONE		BRIGHT	SOL LV (SOLO LEVEL)			FREQ	TYPE	
	SOL SW (SOLO SW)		BRIGHT	SOL LV (SOLO LEVEL)			PEAK	1/2 TonMD (FX1/FX2 TONE MODIFY)	
	SOL LV (SOLO LEVEL)		BRIGHT	SP TYPE	RATE		RESO		
	E.LVL (EFFECT LEVEL)		MIC TYP (MIC TYPE)	MIC TYPE	DEPTH		HIGH		
	DIR MIX (DIRECT MIX)		MIC DIST (MIC DISTANCE)	MIC POS (MIC POSITION)	E.LVL (EFFECT LEVEL)		LEVEL		
	C-TYPE (CUSTOM TYPE)		MIC POS (MIC POSITION)	MIC LVL (MIC LEVEL)	DIR MIX (DIRECT MIX)		1/2 GtrSM (FX1/FX2 GUITAR SIM)	TYPE	
	C-BTM (CUSTOM BOTTOM)		MIC LVL (MIC LEVEL)	DIR MIX (DIRECT MIX)	TYPE			LOW	
	C-TOP (CUSTOM TOP)		DIR MIX (DIRECT MIX)	C-TYPE (CUSTOM TYPE)	PDL POS (PEDAL POSITION)			HIGH	
	C-LOW (CUSTOM LOW)		C-TYPE (CUSTOM TYPE)	C-BTM (CUSTOM BOTTOM)	PDL MIN (PEDAL MIN)			BODY	
	C-HIGH (CUSTOM HIGH)	C-BTM (CUSTOM BOTTOM)	C-EDG (CUSTOM EDGE)	PDL MAX (PEDAL MAX)	LEVEL				
	C-CHAR (CUSTOM CHAR)	C-EDG (CUSTOM EDGE)	C-LOW (CUSTOM LOW)	E.LVL (EFFECT LEVEL)	BODY				
	PREAMP	ON/OFF	C-LOW (CUSTOM LOW)	DIR MIX (DIRECT MIX)	1/2 S.WAH (FX1/FX2 SUB WAH)	DIR MIX (DIRECT MIX)	1/2 A.SIM (FX1/FX2 AC. GUITAR SIM)	LOW	
		EQ	LO CUT (LOW CUT)	C-HIGH (CUSTOM HIGH)		C-TYPE (CUSTOM TYPE)		TYPE	HIGH
			LO GAIN (LOW GAIN)	C-CHAR (CUSTOM CHAR)		C-BTM (CUSTOM BOTTOM)		SUSTAIN	LEVEL
			LM FREQ (LOW-MID FREQUENCY)	SP SIZE (CUSTOM SPEAKER SIZE)		C-EDG (CUSTOM EDGE)		ATTACK	SENS
LM Q (LOW-MID Q)			SP LO (CUSTOM COLOR LOW)	C-LOW (CUSTOM LOW)		TONE		RISE TM (RISE TIME)	
LM GAIN (LOW-MID GAIN)			SP HI (CUSTOM COLOR HIGH)	C-HIGH (CUSTOM HIGH)		LEVEL		LEVEL	
HM FREQ (HIGH-MID FREQUENCY)			SP NUM (CUSTOM SPEAKER NUMBER)	C-CHAR (CUSTOM CHAR)	1/2 LIMTR (FX1/FX2 LIMITER)	1/2 SIGER (FX1/FX2 SLOW GEAR)	TYPE		
HM Q (HIGH-MID Q)			SP CABI (CUSTOM CABINET)	SP SIZE (CUSTOM SPEAKER SIZE)			THRES (THRESHOLD)	TONE	
HM GAIN (HIGH-MID GAIN)			ON/OFF	SP LO (CUSTOM COLOR LOW)			RATIO	SENS	
HI FREQ (HIGH-MID FREQUENCY)			LO CUT (LOW CUT)	SP HI (CUSTOM COLOR HIGH)			RELEASE	ATTACK	
HI Q (HIGH-MID Q)			LO GAIN (LOW GAIN)	SP NUM (CUSTOM SPEAKER NUMBER)			LEVEL	DEPTH	
HI GAIN (HIGH GAIN)			LM FREQ (LOW-MID FREQUENCY)	SP CABI (CUSTOM CABINET)			TYPE	RESO	
HI CUT (HIGH CUT)			LM Q (LOW-MID Q)	ON/OFF	DRIVE	E.LVL (EFFECT LEVEL)			
LEVEL			LM GAIN (LOW-MID GAIN)	LO CUT (LOW CUT)	BOTTOM	DIR MIX (DIRECT MIX)			
EQ			HM FREQ (HIGH-MID FREQUENCY)	LM GAIN (LOW-MID GAIN)	TONE	1/2 OD/DS (FX1/FX2 OD/DS)	1/2 DEFRT (FX1/FX2 DEFRET- TER)	WAVE	
			HM Q (HIGH-MID Q)	HM FREQ (HIGH-MID FREQUENCY)	SOL SW (SOLO SW)			CUTOFF	RESO (RESONANCE)
			HM GAIN (HIGH-MID GAIN)	HM Q (HIGH-MID Q)	SOL LV (SOLO LEVEL)			FLT SNS (FILTER SENS)	FLT DCY (FILTER DECAY)
			HI FREQ (HIGH-MID FREQUENCY)	HM GAIN (HIGH-MID GAIN)	E.LVL (EFFECT LEVEL)			FLT DPT (FILTER DEPTH)	SYN LVL (SYNTH LEVEL)
			HI Q (HIGH-MID Q)	HI FREQ (HIGH-MID FREQUENCY)	DIR MIX (DIRECT MIX)			SYN LVL (SYNTH LEVEL)	DIR MIX (DIRECT MIX)
	HI GAIN (HIGH GAIN)	HM Q (HIGH-MID Q)	31 Hz	1/2 WvSYN (FX1/FX2 WAVE SYNTH)	WAVE				
	HI CUT (HIGH CUT)	HM GAIN (HIGH-MID GAIN)	62 Hz		CUTOFF	RESO (RESONANCE)			
	LEVEL	HI Q (HIGH-MID Q)	125 Hz		FLT SNS (FILTER SENS)	FLT DCY (FILTER DECAY)			
	EQ	HM FREQ (HIGH-MID FREQUENCY)	HM GAIN (HIGH-MID GAIN)		250 Hz	FLT DPT (FILTER DEPTH)	SYN LVL (SYNTH LEVEL)		
		HM Q (HIGH-MID Q)	HI FREQ (HIGH-MID FREQUENCY)		500 Hz	DIR MIX (DIRECT MIX)	DIR MIX (DIRECT MIX)		
		HM GAIN (HIGH-MID GAIN)	HM Q (HIGH-MID Q)		1 kHz	1/2 GEQ (FX1/FX2 GEQ)	31 Hz		
		HI FREQ (HIGH-MID FREQUENCY)	HM GAIN (HIGH-MID GAIN)	2 kHz	62 Hz				
		HI Q (HIGH-MID Q)	HI FREQ (HIGH-MID FREQUENCY)	4 kHz	125 Hz				
		HI GAIN (HIGH GAIN)	HM Q (HIGH-MID Q)	8 kHz	250 Hz				
	HI CUT (HIGH CUT)	HM GAIN (HIGH-MID GAIN)	16 kHz	500 Hz					
	LEVEL	HI Q (HIGH-MID Q)	LEVEL	1 kHz					

CATEGORY	TARGET	CATEGORY	TARGET	CATEGORY	TARGET	CATEGORY	TARGET	
1/2 StrSM (FX1/FX2 SITAR SIM)	TONE	1/2 PHASR (FX1/FX2 PHASER)	TYPE	1/2 SLICR (FX1/FX2 SLICER)	PATTERN	2 T.ECHO (FX2 TERA ECHO)	MODE	
	SENS		RATE		RATE		TIME (S.TIME)	
	DEPTH		DEPTH		TRG SNS (TRIGGER SENS)		F.BACK (FEEDBACK)	
	RESO		MANUAL		E.LVL (EFFECT LEVEL)		E.LVL (EFFECT LEVEL)	
	BUZZ		RESO (RESONANCE)		DIR MIX (DIRECT MIX)		TONE	
	E.LVL (EFFECT LEVEL)		STEP RT (STEP RATE)		RATE		DIR MIX (DIRECT MIX)	
DIR MIX (DIRECT MIX)	E.LVL (EFFECT LEVEL)	DEPTH	HOLD					
1/2 OCTAV (FX1/FX2 OCTAVE)	RANGE	1/2 FLNGR (FX1/FX2 FLANGER)	DIR MIX (DIRECT MIX)	1/2 VIBRT (FX1/FX2 VIBRATO)	TRIGGER	DELAY	ON/OFF	
	OCT LVL (OCTAVE LEVEL)		RATE		RISE TM (RISE TIME)		TYPE	
	DIR MIX (DIRECT MIX)		DEPTH		LEVEL		DLY TIM (DELAY TIME)	
1/2 PSHFT (FX1/FX2 PITCH SHIFTER)	VOICE	1/2 TREML (FX1/FX2 TREMOLO)	MANUAL	1/2 RINGMD (FX1/FX2 RING MOD)	MODE	DELAY D1	F.BACK (FEEDBACK)	
	1 MODE		RESO (RESONANCE)		FREQ (FREQUENCY)		HI CUT	
	1 PITCH		SEPARAT (SEPARATION)		E.LVL (EFFECT LEVEL)		MODEMODE (HIGH CUT)	
	1 FINE (PITCH FINE)		LOW CUT		DIR MIX (DIRECT MIX)		E.LVL (EFFECT LEVEL)	
	1 PrDLY (PRE DELAY)	E.LVL (EFFECT LEVEL)	MODE	DIR MIX (DIRECT MIX)				
	1 LEVEL	DIR MIX (DIRECT MIX)	VOWEL 1	TAPTIME (PAN TAP TIME)				
	2 MODE	WAVE (WAVE SHAPE)	VOWEL 2	DELAY D2	TIME			
	2 PITCH	RATE	SENS		F.BACK (FEEDBACK)			
	2 FINE (PITCH FINE)	DEPTH	RATE		HI CUT			
	2 PrDLY (PRE DELAY)	LEVEL	DEPTH	MODEMODE (HIGH CUT)				
2 LEVEL	SPEED (SPEED SELECT)	MANUAL	LEVEL					
1 F.BAK (FEEDBACK)	RAT SLW (RATE SLOW)	LEVEL	DELAY MD (DELAY MOD)	TIME				
DIR MIX (DIRECT MIX)	RAT FST (RATE FAST)	XOVER (CROSSOVER FREQUENCY)		F.BACK (FEEDBACK)				
1/2 HARM (FX1/FX2 HARMONIST)	VOICE	1/2 ROTY1 (FX1/FX2 ROTARY 1)		LO RATE (LOW RATE)	1/2 2X2CH (FX1/FX2 2X2 CHORUS)	LO DEPT (LOW DEPTH)	CHORUS	HI CUT
	1 HRMNY (HARMONY)			RISE TM (RISE TIME)		LO PrD (LOW PRE DELAY)		MODEMODE (HIGH CUT)
	1 PrDLY (PRE DELAY)		FALL TM (FALL TIME)	LO LEVEL (LOW EFFECT LEVEL)		LEVEL		
	1 LEVEL		DEPTH	HI RATE (HIGH RATE)		MOD RAT (MODULATION RATE)		
	2 HRMNY (HARMONY)	LEVEL	HI DEPT (HIGH DEPTH)	MOD DPT (MODULATION DEPTH)				
	2 PrDLY (PRE DELAY)	SPEED (SPEED SELECT)	HI PrD (HIGH PRE DELAY)	ON/OFF				
	2 LEVEL	RAT SLW (RATE SLOW)	HI LEVEL (HIGH LEVEL)	MODE				
	1 F.BAK (FEEDBACK)	RAT FS (RATE FAST)	DIR MIX (DIRECT MIX)	RATE				
DIR MIX (DIRECT MIX)	DEPTH	1/2 SubDL (FX1/FX2 SUB DELAY)	TYPE	DEPTH				
1/2 S.HLD (FX1/FX2 SOUND HOLD)	HOLD		1/2 ROTY2 (FX1/FX2 ROTARY 2)	DLY TIM (DELAY TIME)	PRE DLY (PRE DELAY)			
	RISE TM (RISE TIME)			RISE TM (RISE TIME)	LO CUT (LOW CUT)			
	E.LVL (EFFECT LEVEL)			FALL TM (FALL TIME)	HI CUT			
1/2 AcPRO (FX1/FX2 AC.PROCESSOR)	TYPE	1/2 UNIV (FX1/FX2 UNIV)		BAL (BASS/HORN MIX)	MODEMODE (HIGH CUT)			
	BASS		LEVEL	E.LVL (EFFECT LEVEL)				
	MIDDLE		DIR MIX (DIRECT MIX)	DIR MIX (DIRECT MIX)				
	MID FRQ (MIDDLE FREQUENCY)		RATE	TAP TIM (TAP TIME)				
	TREBLE	DEPTH	2 O.TONE (FX2 OVERTONE)	UPPR LV (UPPER LEVEL)				
	PRES (PRESENCE)	LEVEL		LOWR LV (LOWER LEVEL)				
LEVEL	TYPE	DIR MIX (DIRECT MIX)						
	WAVE (WAVE SHAPE)	DETUNE						
	RATE	TONE						
	DEPTH							
	POS (POSITION)							
	LEVEL							

MENU

CATEGORY	TARGET	CATEGORY	TARGET	CATEGORY	TARGET
REVERB	ON/OFF	NS1	ON/OFF	BMP.KEY	MstBPM (MASTER BPM)
	TYPE		THRES (THRESHOLD)		MstKEY (MASTER KEY)
	REV TIM (REVERB TIME)		RELEASE	TUNER	TUNER (TUNER SW)
	PRE DLY (PRE DELAY)	DETECT	TAP		BPM TAP
	LO CUT (LOW CUT)	ON/OFF		DLY TAP (DELAY TAP)	
	HI CUT	NS2	THRES (THRESHOLD)	MIDI	ST/STP (START/STOP)
	MODEMODE (HIGH CUT)		RELEASE		PLY/STP (MMC PLAY/STOP)
	DENSITY	DETECT	PATCH		LVL +10 (LEVEL +10)
	E.LVL (EFFECT LEVEL)	ON/OFF			LVL +20 (LEVEL +20)
	DIR MIX (DIRECT MIX)	TYPE		LVL -10 (LEVEL -10)	
	SPRING (SPRING SENS)	PITCH		LVL -20 (LEVEL -20)	
PDL FX (PEDAL FX)	ON/OFF	LASER (ACCEL LASER BEAM)		RISE TM (RISE TIME)	NUM INC (NUMBER INC)
	PITCH			FALL TM (FALL TIME)	NUM DEC (NUMBER DEC)
PDL P.B. (PEDAL PITCH BEND)	PDL POS (PEDAL POSITION)			DEPTH	FAV INC (FAVORITE INC)
	E.LVL (EFFECT LEVEL)	RISE TM (RISE TIME)			
	DIR MIX (DIRECT MIX)	FALL TM (FALL TIME)			
PDL WAH (PEDAL WAH)	TYPE	RING (ACCEL RING MOD)		FREQ (FREQUENCY)	
	PDL POS (PEDAL POSITION)			RISE TM (RISE TIME)	
	PDL MIN (PEDAL MIN)		FALL TM (FALL TIME)		
	PDL MAX (PEDAL MAX)		RNG LVL (RING LEVEL)		
	E.LVL (EFFECT LEVEL)		OCT LVL (OCTAVE LEVEL)		
	DIR MIX (DIRECT MIX)	DIR MIX (DIRECT MIX)			
FOT VOL (FOOT VOLUME)	VOL CRV (VOLUME CURVE)	TWIST (ACCEL TWIST)	LEVEL		
	VOL MIN (VOLUME MIN)		RISE TM (RISE TIME)		
	VOL MAX (VOLUME MAX)		FALL TM (FALL TIME)		
	LEVEL	WARP (ACCEL WARP)	LEVEL		
DIVIDER	MODE		RISE TM (RISE TIME)		
	CH SEL (CHANNEL SELECT)		FALL TM (FALL TIME)		
	ChA DYN (Ch.A DYNAMIC)	F.BACK (ACCEL FEED-BACKER)	MODE		
	ChA SNS (Ch.A DYNAMIC SENS)		DEPTH		
	ChA FLT (Ch.A FILTER)		RISE TM (RISE TIME)		
	ChA COF (Ch.A CUTOFF FREQUENCY)		OCT R.TM (OCTAVE RISE TIME)		
	ChB DYN (Ch.B DYNAMIC)		FB LVL (FEEDBACK LEVEL)		
	ChB SNS (Ch.B DYNAMIC SENS)	OCT FB (OCTAVE FEEDBACK LEVEL)			
	ChB FLT (Ch.B FILTER)	VIB RAT (VIBRATO RATE)			
	ChB COF (ChB CUTOFF FREQUENCY)	VIB DPT (VIBRATO DEPTH)			
	MIXER	MODE	MASTER	PAT LVL (PATCH LEVEL)	
Ch BAL (ChA/B BALANCE)		LO (MASTER LOW GAIN)			
SPREAD		MID F (MASTER MID FREQUENCY)			
		MID Q (MASTER MID Q)			
	MID (MASTER MID GAIN)				
	HI (MASTER HI GAIN)				

Virtual expression pedal system (Internal Pedal / Wave Pedal)

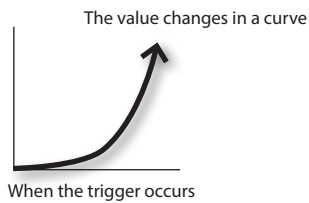
By assigning a desired parameter to the virtual expression pedal, you can produce an effect as though you were operating a physical expression pedal to change the volume or tone quality in real time.

The virtual expression pedal system provides the following two types of functions, and you can use the SOURCE setting for ASSIGN 1–8 to choose the desired type.

- * If you want to use the internal pedal or wave pedal, set the ASSIGN parameter MODE to "MOMENT."

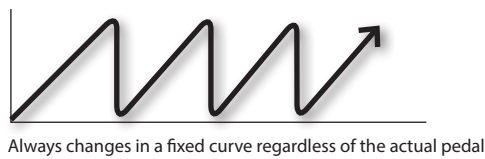
Internal pedal

If SOURCE is set to "INT PDL," the virtual expression pedal will begin operating when started by the specified trigger (INT PDL TRIGGER), modifying the parameter specified by TARGET.



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.



Input level

Input level

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

MEMO

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

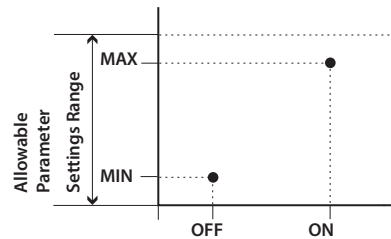
About the Range of a Target's Change

The value of the parameter selected as the target changes within the range defined by "Min" and "Max," as set on the GT-001.

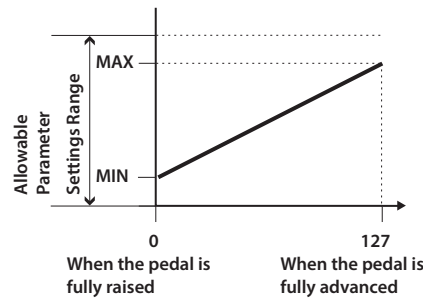
When using an external footswitch, or other controller that acts as an on/off switch, "Min" is selected with Off (CLOSED), and "Max" is selected with On (OPEN).

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.

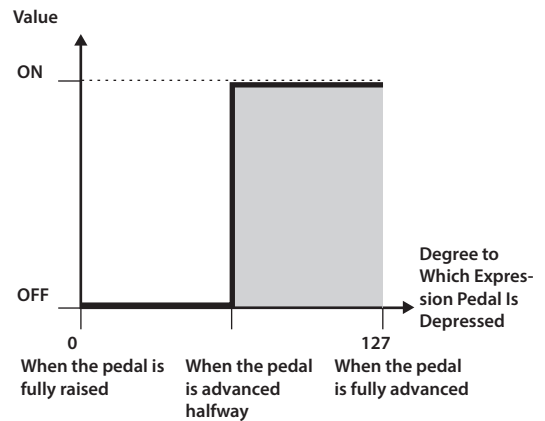
When using the footswitch:



When using the expression pedal:



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

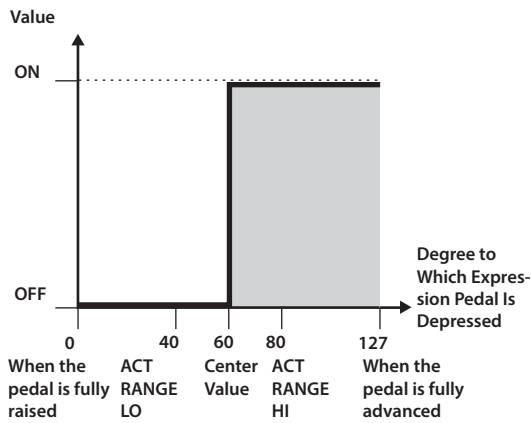
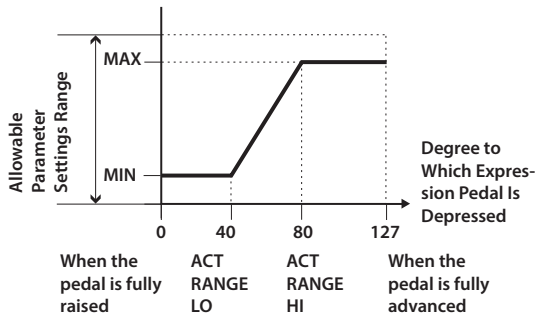


- * The range that can be selected changes according to the target setting.
- * When the "minimum" is set to a higher value than the "maximum," the change in the parameter is reversed.
- * "The values of settings can change if the target is changed after the "minimum" and "maximum" settings have been 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 LO: 40, ACT HI: 80



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

SYSTEM

Settings that are shared by the entire GT-001 are called “system settings.”

MEMO

For details on how to make settings, refer to “Editing: Editing the Effects” (p. 7) in the owner’s manual.

OUTPUT SELECT

Specify the device (amp) that’s connected to the OUTPUT jacks.

Parameter	Value	Explanation
SELECT	JC-120	Choose this setting if the GT-001 is connected to the guitar input of a Roland JC-120 guitar amp.
	SMALL AMP	Choose this setting if the GT-001 is connected to a small guitar amp.
	COMBO AMP	Choose this setting if the GT-001 is connected to the guitar input of a combo-type guitar amp (i.e., a single unit that contains the amp and speaker) other than the JC-120. For some types of guitar amps, the “JC-120” setting might produce better results.
	STACK AMP	Choose this setting if the GT-001 is connected to the guitar input of a stack-type guitar amp (i.e., one in which the amp and speaker are separate units).
	JC-120 RETURN	Choose this setting if the GT-001 is connected to the RETURN jack of the JC-120.
	COMBO RETURN	Choose this setting if the GT-001 is connected to the RETURN jack of a combo-type guitar amp.
	STACK RETURN	Choose this setting if the GT-001 is connected to the RETURN jack of a combo-type guitar amp. You should also choose the “STACK RETURN” setting if you’re using a guitar power amp together with a speaker cabinet.
	LINE/PHONES	Choose this setting if you’re using headphones, or if the GT-001 is connected to a keyboard amp, mixer, or digital recorder.

INPUT

Here you can make settings related to input.

On the GT-001 you can use either the guitar input or the mic input. You can’t use both simultaneously.

Knob	Parameter	Value	Explanation
Page 1			
[1]	SELECT (INPUT SELECT)	Specifies which signal will be received: GUITAR IN or MIC IN.	
		GUITAR	The input from GUITAR IN is sent through the effect.
		MIC	The input from MIC IN is sent through the effect.
Page 2			
[1]	GT.LVL (GUITAR LEVEL)	MUTE, -19 dB--+20 dB	Adjusts the guitar input level. The input is muted if you select MUTE.
[2]	MIC.LVL (MIC LEVEL)	MUTE, 0 dB--+20 dB	Adjusts the mic input level. The input is muted if you select MUTE. While watching the level meter shown in the same screen, set the level so that it does not exceed the second line from the top.
[4]	PHANTM (PHANTOM)	OFF, ON	Specifies whether phantom power is supplied. You must turn this OFF if you’re using a mic that does not support phantom power.

* The sound might be interrupted when you adjust MIC LEVEL or PHANTOM.

KNOB SETTING

Here you can assign the desired parameters to knobs [1]–[4] in the Play Screen.

* The settings you make here are only for the knobs in the Play Screen.

1. Choose [MENU] → “SYSTEM” → “KNOB.”
2. Set the parameter values with knobs [1]–[4].

Knob	Parameter	Value
[1]	KNOB 1	OFF, PATCH, CmpSUS (COMP SUSTAIN), CmpATK (COMP ATTACK), CmpLEV (COMP LEVEL), OD DRV (OD/DS DRIVE), OD TNE (OD/DS TONE), OD ELV (OD/DS EFFECT LEVEL), OD SLV (OD/DS SOLO LEVEL), A: TYPE (PREAMP A TYPE), A: GAIN (PREAMP A GAIN), A: LEV (PREAMP A LEVEL), A: BASS (PREAMP A BASS), A: MID (PREAMP A MID), A: TRB (PREAMP A TREBLE), A: PRES (PREAMP A PRESENCE), A: SLV (PREAMP A SOLO LEVEL), A: MLV (PREAMP A MIC LEVEL), B: TYPE (PREAMP B TYPE), B: GAIN (PREAMP B GAIN), B: LEV (PREAMP B LEVEL), B: BASS (PREAMP B BASS), B: MID (PREAMP B MID), B: TRB (PREAMP B TREBLE), B: PRES (PREAMP B PRESENCE), B: SLV (PREAMP B SOLO LEVEL), B: MLV (PREAMP B MIC LEVEL), EQ LC (EQ LOW CUT), EQ LOW (EQ LOW GAIN), EQ LMD (EQ LOW-MID GAIN), EQ HMD (EQ HIGH-MID GAIN), EQ HI (EQ HIGH GAIN), EQ HC (EQ HIGH CUT), DlyTIM (DELAY TIME), DlyFBK (DELAY FEEDBACK), DlyHC (DELAY HI CUT), DlyELV (DELAY EFFECT LEVEL), D1 TIM (D1 TIME), D1 FBK (D1 FEEDBACK), D1 HC (D1 HIGH CUT), D1 LEV (D1 EFFECT LEVEL), D2 TIM (D2 TIME), D2 FBK (D2 FEEDBACK), D2 HC (D2 HIGH CUT), D2 LEV (D2 EFFECT LEVEL), ChoRAT (CHORUS RATE), ChoDPT (CHORUS DEPTH), ChoDLY (CHORUS PRE DELAY), ChoLEV (CHORUS EFFECT LEVEL), RevTIM (REVERB TIME), RevHC (REVERB HIGH CUT), RevLV (REVERB EFFECT LEVEL), MT LOW (MASTER LOW GAIN), MT MID (MASTER MID GAIN), MT HI (MASTER HIGH GAIN), PAT LV (PATCH LEVEL), WahLEV (PEDAL WAH LEVEL), PB LEV (PEDAL PITCH BEND LEVEL), CH A/B (DIVIDER CH SELECT), NS1THR (NS1 THRESHOLD), NS1REL (NS1 RELEASE), NS2THR (NS2 THRESHOLD), NS2REL (NS2 RELEASE), GB LOW (GLOBAL EQ LOW), GB MID (GLOBAL EQ MID), GB HI (GLOBAL EQ HIGH), USB LV (USB MIX LEVEL), ACC SW (ACCEL SWITCH), OD SL (OD/DS SOLO), A/B SL (PREAMP A/B SOLO), A&B SL (PREAMP A&B SOLO), Cmp SW (COMP SWITCH), OD/DS, PREAMP, EQ, FX1, FX2, REVERB, PEDL FX (PEDAL FX)
[2]	KNOB 2	
[3]	KNOB 3	
[4]	KNOB 4	

USB

Here you can make USB-related settings for when the GT-001 is connected to a computer via USB.

USB audio flow

GT-001 provides two USB audio outputs: "PRIMARY" and "SECONDARY."

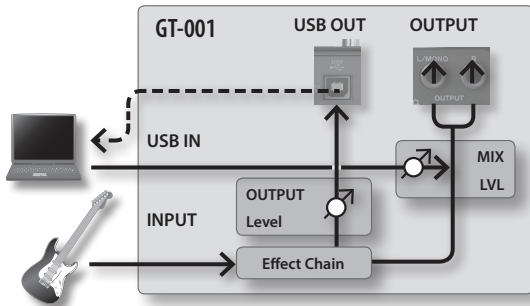
PRIMARY outputs the effect sound, and the return from the computer is mixed with your guitar performance at the final stage.

Regardless of the settings of the GT-001 itself, SECONDARY always outputs the dry sound, and the return from the computer is always returned to the beginning of the effect chain.

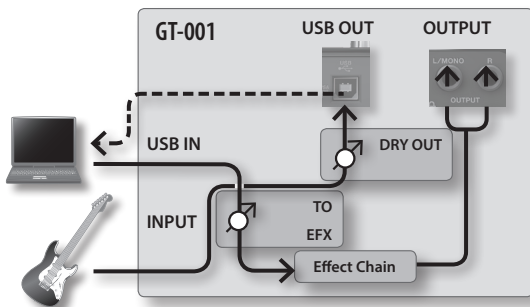
With GT-001, both PRIMARY and SECONDARY are being output to the computer; this means that by using two guitar tracks on your computer, you can record the dry sound and effect sound simultaneously.

If you're not happy with the effect sound from PRIMARY, you can play back the simultaneously-recorded dry sound from SECONDARY, and send it through the effect chain of GT-001 to modify the sound to your liking.

USB PRIMARY



USB SECONDARY



USB PRIMARY

Knob	Parameter	Value	Explanation
Page 1			
[1]	MIX.LVL (MIX LEVEL)	0-200%	Adjusts the level of the audio input from the computer. At this time, the audio input from the computer is mixed at the final stage of the GT-001.
[2]	EFX.OUT (EFFECT OUTPUT LEVEL)	0-200%	Adjusts the level of the output to the computer.
[3]	LOOP (LOOP BACK)	OFF, ON	If this is ON, the sound from the computer is mixed with the effect sound of the GT-001 and sent to the computer.
[4]	DIR. MONITOR	Switches the output of the GT-001 sound to the OUTPUT and PHONES jacks. * This setting cannot be saved. It is set to ON when the power is turned on.	
		OFF	Set this to Off if transmitting audio data internally through a computer (Thru). No sound is heard at this time unless the setting for the computer is Thru.
		ON	The GT-001 sound is output. Set this to ON when using the GT-001 as a standalone device, without connecting to a computer (only USB input sound will be output if this is set to Off).

USB SECONDARY

Knob	Parameter	Value	Explanation
Page 2			
[1]	TO.EFX (TO EFFECT LEVEL)	-20+20 dB	Adjusts the input level from the computer to the GT-001's effects.
[3]	DRY.OUT (DRY GUITAR OUTPUT LEVEL)	0-200%	Outputs the unmodified sound (dry sound) of the guitar that is being input to the GT-001.

GLOBAL EQ

STEREO

This adjusts the tone of the OUTPUT regardless of the equalizer on/off settings of individual patches.

Knob	Parameter	Value	Explanation
Page 1			
[1]	LOW (LOW GAIN)	-20+20 dB	Adjusts the low frequency range tone.
[2]	MID (MID GAIN)	-20+20 dB	Adjusts the middle frequency range tone.
[3]	MID.FREQ (MID FREQUENCY)	20.0 Hz-10.0 kHz	Specifies the center of the frequency range that will be adjusted by the MID GAIN.
[4]	MID.Q	0.5-16	Adjusts the width of the area affected by the EQ centered at the MID FREQ. Higher values will narrow the area.
Page 2			
[1]	HIGH (HIGH GAIN)	-20+20 dB	Adjusts the high frequency range tone.

TOTAL

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

Knob	Parameter	Value	Explanation
[1]	NS.THRS (NS THRESH-OLD)	-20~+20 dB	Control the threshold level of the noise suppressor used by each patch. This does not affect the settings of each patch. * If you want to use the settings specified for each patch, set this to 0 dB.
[2]	REVERB	0~200%	Adjusts the reverb level specified for each patch. 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 patch. * If you want to use the settings specified for each patch, set this to 100%.

PLAY OPTION

Here you can specify what happens when you operate an external expression pedal while performing, and specify the range of patches that can be selected.

Knob	Parameter	Value	Explanation
[1]	EXPHLD (EXP PEDAL HOLD)	OFF	The operational status of the EXP PEDAL's FUNC (p. 26) is not carried over when patches are switched.
		ON	If the EXP PEDAL's FUNC (p. 26) are the same between 2 patches, the operational status is carried over when patches are switched. For example, if EXP PEDAL FUNC is set to FOOT VOLUME in both patches, the one before and the one after the change, the volume corresponding to the position the pedal is in (angle) at the time of the patch change will be maintained after the patch change. On the other hand, if the patch being changed to is set to WAH, the volume will be in accordance with the value set within the patch, and you'll obtain a wah effect that is in accordance with a value that reflects the current position (angle) of the pedal.
[3]	PatMIN (PATCH EXTENT MIN)	U001~U200, P001~P200	Sets the lower limit for the patches.
[4]	PatMAX (PATCH EXTENT MAX)	U001~U200, P001~P200	Sets the upper limit for the patches.

PREFERENCE

Here you can specify whether settings for the type of connected amp and preamp, control pedal, expression pedal, etc. will be independent for each patch, or whether the same settings will be shared by all patches.

Knob	Parameter	Value	Explanation
Page 1			
[1]	OUTPUT (OUTPUT SELECT)	PATCH, SYSTEM	If this is set to PATCH, different settings can be made independently for each patch. If this is set to SYSTEM, the same settings will be shared by all patches.
[2]	PREAMP	PATCH, SYSTEM 1~3	
Page 2			
[1]	CTL1	PATCH, SYSTEM	* Here, even if a CTL/EXP pedal that has been set to SYSTEM is set to ASSIGN SOURCE (p.26), that setting will be ignored.
[2]	CTL2	PATCH, SYSTEM	
[3]	EXP	PATCH, SYSTEM	

LCD

Here you can adjust the brightness of the characters in the display.

Knob	Parameter	Value	Explanation
[1]	CONTRST (CONTRAST)	1~16	Higher values increase the brightness.

G.2MIDI (GUITAR TO MIDI)

This converts the guitar input to a MIDI signal that can be output from the USB port.

This allows you to create MIDI tracks on your DAW, or to use Guitar Friend Jam (www.roland.com/FriendJam/Guitar/) to make connections with guitarists around the world.

* The input supports only monophonic playing (single notes). The pitch will not be correctly detected if you play multiple notes simultaneously.

Knob	Parameter	Value	Explanation
Page 1			
[1]	GTR.MIDI (GUITAR TO MIDI)	OFF	The input signal is not converted to MIDI.
		ON	The input signal is converted to MIDI, and sent from the USB port.
[2]	MODE	MULTI	The guitar notes are divided into six channels for transmission, according to their pitch range. The six channels (one for each string) starting with the TX CH you specify in "MIDI SETTING" (p. 36) are used as the transmission channels. Example: If the TX CH is 1, the transmission channels will be ch.1~ch.6. * If the TX CH is set to 12 or following, the notes for channels beyond 16 are not transmitted.
		SINGLE	All guitar notes are transmitted on a single MIDI channel. The TX CH specified in "MIDI SETTING" is used as the transmission channel.
[3]	B.RANGE (BEND RANGE)	1~24	Specifies the bend range in semitone units.
[4]	B.THIN (BEND THIN)	OFF	Bend data is thinned for transmission.
		ON	Bend data is thinned for transmission.

Knob	Parameter	Value	Explanation
Page 2			
[1]	PLY.FEL (PLAY FEEL)		Selects the response to your picking dynamics. By changing this setting appropriately for your guitar playing style or the sound that you're controlling, you can make the sound respond more naturally to the dynamics of your playing.
		FEEL1-4	FEEL1 is the setting that gives you the broadest expressive range of volume change in response to your picking dynamics. As the number increases, it becomes easier to produce a loud volume even for softly-picked notes. This allows you to perform with a consistent volume even when tapping or when your picking is inconsistent.
		NO DYNA	This mode produces a fixed volume regardless of your picking dynamics.
		STRUM	Softly-picked notes are suppressed. This lets you suppress unwanted notes that might otherwise be sounded when your finger accidentally contacts a string.
[2]	CHROMA (CHOROMATIC)		When you smoothly change the pitch of a guitar note, for example by bending a string, this setting lets you quantize the pitch change of the transmitted MIDI messages to semitone steps.
		OFF	Conventional pitch bend data is transmitted. The pitch changes smoothly in response to string bending and vibrato.
		TYPE1	When the pitch is changed, the currently-sounding note is not stopped, but only pitch bend data is transmitted. This allows you to produce smooth slurs as when playing a recorder.
		TYPE2	When the pitch is changed, the note is retriggered at the new pitch, so that the pitch changes only in semitone steps. This means that a new attack is heard each time the pitch changes. If the string vibration has diminished since you plucked the string, the retriggered notes gradually diminish to reflect this.
		TYPE3	As with TYPE2, the note is retriggered at the new pitch, so that the pitch changes only in semitone steps. However, the retriggered note does not reflect any decrease in the string vibration; the retriggered note has the same level as the initially-played note.

MIDI SETTING

Here you can make MIDI-related settings for the GT-001.

Knob	Parameter	Value	Explanation
Page 1			
[1]	RX.CH(RECEIVE CHANNEL)		This sets the MIDI channel used for receiving MIDI messages.
		Ch. 1- Ch. 16	Specifies the receive channel.
[2]	OMNI (OMNI MODE)		This makes the settings for the channels used for MIDI information.
		OFF	Information is received on the channel specified by the RX.CH setting.
		ON	Messages are received on all channels, regardless of the MIDI channel settings.
[3]	TX.CH (TRANSMIT CHANNEL)		This sets the MIDI channel used for transmitting MIDI messages.
		Ch. 1- Ch. 16.	Specifies the transmit channel.
		RX	Transmits on the same channel as the RX CH.

Knob	Parameter	Value	Explanation
[4]	DEV.ID (DEVICE ID)		This sets the MIDI Device ID used for transmitting and receiving Exclusive messages.
		1-32	Sets the MIDI Device ID.
Page 2			
[1]	SYNC (SYNC CLOCK)		This setting determines the basis used for synchronizing the timing for effect modulation rates and other time-based parameters.
			* When you have an external MIDI device connected via USB, the MASTER BPM is then synchronized to the external MIDI device's tempo, thus disabling the MASTER BPM setting. To enable setting of the MASTER BPM, set 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 the MIDI Clock received via MIDI. However, operations are automatically synchronized to the GT-001's internal Clock if the GT-001 is unable to receive the external Clock.
		INTERNAL	Operations are synchronized to the GT-001's internal Clock.
[3]	PC.OUT		This setting determines whether or not Program Change messages are output when patches are switched on the GT-001.
		OFF	Program Change messages are not output, even when patches are switched.
		ON	Program Change messages are simultaneously output when patches are switched.
[4]	MAPSEL (PROGRAM CHANGE MAP SELECT)		This setting determines whether patches are switched according to the Program Change Map settings, or to the default settings.
		FIX	This deactivates the Program Change Map. Switches to the patches according to the default settings.
		PROG	This activates the Program Change Map. Switches to the patches according to the Program Change Map.
Page 3			
[1]	C1.OUT (CTL1 OUT)		This sets the controller number when operation data from the footswitch connected to the CTL/EXP jack is output as Control Change messages.
		OFF	Control Change messages are not output.
		CC#1-CC#31, CC#64-CC#95	This sets the controller number when CTL 1 pedal operation data is output as Control Change messages.
[2]	C2.OUT (CTL2 OUT)	OFF	Control Change messages are not output.
		CC#1-CC#31, CC#64-CC#95	This sets the controller number when CTL 2 pedal operation data is output as Control Change messages.
[3]	EXP OUT		This sets the controller number when operation data from the expression pedal connected to the CTL/EXP jack is output as Control Change messages.
		OFF	Control Change messages are not output.
		CC#1-CC#31, CC#64-CC#95	This sets the controller number when [EXP] pedal operation data is output as Control Change messages.

P.MAP (MIDI-PROGRAM CHG MAP)

When switching patches using Program Change messages transmitted by an external MIDI device, you can freely set the correspondence between Program Change messages received by the GT-001 and the patches to be switched to in the “Program Change Map.”

Knob	Parameter	Value	Explanation
Page 1 (BANK#0)			
[1]	PC#	BANK#0 PC#1-PC#128	Specify the program change number that you want to assign.
[4]	PATCH	U001-U200 P001-P200	This sets the patch number (U001 through P200) for the corresponding Program Change number.
Page 2 (BANK#2)			
[1]	PC#	BANK#1 PC#1-PC#128	Specify the program change number that you want to assign.
[4]	PATCH	U001-U200 P001-P200	This sets the patch number (U001 through P200) for the corresponding Program Change number.
Page 3 (BANK#2)			
[1]	PC#	BANK#2 PC#1-PC#128	Specify the program change number that you want to assign.
[4]	PATCH	U001-U200 P001-P200	This sets the patch number (U001 through P200) for the corresponding Program Change number.
Page 4 (BANK#3)			
[1]	PC#	BANK#3 PC#1-PC#128	Specify the program change number that you want to assign.
[4]	PATCH	U001-U200, P001-P200	This sets the patch number (U001 through P200) for the corresponding Program Change number.

MIDI BULK DUMP

You can use Exclusive messages to provide another GT-001 with identical settings, and save effect settings on a MIDI sequencer or other device.

Knob	Parameter	Value	Explanation
[1]	FROM	SYSTEM	System parameter settings
		QUICK	Settings for User Quick Setting
		U001-P200	Settings for Patch Numbers U001-U200
		TEMP	Settings for the patch that is currently selected
[4]	TO	SYSTEM	System parameter settings
		QUICK	Settings for User Quick Setting
		U001-P200	Settings for Patch Numbers U001-U200
		TEMP	Settings for the patch that is currently selected

AUTO OFF

The GT-001 can turn off its power automatically. The power will turn off automatically when 10 hours have passed since you last played or operated the unit. The display will show a message approximately 15 minutes before the power turns off.

With the factory settings, this function is turned “ON” (power-off in 10 hours). If you want to have the power remain on all the time, turn it “OFF.”

* When the power is turned off, any settings you were editing will be lost. You must save settings that you want to keep.

Knob	Parameter	Value	Explanation
[1]	AUTO OFF	OFF	The power will not turn off automatically.
		ON	The power will automatically turn off when 10 hours have passed since you last played or operated the GT-001.

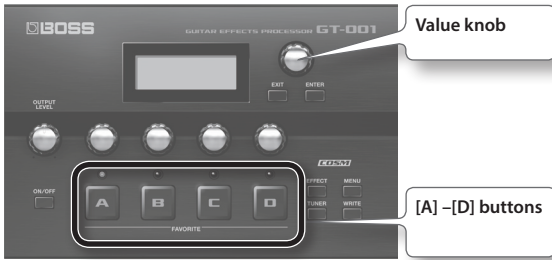
FACTORY RESET

Initializes the GT-001 to its factory-set condition. Refer to “Restoring the Factory Settings.”

Knob	Parameter	Value	Explanation
[1]	FROM	SYSTEM	System parameter settings
		QUICK	Settings for User Quick Setting
		U001-P200	Settings for Patch Numbers U001-U200
[4]	TO	SYSTEM	System parameter settings
		QUICK	Settings for User Quick Setting
		U001-P200	Settings for Patch Numbers U001-U200

DAW CTL (DAW Control)

You can use the panel [A]–[D] buttons and value knob to control the following items on DAW software that supports Mackie Control Universal, such as Logic or Sonar.



GT-001 Controller	Logic	Sonar
[A] button	Switches click on/off.	Switches Loop on/off.
[B] button	Stops recording or playback.	
[C] button	Starts playback.	
[D] button	Starts recording on record-enabled tracks.	
Value knob	Moves the current value (POSITION).	

For details on how to make settings in your DAW software, refer to the owner's manual of your software.

* The GT-001 does not support the HUI mode of Mackie Control Universal.

Other Settings

TUNER/METRONOME

Press the [TUNER] button to use the tuner and metronome functions. Turn the value knob to switch between tuner and metronome.

TUNER

Here you can make settings for the TUNER mode.

Knob	Parameter	Value	Explanation
Page 1			
[1]	PITCH	435 Hz–445 Hz	Specifies the reference pitch.
[4]	OUTPUT	MUTE	Sound will not be output while tuning.
		BYPASS	While tuning, the sound of the guitar being input to the GT-001 will be output without change. All effects will be off.
		THRU	Allows you to tune while hearing the current effect sound.

METRONOME

Here you can make settings for the METRONOME mode.

Knob	Parameter	Value	Explanation
[1]	TEMPO	40–250	Specifies the tempo of the metronome.
[2]	BEAT	1/1–8/1, 1/2–8/2, 1/4–8/4, 1/8–8/8	Selects the time signature.
[3]	ON/OFF	OFF, ON	Turns the metronome on/off.
[4]	LEVEL	0–100	Adjusts the volume of the metronome.

Troubleshooting

Problem	Items to check	Action
Problems with the sound		
No sound / volume too low	Are the connection cables broken?	Try another set of MIDI cables.
	Is the GT-001 correctly connected to the other devices?	Check connections with the other devices.
	Is the connected amp/mixer turned off, or the volume lowered?	Check the settings of your amp/mixer system.
	Is the [OUTPUT LEVEL] knobs lowered?	Adjust the OUTPUT LEVEL knobs to an appropriate position.
	Is Tuner set to On?	When the OUTPUT is set to "MUTE" in the Tuner mode, even the direct sound will not be output by setting the Tuner to "On" (p. 39).
	Is each effect set correctly?	Check the settings of each effect.
	Is "FOOT VOLUME: LEVEL" or "MASTER: PATCH LEVEL" specified as an assign Target (p. 26)?	Move the controller (pedal) to which it is assigned.
	Is INPUT (GUITAR/MIC) set correctly (p. 33)?	Make the correct setting.
Sound from devices connected to the INPUT jack is not heard in the headphones	Is the "DIR.MONITOR" (p. 34) set to OFF?	Set to ON.
	Is INPUT (GUITAR/MIC) set correctly (p. 33)?	Make the correct setting.
The volume level of the instrument connected to INPUT, AUX IN jacks are too low	Could you be using a connection cable that contains a resistor?	Use a connection cable that does not contain a resistor.
Oscillating sound occurs	Is the value for any gain- or volume-related effects parameter set too high?	Lower these values.
	Could the USB PRIMARY (p. 34) parameter "LOOP" (LOOP BACK) be turned ON?	Depending on the software settings, audio signals may end up looping. You can use the following methods to prevent this from happening. <ul style="list-style-type: none"> • Stop playback with the software, and set Soft Thru to Off. • Switch the software's audio input off.
No change in preamp tone even after switching patches	Could the preamp "PREFERENCE" (p. 35) be set to "SYSTEM 1-3"?	If PREFERENCE: PREAMP is set to "SYSTEM 1-3," the preamp settings won't change when you switch patches. If you want to make preamp settings individually for each patch, set the above setting to "PATCH."
Unable to change parameters with the knobs	Is "INT PEDAL" or "WAVE PEDAL" set as the ASSIGN 1-8, SOURCE in Assign (p. 26)?	When the ASSIGN -8, SOURCE is set to "INT PDL (INT PEDAL)" or "WAVE PDL (WAVE PEDAL)," the effect parameter set as the Assign Target changes automatically. If you want to be able to change the parameters manually with the knobs, first switch off Assign to deactivate the Internal Pedal System.
	Is "INPUT LEVEL" set as the ASSIGN 1-8, SOURCE (p. 26)?	When "INPUT LEVEL" is set for the ASSIGN 1-8, SOURCE (p. 26), the effect parameter set as the Assign Target changes automatically according to the level of the input from the guitar (the playing dynamics). If you want to be able to change the parameters manually with the knobs and dial, first switch off Assign.
Other Problems		
Patch does not change	Is something other than the Play screen shown in the display?	On the GT-001, patches can be selected only when the Play screen is displayed. Press [EXIT] to return to the Play screen.
Parameters specified with Assign can't be controlled	Could the effect be switched off?	To control a parameter using the expression pedal or footswitch, make sure the effect that contains the parameter you intend to control is switched on.
	Could the pedal function "PREFERENCE" (p. 35) be set to "SYSTEM"?	If the preference is set to "SYSTEM," the patch assignment will be ignored. If you want to enable the settings of the patch, change the preference for the corresponding parameter to "PATCH."
	Do the MIDI channel settings of both devices match?	Make sure that the MIDI channels of both devices match (p. 36).
	Do the controller number settings of both devices match?	Make sure that the controller number of both devices match (p. 36).
MIDI messages are not transmitted/received	Is the USB cable broken?	Try another USB cable.
	Is the GT-001 correctly connected to the other MIDI device?	Check connections with the other MIDI device.
	Do the MIDI channel settings of both devices match?	Make sure that the MIDI channels of both devices match (p. 36).
	When you send messages from the GT-001, make sure the GT-001 is set to the settings appropriate for sending data.	Check the on/off status for transmission of program change messages (p. 36) and the settings for the controller numbers to be transmitted (p. 36).

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
1	Hi GAIN STACK	The powerful and fat sound of a high-gain amp stack. Ideal for backing or riffs.	SINGLE: Ch. A	HIGAIN STACK	HIGAIN STACK	A&B SOLO	DIV CH SELECT	WAH/FV	H
2	TERA ECHO LD	A sound that takes advantage of the TERA ECHO's distinctive reverberation, and is perfect for long notes.	SINGLE: Ch. A	POWER DRIVE	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	S
3	NATURAL CLEAN	An all-around sound usable for everything from solos to rhythm. With a broad range and good sustain from the high frequencies to the low frequencies.	SINGLE: Ch. A	NATURAL CLEAN	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	S/H
4	POWER METAL RIFF	A metal sound with powerful ultra-low range. Two types of metal-optimized amp are used separately for the low and high frequency ranges.	DUAL	CORE METAL	BGNR UB	A&B SOLO	DELAY	WAH/FV	H
5	OD-1 + DIST	A crisp sound suitable for lead. Two types of distortion are used separately for the low and high frequency ranges.	DUAL	JC-120	JC-120	A&B SOLO	OD/DS SOLO, FX1 (SUB OD/DS) SOLO	WAH/FV	H
6	LAYER SOUND	A clean sound with chorus is mixed with a highly processed crunch sound.	DUAL	NATURAL CLEAN	TWEED	A&B SOLO	DELAY	WAH/FV	S
7	FDR BLUES CRUNCH	A straightforward crunch sound. Two types of combo amp are used separately for the low and high frequency ranges.	DUAL	TWEED	DELUXE CRUNCH	A&B SOLO	OD/DS	WAH/FV	S/H
8	OD-1 + STACK	A hard rock sound with phaser and OD-1 applied before the distortion.	SINGLE: Ch. A	STACK CRUNCH	MS1959 I	FX1 (PHASER)	DIV CH SELECT	WAH/FV	H
9	ADD TRANSPARENCY	Clear crunch sound that combines the A-DIST crunch and clean.	DUAL	NATURAL CLEAN	NATURAL CLEAN	A&B SOLO	DELAY	WAH/FV	S
10	ORNG ROOMY LEAD	Coarse distortion that combines TREBLE BOOSTER and ORNG REVERB.	SINGLE: Ch. A	ORNG RV	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	H
11	ROTARY CRUNCH	Standard rotary sound for rock.	SINGLE: Ch. A	COMBO CRUNCH	STACK CRUNCH	DELAY	DIV CH SELECT	WAH/FV	S
12	AC SIM STRAIGHT	An uncolored acoustic simulator.	SINGLE: Ch. A	FULL RANGE	NATURAL CLEAN	DELAY	FX1 (AC. GUITAR SIM)	WAH/FV	S
13	COMBO AC+DC	A drive sound that does not impair chords. Two types of combo amp are used separately for the low and high frequency ranges.	DUAL	VO DRIVE	MATCH DRIVE	A&B SOLO	DELAY	WAH/FV	S
14	SUPER SLOW GEAR	A beautiful pad-type sound that uses Slow Gear.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	CHORUS	DIV CH SELECT	WAH/FV	S
15	SLAPBACK ECHO	'50s-style crunch and echo sound.	SINGLE: Ch. A	TWEED	NATURAL CLEAN	REVERB	DIV CH SELECT	WAH/FV	S
16	A-DIST&OVERTONE	A lead sound that emphasizes the overtones of the high frequency region.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	FX2 (OVERTONE)	DIV CH SELECT	WAH/FV	S
17	FAT BLUESY LEAD	A fat lead sound that uses A-DIST as a booster, suitable for single-coil pickups.	SINGLE: Ch. A	DELUXE CRUNCH	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	S
18	EG & AG MIX	A sound that mixes electric guitar and acoustic guitar. We recommend setting the mixer to stereo.	DUAL	TWEED	FULL RANGE	MIXER MODE	CHORUS	WAH/FV	S
19	Hi:BG LD Lo:1959	With both an edgy low range as well as good sustain in the mid and high ranges, this sound can be used for riffing and lead without switching.	DUAL	BG LEAD	MS1959 I	A&B SOLO	OD/DS	WAH/FV	H
20	DIVID ORGAN TONE	A filter is used to divide the frequency ranges, and OVERTONE is applied only to the low range.	DUAL	NATURAL CLEAN	NATURAL CLEAN	A&B SOLO	FX1 (ROTARY 2) SPEED SELECT	WAH/FV	S
21	COMBO CRUNCH	The sound of a combo amp featuring extremely direct and sensitive touch response, with the low-frequency range reduced appropriately.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	DELAY	DIV CH SELECT	WAH/FV	H
22	TOUCH & GO	A crunch sound that responds nicely to the nuances of your picking.	SINGLE: Ch. A	COMBO CRUNCH	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	S
23	CRUNCH LEAD	A high-quality distortion sound that instantly responds to your picking dynamics. Great for solos.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	DELAY	DIV CH SELECT, CHORUS	WAH/FV	S/H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
24	STACK CRUNCH	Switch between stack crunch sounds with different gain for backing and solo.	SINGLE: Ch. A	STACK CRUNCH	STACK CRUNCH	CHORUS	DIV CH SELECT, DELAY	WAH/FV	H
25	ORNG CRUNCH	The crunch sound of a UK stack amp.	SINGLE: Ch. A	ORNG RV	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	S
26	SINGLE COIL ROCK	A hard crunch sound, ideal for punchy rhythm playing. The CTL pedal boosts the GAIN and MID.	SINGLE: Ch. A	STACK CRUNCH	STACK CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	S
27	BLUES COMBO	A sustaining crunch sound that's suitable for blues. Two types of combo amp are used separately for the low and high frequency ranges.	DUAL	COMBO CRUNCH	MATCH DRIVE	A&B SOLO	OD/DS	WAH/FV	S/H
28	UNMATCHED COMBO	The sound of a fat and extremely clean combo amp.	DUAL	MATCH DRIVE	COMBO CRUNCH	FX2 (COMP)	CHORUS	WAH/FV	S
29	BEE BEE THRILL	Combo amp sound suitable for blues leads.	SINGLE: Ch. A	VO LEAD	COMBO CRUNCH	DELAY	DIV CH SELECT	WAH/FV	H
30*	STEREO STACK	The sound of two high-gain amps set up in stereo, suitable for riffing.	DUAL	POWER DRIVE	EXTREME LEAD	A&B SOLO	DELAY, OD/DS	WAH/FV	H
31	ATTACKY CRUNCH	A crunch sound with a sense of attack. The CTL pedal applies mid-boost.	DUAL	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	OD/DS, DELAY	WAH/FV	H
32	MELLOW LEAD	Bluesy sound with warm overdrive.	SINGLE: Ch. A	NATURAL CLEAN	JC-120	A/B SOLO	DIV CH SELECT	WAH/FV	H
33	TWEED BLUES	Classic blues sound from a tweed amp.	SINGLE: Ch. A	TWEED	NATURAL CLEAN	OD/DS	DIV CH SELECT	WAH/FV	S/H
34	1959 CRUNCH	Crunch sound based on MS1959.	SINGLE: Ch. A	MS1959 I	—	OD/DS, DELAY	DIV CH SELECT	WAH/FV	H
35	DIAMOND ECHO	A clean sound with echo.	DUAL	STACK CRUNCH	STACK CRUNCH	A&B SOLO	DELAY F.BACK	WAH/FV	S
36	CRUNCH DELAY	American crunch sound with chorus and delay applied. Also suitable for country styles.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	S
37	MID RANGE CRUNCH	Crunch sound with a boosted mid-range.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	S/H
38	LIMITED CRUNCH	A crunch tone that will sound smooth and refined when playing chords.	SINGLE: Ch. A	COMBO CRUNCH	MATCH DRIVE	A&B SOLO	DIV CH SELECT	WAH/FV	H
39	MATCH CRUNCH	Crunch sound ideal for use with the rear single coil pickup.	SINGLE: Ch. A	MATCH DRIVE	COMBO CRUNCH	OD/DS, EQ, DELAY	DIV CH SELECT	WAH/FV	S
40	MID BOOST COMBO	The crunch sound of a mid-boosted combo amp.	SINGLE: Ch. A	COMBO CRUNCH	MS1959 I	DELAY	DIV CH SELECT	WAH/FV	S/H
41	KING OF BLUES	A sound that's ideal for blues leads.	SINGLE: Ch. A	DELUXE CRUNCH	—	A&B SOLO	FX2 (SUB DELAY)	WAH/FV	S
42	COUNTRY PICKIN'	A classic country rock sound.	SINGLE: Ch. A	CLEAN TWIN	—	A&B SOLO	OD/DS	WAH/FV	S
43	NATURAL OVER-DRV	Drive sound ideal for rock'n'roll. The CTL pedal switches to a dry sound.	SINGLE: Ch. A	TWEED	COMBO CRUNCH	OD/DS, DELAY	DIV CH SELECT	WAH/FV	S
44	BASIC BLUES	Crunch sound with compressor, ideal for blues or classic rock.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	H
45	T-SCREAM TWEED	Tweed amp sound notable for its mellow tube distortion.	SINGLE: Ch. A	TWEED	—	A&B SOLO	FX1 (SUB OD/DS), DELAY	WAH/FV	S/H
46	Hi GAIN + CRUNCH	A sound that combines a high-gain amp and a combo amp.	DUAL	COMBO CRUNCH	EXTREME LEAD	A&B SOLO	DELAY	WAH/FV	H
47	TIGHT CRUNCH	A tight combo crunch sound.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT, DELAY, CHORUS	WAH/FV	H
48	SQUEEZE BLUES GT	A bluesy sound with ambience included.	SINGLE: Ch. B	TWEED	CLEAN TWIN	OD/DS	DIV CH SELECT	WAH/FV	H
49	PLEXI RHYTHM	A rhythm tone used in classic rock.	SINGLE: Ch. A	PRO CRUNCH	STACK CRUNCH	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	H
50	BLUES BUDDY	Crunch rhythm sound for blues. The CTL pedal switches to a lead sound.	SINGLE: Ch. A	CLEAN TWIN	CLEAN TWIN	FX2 (SUB DELAY)	DIV CH SELECT	WAH/FV	S/H
51	DIRTY OLE TWEED	The sound of a small combo amp with a bit of overdrive. Great for blues or funk.	DUAL	TWEED	PRO CRUNCH	DELAY	ACCEL (S-BEND)	WAH/FV	S
52	COMP CRUNCH LEAD	A lead sound suitable for jazz fusion.	SINGLE: Ch. A	DELUXE CRUNCH	NATURAL CLEAN	DELAY	DIV CH SELECT	WAH/FV	H
53	70s SMALL AMP	The drive sound produced by a small amp of the 70s.	SINGLE: Ch. A	DELUXE CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	S

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
54	COLLEGE ROCK	Crunch sound suitable for chordal riffs.	SINGLE: Ch. A	COMBO CRUNCH	MATCH DRIVE	A&B SOLO	DIV CH SELECT	WAH/FV	S
55	SLIDE FOR ST	Ideal sound for playing slide guitar with single coil pickups.	SINGLE: Ch. A	TWEED	TWEED	DELAY	DIV CH SELECT	WAH/FV	S
56	CRNCH 4 RHYTHM	Crunch sound for funky rock. Suitable for use with the rear single coil pickup.	SINGLE: Ch. A	COMBO CRUNCH	MS1959 I	FX1 (T. WAH)	DIV CH SELECT	WAH/FV	S
57	TUESDAYS LEAD	A sound with phaser lightly applied.	SINGLE: Ch. A	TWEED	TWEED	DELAY	DIV CH SELECT, FX1 (PHASER), DELAY	WAH/FV	H
58	WILD STK CRUNCH	A wild crunch sound for chording. Two types of amp are used separately for the low and high frequency ranges.	DUAL	STACK CRUNCH	TWEED	A&B SOLO	EQ	WAH/FV	H
59*	DBL CRUNCH 4 HUM	The sound of two crunch amps in a stereo setup.	DUAL	COMBO CRUNCH	ORNG RV	A&B SOLO	DELAY	WAH/FV	H
60	TWIN CRUNCH	Crunch sound from a Twin Reverb.	SINGLE: Ch. A	CLEAN TWIN	CLEAN TWIN	A&B SOLO	DIV CH SELECT, REVERB LEVEL	WAH/FV	S
61	FULLERTN DRIVE	Light American crunch sound of the late 50s.	DUAL	PRO CRUNCH	TWEED	A&B SOLO	CHORUS	WAH/FV	S
62	UK ComboForChord	Combo amp sound suitable for playing chords.	SINGLE: Ch. A	VO LEAD	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	H
63	AUTO ROTARY 2	Rotary crunch sound that changes randomly.	SINGLE: Ch. A	COMBO CRUNCH	NATURAL CLEAN	DELAY	DIV CH SELECT	WAH/FV	S
64	MODERN VO DRIVE	Play chords to get sparkling crunch sound.	SINGLE: Ch. A	VO DRIVE	VO LEAD	A&B SOLO	DIV CH SELECT	WAH/FV	S
65	POWER DRIVE	A straightforward and powerful drive sound that lets the character of the guitar come through.	SINGLE: Ch. A	POWER DRIVE	POWER DRIVE	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	S/H
66*	SYNC TREMOLO	The sound of a stereo tremolo effect whose depth changes.	DUAL	MS1959 I	MS1959 I	DELAY	FX2 (TREMOLO)	WAH/FV	S
67	POWER CHORD!	A drive sound, simple yet with presence.	SINGLE: Ch. A	HiGAIN STACK	HiGAIN STACK	A/B SOLO	DIV CH SELECT, DELAY	WAH/FV	H
68	WALL OF DIST	Power chords produce a wall of distortion.	SINGLE: Ch. A	STACK CRUNCH	BG DRIVE	CHORUS	DIV Ch SELECT	WAH/FV	S
69	DUAL MTL/CRUNCH	A sound that combines core metal and crunch.	DUAL	COMBO CRUNCH	CORE METAL	A&B SOLO	FX1 (PITCH SHIFTER), OD/DS, DELAY	WAH/FV	H
70	70s COOL STACK	The sound of a vintage stack amp with the gain reduced. Two types of stack amp are used separately for the low and high frequency ranges.	DUAL	HiGAIN STACK	MS1959 I	A&B SOLO	DELAY	WAH/FV	H
71	STEREO STK DRIVE	Drive sound that's ideal for hard rock riffs. Two types of stack amp are used separately for the low and high frequency ranges.	DUAL	HiGAIN STACK	MS1959 I	DELAY	CHORUS	WAH/FV	H
72	AMBIENT DIRTY OD	Drive sound with added room ambience.	SINGLE: Ch. A	STACK CRUNCH	MS1959 I	REVERB	DIV CH SELECT	WAH/FV	H
73	BOSSToneDrv-SOLO	One of the rock sounds of the late 70s. The CTL pedal switches to a sound for soloing.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	REVERB LEVEL	DIV CH SELECT	WAH/FV	S/H
74	MS MULTI MIC AMB	On-mic and off-mic sounds are mixed, and ambience is lightly applied. For the off-mic sound, RESONANCE is added in TONE MODIFY.	DUAL	MS1959 I	MS1959 I	A&B SOLO	OD/DS	WAH/FV	S/H
75	FRANKLY SWEEPING	The fusion rhythm tone of the 90s. The CTL pedal boosts the gain and volume for soloing.	SINGLE: Ch. A	POWER DRIVE	POWER DRIVE	DELAY	DIV CH SELECT	WAH/FV	H
76	FAT DRY MIX MS	Crisp and bold drive sound.	SINGLE: Ch. A	MS1959 I+II	STACK CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	H
77	70s BRITISH ROCK	An early British stack tone that's ideal for leads.	SINGLE: Ch. A	PRO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	H
78	BARK TONE	70s rock sound with phaser. The CTL pedal makes the sound suitable for leads and also turns on a delay.	SINGLE: Ch. A	CORE METAL	CORE METAL	FX1 (PHASER)	DIV CH SELECT, DELAY	WAH/FV	H
79	1969 XPERIENCE	Psychedelic rock sound of the 1969 Woodstock festival. Intense distortion produced using fuzz.	DUAL	TWEED	EXTREME LEAD	REVERB LEVEL	ACCEL (S-BEND)	WAH/FV	S
80	CHAINED UP	A riff tone used in classic rock. The CTL pedal adds a flanger.	SINGLE: Ch. A	5150 DRIVE	5150 DRIVE	A&B SOLO	DIV CH SELECT, FX1 (FLANGER)	WAH/FV	S/H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
81	1984 DRIVIN'	Drive sound reminiscent of 80s hard rock.	SINGLE: Ch. A	HIGAIN STACK	5150 DRIVE	ACCEL (FEED- BACKER)	DIV CH SELECT	WAH/FV	H
82*	ROUGH'N' DIRTY	Dirty rock sound. Ideal for backing or riffs.	DUAL	POWER DRIVE	R-FIER VINTAGE	A&B SOLO	ACCEL (S-BEND), DELAY LEVEL	WAH/FV	S/H
83	CREAMY SET	A bluesy sound of the late 60s that combines MS1959 with FUZZ.	SINGLE: Ch. A	MS1959 I	STACK CRUNCH	OD/DS	DIV CH SELECT	WAH/FV	H
84	STACK LEAD	A stack amp sound with sustained distortion. Suitable for both backing and soloing.	SINGLE: Ch. A	POWER DRIVE	EXTREME LEAD	A/B SOLO	DIV CH SELECT, DELAY	WAH/FV	S/H
85	GREAT ROCK	A hard rock tone used in the 80s and 90s.	SINGLE: Ch. A	MS1959 I	HIGAIN STACK	A&B SOLO	DIV CH SELECT	WAH/FV	S/H
86	SLIDE FOR LP	Ideal sound for playing slide guitar with humbucking pickups.	SINGLE: Ch. A	PRO CRUNCH	PRO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	H
87	FAT 60s FUZZ	The classic, fat fuzz sound of the '60s.	SINGLE: Ch. A	MS1959 I+II	MS1959 I+II	DELAY	DIV CH SELECT	WAH/FV	S
88	UFOBJECT	The classic sound of 70s hard rock.	SINGLE: Ch. A	MS1959 I+II	HIGAIN STACK	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	H
89	VAN FLANGE	The flanger sound of 80s hard rock.	SINGLE: Ch. A	R-FIER MODERN	—	FX1 (FLANGER)	ACCEL (S-BEND), DELAY	WAH/FV	S/H
90*	WALL OF FUZZTONE	Different types of fuzz are placed in stereo.	DUAL	TWEED	MS1959 I	CHORUS	DELAY	WAH/FV	S
91	OCTAFUZZ LEAD	A fuzz sound with a unique character. Also useable even if the volume of your guitar is lowered.	SINGLE: Ch. A	CLEAN TWIN	COMBO CRUNCH	A&B SOLO	FX2 (UNI-V)	WAH/FV	S
92	60s FUZZ LEGEND	Reproduces the combination of a late 60s fuzz and distorted amp.	SINGLE: Ch. A	STACK CRUNCH	COMBO CRUNCH	OD/DS	DIV CH SELECT	WAH/FV	S
93	70s PUB ROCK	Produces a sharp sound when used with single coil pickups.	SINGLE: Ch. A	DELUXE CRUNCH	COMBO CRUNCH	DELAY	DIV CH SELECT	WAH/FV	S
94*	VINTAGE & MDN	Thick stereo crunch sound.	SINGLE: Ch. A	MS1959 I	STACK CRUNCH	A&B SOLO	CHORUS	WAH/FV	H
95*	PASADENA PLEXI	The hard rock sound of the late 70s. Phaser and delay are applied to a fat British overdrive.	DUAL	STACK CRUNCH	HIGAIN STACK	A&B SOLO	ACCEL (S-BEND)	WAH/FV	S/H
96	SHRED FZ	A fuzz sound with a rich overtone structure. Ideal for backing or for solos.	SINGLE: Ch. A	COMBO CRUNCH	VO DRIVE	DELAY	DIV CH SELECT	WAH/FV	H
97	80s HARD ROCK	Rock sound of the 80s using a stereo chorus.	SINGLE: Ch. A	BG LEAD	BG DRIVE	A/B SOLO, DELAY	DIV CH SELECT	WAH/FV	H
98	80s NEW WAVE	80s sound that combines a doubling delay with a chorus.	SINGLE: Ch. A	COMBO CRUNCH	JC-120	OD/DS	DIV CH SELECT	WAH/FV	S
99	Hi GAIN LEAD	The mid-boost lead sound of a stack amp. The CTL pedal turns SOLO on.	SINGLE: Ch. A	EXTREME LEAD	POWER DRIVE	A&B SOLO	DIV CH SELECT	WAH/FV	H
100	BG LEAD	A tube amp sound typical of the late 70s through the 80s. The CTL pedal switches to a lead tone with chorus applied.	SINGLE: Ch. A	BG LEAD	BG LEAD	DELAY	DIV CH SELECT	WAH/FV	S/H
101	HarmonyLead inAm	Sustaining harmony tone, ideal for fusion solos.	SINGLE: Ch. A	NATURAL CLEAN	COMBO CRUNCH	FX2 (HARMONIST)	DIV CH SELECT	WAH/FV	S/H
102	VINTAGE OVERDRV	Vintage OD-1 sound. The CTL pedal selects a sound appropriate for solos.	SINGLE: Ch. B	JC-120	NATURAL CLEAN	DIV CH SELECT	OD/DS SOLO, COMP, DELAY	WAH/FV	H
103	TERA ECHO LEAD	A spacious sound that takes advantage of A-DIST and TERA ECHO.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	FX2 (TERAECHO)	OD/DS SOLO	WAH/FV	S
104	70s US HARD ROCK	A retro hard rock sound from the 70s.	SINGLE: Ch. A	STACK CRUNCH	POWER DRIVE	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	S
105	80s STUDIO LEAD	A chorused sound with sustain, suitable for lead. Two types of stack amp are used separately for the low and high frequency ranges.	DUAL	ORNG RV	SLDN	A&B SOLO	CHORUS	WAH/FV	S/H
106	CHORUS LEAD	Metal sound with chorus applied. Usable for either backing or lead.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	DELAY	DIV CH SELECT, OD/DS	WAH/FV	S/H
107	DUCKING DLY&VIB	Delay and vibrato automatically become deeper when you sustain a note.	SINGLE: Ch. A	POWER DRIVE	NATURAL CLEAN	A&B SOLO	ACCEL (WARP)	WAH/FV	S
108	COMBO LEAD	A combo amp lead sound. You can use the ACCEL pedal for feedback performance.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	ACCEL (FEED- BACKER)	DIV CH SELECT	WAH/FV	S/H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
109	JAZZ FIELD	An aggressive jazz tone. The CTL pedal switches to a sound for soloing.	SINGLE: Ch. A	BG LEAD	BG LEAD	CHORUS	DIV CH SELECT, COMP, DELAY, REVERB LEVEL	WAH/FV	H
110	METAL STACK LEAD	High-gain but with good consistency, this lead sound is suitable for metal. Two types of high-gain amp are used separately for the low and high frequency ranges.	DUAL	T-AMP LEAD	EXTREME LEAD	A&B SOLO	ACCEL (S-BEND)	WAH/FV	H
111	BROWN SOUND 4 ST	Use a Strat to reproduce the hard rock sound of the late '70s. Transforms the sound of a single-coil pickup to a humbucking pickup sound.	SINGLE: Ch. A	MS1959 I	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	S
112	OVERDRV LEAD	A simple overdrive sound.	SINGLE: Ch. B	NATURAL CLEAN	NATURAL CLEAN	A&B SOLO	DIV CH SELECT	WAH/FV	H
113	FINGER LEAD	Fat sound that still remains sensitive to the nuances of your touch. Ideal for bluesy fusion.	SINGLE: Ch. A	STACK CRUNCH	MS1959 I	DELAY	OD/DS	WAH/FV	S/H
114	SQUARE LEAD	Distortion sound with extreme sustain. Use the CTL pedal to apply pitch bend.	SINGLE: Ch. A	FULL RANGE	COMBO CRUNCH	ACCEL (S-BEND)	DIV CH SELECT	WAH	S/H
115	SMOOTH LEAD	Classic lead tone for rock. Also ideal for sweep-picking.	SINGLE: Ch. A	5150 DRIVE	T-AMP LEAD	A/B SOLO	DIV CH SELECT	WAH/FV	H
116	Hi GAIN STK LEAD	A sustaining lead sound. Two types of stack amp are used separately for the low and high frequency ranges.	DUAL	POWER DRIVE	HIGAIN STACK	DELAY	ACCEI (S-BEND)	WAH/FV	H
117	MID BOOST STACK	The sound of a mid-boosted stack amp. You can use the CTL pedal for feedback performance.	SINGLE: Ch. A	MS1959 I	COMBO CRUNCH	DELAY	ACCEL (FEED-BACKER)	WAH/FV	S/H
118	MATCH LEAD	An extremely smooth lead tone. Ideal for fusion solos.	SINGLE: Ch. A	MATCH DRIVE	MATCH DRIVE	CHORUS	DIV CH SELECT	WAH/FV	H
119	BALLAD ECHO LEAD	A lead sound suitable for ballads, with distinctively ample echo. Two types of amp are used separately for the low and high frequency ranges.	DUAL	BG LEAD	COMBO CRUNCH	DELAY	FX2 (TERAECHO)	WAH/FV	H
120	FUSION 335	A lead tone of 70s fusion. The CTL pedal boosts the gain and volume.	SINGLE: Ch. A	NATURAL CLEAN	DELUXE CRUNCH	DELAY	DIV CH SELECT	WAH/FV	H
121	80s JAZZ FUSION	A fusion lead tone using stereo chorus.	SINGLE: Ch. A	NATURAL CLEAN	JC-120	OD/DS	DIV CH SELECT	WAH/FV	H
122	ROADS	Sound with delay applied, ideal for leads in 70s rock.	SINGLE: Ch. B	NATURAL CLEAN	CORE METAL	DELAY	DIV CH SELECT	WAH/FV	H
123	FUSION Y	Fusion lead tone with pan delay.	SINGLE: Ch. A	SLDN	SLDN	FX2 (SUB DELAY)	DIV CH SELECT	WAH/FV	H
124	OUT DELAY	Lead tone using a long stereo delay.	SINGLE: Ch. A	R-FIER MODERN	COMBO CRUNCH	A&B SOLO	FX2 (SUB DELAY)	WAH/FV	S/H
125	ROYAL LEAD	British lead tone of the 70s and 80s.	SINGLE: Ch. A	VO LEAD	COMBO CRUNCH	DELAY	DIV CH SELECT	WAH/FV	H
126	MahoganyFlashbak	A wide-ranged lead tone of the late 70s.	DUAL	TWEED	EXTREME LEAD	A&B SOLO	ACCEL (S-BEND)	WAH/FV	S/H
127	70s T.WAH LEAD	A lead sound of the 70s using touch wah.	SINGLE: Ch. A	STACK CRUNCH	MS1959 I	FX1 (T. WAH)	DIV CH SELECT	WAH/FV	H
128	NY LEAD MODULATE	A lead sound with a strongly modulated flanger. Also usable for cool jazz fusion.	SINGLE: Ch. A	BG DRIVE	JC-120	DELAY	DIV CH SELECT, OD/DS	WAH/FV	H
129	MID 70s S.O.S.	Enjoy sound-on-sound with a two-beat delay.	SINGLE: Ch. A	VO LEAD	COMBO CRUNCH	BPM TAP	DIV CH SELECT	WAH/FV	S
130	Hi GAIN LEAD 2	A smooth high-gain lead sound. Fat distortion can be obtained even with single coil pickups.	SINGLE: Ch. A	EXTREME LEAD	POWER DRIVE	A/B SOLO	DIV CH SELECT	WAH/FV	S/H
131	BGNR LEAD	Lead sound using BGNR UB METAL, suitable for humbucking pickups.	SINGLE: Ch. A	BGNR UB	BGNR UB	A/B SOLO	DIV CH SELECT	WAH/FV	H
132*	ST GERMAN HIGAIN	A stereo high-gain amp sound using BGNR UB METAL and T-AMP.	DUAL	BGNR UB	T-AMP LEAD	A&B SOLO	DELAY	WAH/FV	H
133	MODERN METAL	An extremely heavy metal sound, usable for anything from rhythm to lead.	SINGLE: Ch. A	EXTREME LEAD	EXTREME LEAD	ACCEL (FEED-BACKER)	DIV CH SELECT, DELAY	WAH/FV	S/H
134	R-FIER LEAD	Hard distortion sound, ideal for metal riffs. The CTL pedal switches to a lead sound.	SINGLE: Ch. A	R-FIER VINTAGE	R-FIER VINTAGE	ACCEL (S-BEND)	DIV CH SELECT	WAH/FV	S/H
135	METAL MONEY	The metal sound of the 90s.	SINGLE: Ch. A	CORE METAL	CORE METAL	A&B SOLO	DIV CH SELECT	WAH/FV	S/H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
136*	STEREO HARD RIFF	A modern hard rock sound appropriate for riffing.	DUAL	POWER DRIVE	EXTREME LEAD	DELAY	CHORUS	WAH/FV	H
137	METAL FLANGER	Metal sound with flanger applied.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	A&B SOLO	DIV CH SELECT, DELAY	WAH/FV	S/H
138	LATE 80s MetalRF	Slash metal sound of the 80s. The CTL pedal switches to JC-120.	SINGLE: Ch. B	JC-120	CORE METAL	A/B SOLO	DIV CH SELECT	WAH/FV	H
139*	DUAL ST Hi GAIN	Stereo high-gain sound produced by two amps.	DUAL	T-AMP LEAD	R-FIER VINTAGE	A&B SOLO	CHORUS	WAH/FV	H
140	REIGN IN THRASH	Slash metal sound of the 80s. Ideal for riffing.	SINGLE: Ch. A	SLDN	SLDN	OD/DS	DIV CH SELECT, DELAY	WAH/FV	H
141	METAL CORN	The ideal sound for heavy metal riffing. The CTL pedal boosts the gain and volume.	SINGLE: Ch. A	R-FIER MODERN	CORE METAL	A/B SOLO	DIV CH SELECT	WAH/FV	H
142	BLADE METAL	An extremely sharp metal tone.	SINGLE: Ch. A	R-FIER MODERN	—	DELAY	OD/DS	WAH/FV	H
143	DRAGON METAL	Ideal modern metal sound for humbucking pickups.	SINGLE: Ch. A	T-AMP LEAD	EXTREME LEAD	OD/DS	DIV CH SELECT	WAH/FV	H
144	HARD ROCK FLANGE	The flanger sound of 80s metal.	SINGLE: Ch. A	5150 DRIVE	R-FIER MODERN	FX1 (FLANGER)	DIV CH SELECT	WAH/FV	S/H
145*	STEREO RIFF	Stereo amp sound appropriate for heavy riffs.	DUAL	POWER DRIVE	HIGAIN STACK	OD/DS	CHORUS	WAH/FV	H
146	RECTOSARIUS	A modern rock sound.	SINGLE: Ch. A	R-FIER VINTAGE	R-FIER MODERN	ACCEL (S-BEND)	DIV CH SELECT, DELAY	WAH/FV	S/H
147	JP METAL UNISON	Produces a unison sound with one octave below. Ideal for riffs or single notes.	DUAL	5150 DRIVE	R-FIER VINTAGE	FX1 (OCTAVE)	ACCEL (S-BEND)	WAH/FV	S/H
148*	STEREO R-FIER	A high-gain stereo sound suitable for low-pitched riffing.	DUAL	R-FIER MODERN	R-FIER VINTAGE	ACCEL (S-BEND)	DELAY	WAH/FV	H
149	METAL Gt w/Bass	Core metal sound that adds a suitable bass tone to your riffs.	DUAL	CORE METAL	—	REVERB LEVEL	DELAY, COMP LEVEL, PREAMP A SOLO ACCEL (LASER BEAM),	WAH/FV	S/H
150	MULTIBAND COMP	A straightforward limiter sound with minimal sense of compression.	DUAL	NATURAL CLEAN	NATURAL CLEAN	DELAY	CHORUS	WAH/FV	S
151	TWEED CLEAN	Use the CTL pedal to switch between a tweed amp's clean tone and a mid-boost lead tone.	SINGLE: Ch. A	TWEED	TWEED	DELAY	DIV CH SELECT	WAH/FV	H
152	RETRO FUNK	A retro low-fi sound of the '60s.	SINGLE: Ch. A	CLEAN TWIN	NATURAL CLEAN	FX1 (TONE MODIFY)	DIV CH SELECT	WAH/FV	S
153	JAZZ SIMULATOR	Lets you get the sound of a hollow body guitar from a solid-body guitar.	SINGLE: Ch. A	PRO CRUNCH	NATURAL CLEAN	DELAY	DIV CH SELECT	WAH/FV	H
154	CLEAN SUSTAIN	A clean sound with good sustain. The CTL pedal switches to a stack crunch sound.	SINGLE: Ch. A	NATURAL CLEAN	STACK CRUNCH	CHORUS	DIV CH SELECT	WAH/FV	S/H
155	70s FUNKY CLEAN	Clean sound suitable for simple strumming.	SINGLE: Ch. A	CLEAN TWIN	NATURAL CLEAN	FX1 (LIMITER)	DIV CH SELECT	WAH/FV	S
156	BRIGHT RHYTHM	A bright clean sound. The CTL pedal applies chorus.	SINGLE: Ch. A	FULL RANGE	NATURAL CLEAN	DELAY, FX2 (PITCHSHIFTER), REVERBLEVEL	DIV CH SELECT	WAH/FV	S/H
157	SUPER CLEAN	Transparently clean sound. Ideal for arpeggios or chording.	SINGLE: Ch. A	FULL RANGE	NATURAL CLEAN	ACCEL (S-BEND)	DIV CH SELECT	WAH/FV	S/H
158	SAFARI USA	Tremolo sound suitable for the surf music of the 60s.	SINGLE: Ch. A	TWEED	STACK CRUNCH	REVERB LEVEL	DIV CH SELECT	WAH/FV	S
159	Acoustic Gt SIM	Transforms the sound of an electric guitar to the sound of an acoustic guitar. The front pickup is recommended.	SINGLE: Ch. A	FULL RANGE	NATURAL CLEAN	BODY	DELAY	WAH/FV	H
160	FunkyGT For HumB	Sound that won't distort even when playing through humbuckers. Also suitable for clean muted chords.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	CHORUS, COMP	DIV CH SELECT	WAH/FV	H
161	BLACK PANEL	Vintage clean sound. The CTL pedal applies mid-boost.	SINGLE: Ch. A	CLEAN TWIN	—	DELAY	OD/DS	WAH/FV	S
162	TERA REV & COMP	Combines a TERA ECHO set to a spring reverb type with compressed and clean sound.	SINGLE: Ch. A	DELUXE CRUNCH	NATURAL CLEAN	TERAECHO Off, REVERB On	DIV CH SELECT	WAH/FV	S/H
163	NORWEGIN GROOVE	Sound that adds the distinctive buzz drone of a sitar.	SINGLE: Ch. A	FULL RANGE	NATURAL CLEAN	BUZZ TONE LEVEL	DIV CH SELECT, DELAY, CHORUS	WAH/FV	H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
164	FUNKY GROOVE	A sound suitable for funky strumming. Two types of clean amp are used separately for the low and high frequency ranges.	DUAL	NATURAL CLEAN	JC-120	DIV CH SELECT	DIVIDER MODE	WAH/FV	S
165	DEEP CS StCHORUS	A rich sound that uses a combination of several modulation-type effects.	SINGLE: Ch. A	NATURAL CLEAN	HIGAIN STACK	FX2 (PAN)	DIV CH SELECT	WAH/FV	S/H
166	FUNKY DELICK	A sound that's ideal for 16-beat muted chording in funk or fusion	SINGLE: Ch. A	DELUXE CRUNCH	EXTREME LEAD	FX1 (PHASER)	DIV CH SELECT	WAH/FV	S/H
167	JAZZ CLEAN	A clean sound suitable for orthodox jazz. Two types of clean amp are used separately for the low and high frequency ranges.	DUAL	CLEAN TWIN	NATURAL CLEAN	FX2 (OVERTONE)	A&B SOLO	WAH/FV	S/H
168	CLN TwinSouthern	Clean sound that's great for country rock riffs.	SINGLE: Ch. A	CLEAN TWIN	DELUXE CRUNCH	DELAY	DIV CH SELECT	WAH/FV	S
169*	GREAT WIDE OPEN	Clean sound with stereo panning that creates the impression of a broad horizon.	DUAL	TWEED	VO LEAD	REVERB LEVEL	ACCEL (S-BEND)	WAH/FV	S
170	THE ULTRA CLEAN	British clean tone with chorus and deep reverb. Appropriate for 80s pop.	SINGLE: Ch. A	FULL RANGE	JC-120	DELAY, CHORUS, REVERB LEVEL	DIV CH SELECT	WAH/FV	S/H
171	SUPER MODULATE	Clean sound with modulation applied. Also effective when used in the intro.	DUAL	NATURAL CLEAN	NATURAL CLEAN	ACCEL (S-BEND)	OD/DS	WAH/FV	H
172	DEEP DEFRETTER	Produces a sound reminiscent of a fretless guitar. Suitable for playing single notes.	SINGLE: Ch. A	NATURAL CLEAN	JC-120	FX2 (SUB DELAY)	DIV CH SELECT	WAH/FV	S
173	ROCKABIL50s ECHO	Reproduces the sound of the 50s with a tape echo and spring reverb.	SINGLE: Ch. A	COMBO CRUNCH	COMBO CRUNCH	A&B SOLO	DIV CH SELECT	WAH/FV	S
174	E SITAR SIMULATE	A sound reminiscent of an electric sitar. Usable with single notes or chords.	SINGLE: Ch. A	NATURAL CLEAN	COMBO CRUNCH	DELAY	DIV CH SELECT	WAH/FV	H
175	SLICING MIX	A sliced sound modulated by a filter is mixed with a distorted sound.	DUAL	POWER DRIVE	EXTREME LEAD	DIVIDER MODE	ACCEL (S-BEND)	WAH/FV	S
176	RIPPIN'	Fantasy-like sound with deep delay. The ACCEL pedal applies ring modulator.	SINGLE: Ch. A	EXTREME LEAD	—	DELAY	ACCEL (RING MOD)	WAH/FV	H
177	MultiDimensional	Multiple effects are turned on simultaneously. Provides a mix of the direct and processed sounds.	SINGLE: Ch. A	NATURAL CLEAN	NATURAL CLEAN	DELAY, CHORUS	ACCEL (WARP)	WAH/FV	S
178*	LA TR RIFF	Straight sound and tremolo sound are generated in stereo.	DUAL	COMBO CRUNCH	COMBO CRUNCH	TREMOLO RATE	CHORUS	WAH/FV	H
179	AUTO RATE	The force of your picking varies the rate of the auto wah.	SINGLE: Ch. A	COMBO CRUNCH	NATURAL CLEAN	FX1 (AUTO WAH)	CH DIV SELECT	WAH/FV	S
180	SLOWGEAR LEAD	A smooth lead sound using Slow Gear. Also effective on sound-effect phrases.	SINGLE: Ch. A	NATURAL CLEAN	COMBO CRUNCH	FX1 (SLOW GEAR), FX2 (SUB DELAY)	CH DIV SELECT	WAH/FV	S
181	WAVE PEDAL SE	A fuzz sound using octaves is overlaid with a flamboyant effect sound.	DUAL	EXTREME LEAD	POWER DRIVE	CHORUS	DELAY	PB	S
182	WAVE SYNTH	Transforms a guitar sound into a synth sound. Use with single notes.	SINGLE: Ch. A	FULL RANGE	COMBO CRUNCH	FX2 (FLANGER)	ACCEL (S-BEND)	WAH/FV	S/H
183	HUMANIZER SP	A cyclically varying Humanizer can be used as the beat.	SINGLE: Ch. A	JC-120	NATURAL CLEAN	CHORUS	ACCEL (S-BEND)	WAH/FV	S
184	REVERSE HARMONY	Distorted lead sound with harmony added by effective use of reverse delay.	DUAL	EXTREME LEAD	EXTREME LEAD	DELAY	ACCEL (S-BEND)	WAH/FV	H
185	GUNYA GUNYA	Irregularly-pitched effect sound is added in response to the dynamics of your touch.	SINGLE: Ch. A	COMBO CRUNCH	NATURAL CLEAN	DELAY	ACCEL (S-BEND)	WAH/FV	S
186	SEQ CLEAN	Slicer and tempo delay are synchronized, so that the settings will follow if you simply change the tempo.	DUAL	PRO CRUNCH	PRO CRUNCH	DELAY MOD DEPTH	BPM TAP	WAH/FV	S
187	5th PS & GATE	An '80s-type sound that combines a pitch a perfect fifth above with gated reverb.	SINGLE: Ch. A	EXTREME LEAD	NATURAL CLEAN	FX1 (OCTAVE)	DELAY	WAH/FV	S/H
188	D'CLEAN DIRT	Sound that combines clean and overdrive. A nice fit with alternative rock.	DUAL	STACK CRUNCH	JC-120	FX2 (PAN)	ACCEL (S-BEND)	WAH/FV	S/H

Preset Patch List

No	Patch Name	Explanation	DIVIDER	PREAMP A	PREAMP B	CTL2	CTL1	EXP	PU
189	HARMO STAY-4th=C	By fixing a lower fourth interval, you can maintain three-voice harmony.	SINGLE: Ch. A	BGNR UB	NATURAL CLEAN	FX2 (HARMONIST)	CH DIV SELECT	WAH/FV	H
190	[AC] AC BODY MID	Sound for an electro-acoustic guitar, using AC.PROCESSOR.	SINGLE: Ch. A	—	—	DELAY	FX1 (ACOUSTIC PROCESSOR)	WAH/FV	—
191	[AC]FOR ARPEGGIO	A sound suitable for arpeggios.	SINGLE: Ch. A	—	—	DELAY	FX1 (ACOUSTIC PROCESSOR)	WAH/FV	—
192	[AC] FOR STRUM	A sound suitable for playing chords.	SINGLE: Ch. A	—	—	CHORUS	FX1 (ACOUSTIC PROCESSOR)	WAH/FV	—
193	[AC] FOR AC SOLO	Sound suitable for single-note soloing.	SINGLE: Ch. A	—	—	PREAMP	FX1 (ACOUSTIC PROCESSOR)	WAH/FV	—
194	[AC] AC 2X2 CHO	Sound using 2X2 CHORUS for more naturalness than conventional chorus.	SINGLE: Ch. A	—	—	DELAY	FX1 (ACOUSTIC PROCESSOR)	WAH/FV	—
195	[VOCAL] POP	All-purpose vocal sound that can be used for pop or any type of vocal.	SINGLE: Ch. A	—	—	DELAY	FX2 (LIMITER)	PB/FV	—
196	[VOCAL] BALLAD	Sound with deep plate reverb, ideal for ballads.	SINGLE: Ch. A	—	—	REVERB LEVEL	DELAY	PB/FV	—
197	[VOCAL] ROCK	Sound with ambience, suitable for rock vocals.	SINGLE: Ch. A	—	—	OD/DS	REVERB, DELAY	PB/FV	—
198	[VOCAL] DOUBLE	Provides the effect of double-tracking created by recording the same phrase sung twice.	SINGLE: Ch. A	—	—	CHORUS	DIVIDER (MODE)	PB/FV	—
199	[VOCAL]HARMONY C	Adds harmony at one third above the Key=C.	SINGLE: Ch. A	—	—	DELAY	FX2 (HARMONIST)	PB/FV	—
200	[VOCAL] DIST	Sound that adds extreme distortion to the vocal.	SINGLE: Ch. A	—	—	DELAY	OD/DS, EQ	PB/FV	—

* Patches with an "*" following the patch number have their mixer mode set to PAN L/R. For other patches, the mode is set to STEREO.

* DIVIDER = Divider setting

- SINGLE: Ch. A = Divider MODE is SINGLE and CH SELECT is CH. A
- SINGLE: Ch. B = Divider MODE is SINGLE and CH SELECT is CH. B
- DUAL = Divider MODE is DUAL

* PU=Pickup

- S=This patch is good for single-coil pickups.
- H=This patch is good for humbucking pickups.
- P=This patch is good for piezo pickups.