

MULTI-EFFECTS PROCESSOR



ATTENTION

Please observe the following precautions to ensure the safe use of this unit.

Handling

Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately.

Do not block any of the ventilation openings.

Keep away from heat sources.

Disconnect the unit during storms to prevent damage.

Operation of this unit within significant electromagnetic fields should be avoided.

Connecting the power and input/output jacks

Always turn OFF the power to the unit and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all connection cables and the AC adapter before moving the unit.

Cleaning

Clean only with a dry cloth.

Alterations

Do not open the unit.

Do not attempt to service the unit yourself.

Opening the chassis for any reason will void the manufacturer's warranty.

AC Adapter Operation

- Always use a DC9V center negative 500mA AC adapter. Use of an adapter other than that specified could damage the unit or cause malfunction and pose a safety hazard.
- Always connect the AC adapter to an AC outlet that supplies the rated voltage required by the adapter.
- •UNPLUG THE UNIT DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

Battery Operation

- Use 4 conventional 1.5V AAA batteries (or nickel metal hydride batteries).
- Carefully read the safety indications on the batteries before use.
- When not using the unit for an extended period, remove the batteries from the unit.
- If battery leakage should occur, thoroughly wipe the battery holder and the battery terminals to remove battery fluid.
- Close the battery holder cover when using the GP-1.

Power Considerations

Since this unit's power consumption is relatively high, we recommend the use of an AC adapter.

If you use batteries, please use alkaline batteries.

Malfunction

If the unit should malfunction, disconnect the AC adapter and turn the power OFF immediately.

Then, disconnect all other connected cables.

Prepare information including the model name, serial number, specific symptoms related to the malfunction, your name, address and telephone number and contact the store where you bought the unit, or contact VALETON support (info@valeton.net).

Please keep this manual in a convenient place for future reference.

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Introduction

Thank you for choosing a VALETON product!

The GP-1 is a compact, high performance guitar multi-effects processor. It offers a potent effects processing platform and complete feature set, so you can improve your skill and experiment with different guitar effects, all with one simple-to-use, Portable device.

The GP-1 has 100 effects to choose from and allows you to run 8 effects simultaneously. It provides a EXP jack that allows you to connect an external Expression Pedal, which can be assigned to the effect you want to control for real-time effect changes.

100 included factory presets let you jump right in, and 100 user presets allow you to store all your favorite effects

The built-in tuner gets your guitar in tune. The built-in drum machine and aux input jack set you up to play along with a drum loop, metronome, or your favorite music.

Whether you're a beginner or an old guitar freak, the GP-1's got it all to let you have at it!

PANEL INTRODUCTION

Top View

1 Module Selector:

Switches between function modules. In patch edit mode, this knob selects the module/parameter for operation.

3 LED Display:

This display shows the patch numbers, setting values, and other operation information.



2 PARA knob (with enter button):

This knob is used to set the master level or change parameter values. Press the button to switch the type of effect, begin storing etc.

4 [+1/[-] Footswitches:

These footswitches are used for controlling preset up/down, the tuner, start/stop drum rhythm, start/stop/record phrases and other functions.

Rear View



1/4" stereo audio jack, for connecting to a guitar amplifier. You can use a mono cable to output the signal to an amplifier, or use a Y cable to output the signal to two amplifiers.

You can also use a neutral stereo plug to output the signal to headphones.



AUX IN Jack:

1/8" (3.5mm) stereo input audio jack. You can connect a CD player, MP3Player or other devices for jamming, practicing, and performance.



External Expression Pedal Jack:

1/4" stereo audio jack, for connecting a external expression pedal. You need a stereo cable with 1/4" stereo plugs at both ends of the cable for connecting.





5 INPUT Jack:

1/4" mono audio jack, for connecting quitar.



Battery Holder:

For installing batteries (AAA x 4).



DC 9V Jack:

For power supply, use a 9-volt DC regulated by AC adapter, 500mA (plug polarity is positive on the barrel and negative in the center).

CONNECTIONS

Applying Power

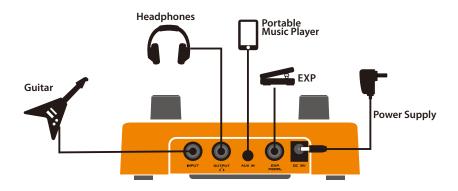
- 1. Before applying power to anything, set your amp to a clean tone.
- 2. Turn the amp volume all the way down.
- 3. Connect the power supply to the power jack.
- 4. Connect the other end of the power supply to an AC outlet.

Applying batteries

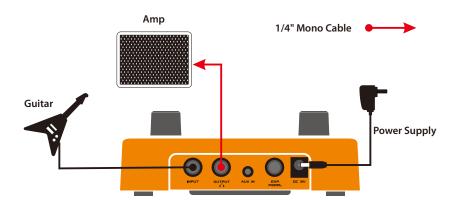
- 1. Insert 4 AAA batteries into the battery holder.
- 2. Set your amp to a clean tone.
- 3. Turn the amp volume all the way down.
- 4. The device will turn on when you plug the guitar cable into the INPUT jack.
- 5. When not using the unit, please remove the cable from the INPUT jack.

NOTE: When the remaining charge is low, "LBAT" appears on the display and will flash.

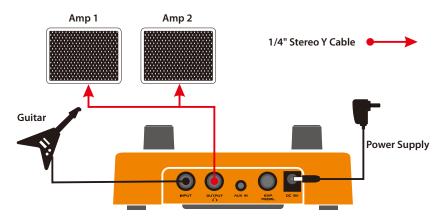
Headphone/Practice Configuration



Mono Amp Configuration



Stereo Amp Configuration



GETTING STARTED

Modes Explained

The GP-1 has two operation modes: Play Mode and Edit Mode.

Play Mode

When the GP-1 is powered on and the module selector is turned to "Preset", the unit will be in Play Mode. The LED screen shows the patch number (from U-00 to P-99). Play Mode allows you to navigate presets using the PARA knob or footswitches.

When in Play Mode:

Push the PARA button to start/stop the Drum Machine.

Edit Mode

Edit Mode allows you to adjust the global Master Level, the Patch Level, select between the different effect modules, edit effects, and edit the settings for the built-in drums.

NOTE:

- Effect settings changed in Edit Mode will need to be stored to a preset patch.
- The exceptions are the Master Level and drum machine settings, which are global settings and are not stored to presets.
- Whenever you change a stored preset's effect settings, the "EDIT" dot below the screen will light up, indicating the effect settings have been changed from the stored value in the preset.
- See "Editing Presets" (page 23) for more information on storing presets.

Navigating Presets

The GP-1 has two preset banks: the User preset bank, which appears in the LED display as U-00 to U-99, and the Factory preset bank, which appears in the LED display as P-00 to P-99. From Play Mode, step on the [+]/[-] footswitches or turn the PARA knob to change presets (Hold down the [+] footswitch to scroll through presets).





NOTE:

- Using pre-patch-select mode (Page 32), you can jump directly to a patch that is far from the current patch.
- See page 89 for more information on the Presets Patch List section.

Bank Switch

In play mode, hold down the [-] footswitch for more than 2 seconds until "BANK" appears on the screen.

The tens place digit of the current patch number will begin flash. Step on the [+]/[-] footswitches or rotate the PARA knob to change the preset number.

Press and hold the [-] footswitch to toggle to the ones place digits, and repeat the step above to change the preset number.





Turn the module selector to "Preset", then hold down the [-] footswitch / press the PARA knob / press both FOOTSWITCHES simultaneously to exit this mode.

NOTE: In this mode, you can still edit the presets.

Using The Tuner

Turn the module selector to "Preset", then press and hold both FOOTSWITCHES simultaneously.

After "BTU" appears on the screen, release the switches within one second, and the unit will be set to bypass/tuner.

Press and hold both FOOTSWITCHES simultaneously. After "BTU" disappears and "MTU" appears on the screen, release the switches within one second, the unit will be set to the mute/tuner.





NOTE:

- If you continue to press both [+]/[-] foot switches for more than 2 seconds, the looper becomes active (Page 18).
- $\hbox{\bf \cdot} \ {\it You can not set the unit to by pass/mute if the module selector is n't set at PRESET.}\\$

Turn the PARA knob to set the standard pitch of middle A from 435Hz to 445Hz (Default: 440 Hz) when the unit is in the "BTU/MTU".

The note name appears on screen. The top 5 LEDs indicate the note of your playing is sharp or flat; the center green LED indicates the note is in tune. The second flashing dot (#) below the screen indicates the sharp note.





Press either FOOTSWITCH to exit the "BTU/MTU".

Looper Function

Turn the module selector to "Preset", then press and hold both FOOTSWITCHES simultaneously for more than 2 seconds until "LOOP" appears on the screen. Then release the switches to begin using the Looper Function.

After "LOOP" disappears, "EMPT" will appear on the screen, indicating the current loop data.

Press the left FOOTSWITCH, and play a guitar phrase. "REC" appears on the display and recording starts. When loop recording is active, the flashing dot indicating "Loop Data" will light up.







To stop loop playback, press the right footswitch ("STOP" appears on the display).

To start loop playback again, press the left footswitch.

Press the left FOOTSWITCH again to set the loop point, and the recorded phrase will begin playing back. "PLAY" appears on the display.

During loop playback, press the left footswitch ("REC" appears on the display) and begin playing the overdub phrase.







To end overdubbing, press the left footswitch again ("PLAY" appears on the display), and the looped phrase will play with the newly added overdub phrase.



NOTE:

- · When in looper mode, use the PARA knob to change the presets, and the effects can still be edited.
- When in looper mode, push the PARA knob to start/stop the drum machine.
- To clear a recorded loop, press and hold the right footswitch for 2 seconds until the display reads "EMPT", and the flashing dot of "loop data" will OFF.
- Press and hold both FOOTSWITCHES simultaneously to return to PLAY mode.

Drum Machine

Turn the module selector to the DRUM module. The first top LED above the screen will light to indicate the drum pattern.



Press either [+]/[-] footswitch to start playback of the current drum pattern, and press either [+]/[-] footswitch again to stop playback of the drum loop.

Whether the drum loop is playing or stopped, turn the PARA knob to change the drum pattern.

Press the PARA knob to move the target parameter to Drum Volume from 00 to 99 (the second top LED above the screen will light up), then turn the PARA knob to adjust the parameter. Press the PARA knob to move the target parameter to BPM (the third LED above the screen will light up). Then turn the PARA knob to adjust the parameter. Tempo can be set in a range from 040 to 280.





NOTE:

- When in Play and Looper mode, press the PARA knob to start/stop drum playback.
- When in Edit mode, press the right footswitch to start/stop drum playback.
- When in LOOPER mode, drum rhythm can be recorded in the loop data of the first recording. When recording is finished
 and turned to playback, the drum function will become unavailable until the loop data is cleared.
- See page 97 for more information on the Drum Rhythm List section.

EDITING FUNCTIONS

EDITING PRESETS

Turn the module selector to Preset, then press either [+]/[-] footswitch to start with an existing preset. Turn the module selector to the effect module you wish to edit.

This activates Edit mode. The available setting options are listed below:

01 COMP

02. NR

03. DS/AMP

04. EQ

05. CAB

06. MOD

07. DLY

08. REV

UTI PRE:



NOTE: For more module details, please check Effect Types and Parameters section (Page 36).

Turn the module selector to the effect module and press the left footswitch to bypass or enable an effect module.

Turn the module selector to the desired effect module and press the PARA knob to enable it.

To edit a enabled module in the edit mode, rotate the PARA knob to select an effect TYPE (the TYPE selected is indicated as the top LED lights up).



Press the PARA knob to select among three parameters of the current effect (the A/B/C selected is indicated as the top LED lights up).



Rotate the PARA knob to modify the effects settings by the current parameter.

Anytime a stored value within a preset is changed, the "EDIT" dot below the screen will light up , including the Patch Volume and the EXP target parameters (indicated by the TYPE LED and the B/C LED of the UTIL position). This indicates that you need to store the changes.



If you change presets or cut the power before saving, all edits will be lost. Save the patch to retain your settings.

UTILTY

Turn the selector module to UTIL, and the A will be selected (indicated as the top LED lights up). Rotate the PARA knob to adjust the Master Volume (from 00 to 99). Use this parameter to control the global output level.

Press the PARA knob until B has been selected (indicated as the top LED lights up). Rotate the PARA knob to adjust the Patch Volume (from 00 to 99). Use this parameter to adjust the current patch output level, then press and hold the PARA knob to store the preset.





NOTE: Press the PARA knob to choose TYPE or C in the UTIL mode to set the target parameters linked to the EXP. See "EXP" on page 34 for more information on this operation.

Storing Presets

After you finish editing a preset, press and hold the PARA knob. The display will begin to flash.

Rotate the PARA knob to select a user preset location. The display will show the patch number (from U00 to U99).

Press the PARA knob again to store the preset in that patch bank.

Copying A Preset

- **1.** Turn the module selector to "Preset". Use the FOOTSWITCHES or PARA knob to select the preset you wish to copy.
- 2. Press and hold the PARA knob. The patch number will begin flashing in the LED display.
- 3. Use the PARA knob or foots witch to select a patch bank where you would like to store the preset (indicated on the display).
- **4.** Press the PARA knob again to copy the preset to this patch bank.

NOTE: Turn the module selector during the above procedure to cancel storing the preset.

OTHER FUNCTIONS

External Expression Pedal

Turn the selector module to UTIL, and press the PARA knob until TYPE has been selected (indicated as the top LED lights up). Rotate the PARA knob until the target parameter appears in the display. (See Page 36 for the list of parameters that can be used with an External Expression Pedal).



Press the PARA knob until C has been selected (indicated as the top LED lights up).

Press either [+]/[-] footswitch to select a target parameter for the External Expression Pedal (Max/Min appears in the display).





Rotate the PARA knob to select the minimum value the assigned parameter will reach with the Expression Pedal in the heel position.







Rotate the PARA knob to select the maximum value the assigned parameter will reach with the Expression Pedal in the toe position.







Store the Expression Pedal assignment to a preset.

Note:

- See page 36 for more information on the Effect Type Parameters section.
- A pedal icon appears next to effect types/parameters that can be controlled by the external expression pedal.
- When you choose the target parameter in the TYPES of UTIL, its corresponding effect module must be enabled. Once the
 external expression pedal has been plugged in, the last dot below the screen (EXP) will light up, which indicates the EXP
 can be used.

Factory Reset

Use this function to reset the GP-1 to its factory settings. This procedure erases all custom user presets. Be sure you want to erase the memory, as all user-programmed data will lost! Performing a Factory Reset is as follows:

- Turn the module selector to Preset and connect the power while pressing and holding both
 [+] [-] footswitches simultaneously.
- 2. When the "RST" appears on the display, release the footswitches. The screen will begin flashing.



- Press the PARA knob to restore all patches to their original factory settings and return to preset mode.
- **4.** To cancel this operation, press either [+]/[-] footswitch before step 3.

Pre-Patch-Select

This function allows you to select a bank and patch in advance, and only switch to that patch after you confirm the selection. This function is convenient during a live performance when you want to switch to a patch that is saved in a distant position. In this mode, the LED will keep flashing.

- 1. Turn the module selector to Preset and connect the power while pressing and holding the [+] footswitch.
- 2. When the "PPS" appears on the display, release the PARA knob, which will be flashing.



- 3. Press the PARA knob again to enter this mode.
- **4.** To cancel this operation, press either [+]/[-] footswitch before step 3.

Press either [+]/[-] footswitch to navigate in this mode. The patch number will keep flashing until confirmation is completed in step 3.

To change the patch, press both [+] [-] footswitches simultaneously.

Note:

- If you enter edit mode or store mode when the screen for step 2 is open, the current patch will be the one affected.
- Reconnect the power to return to the usual patch order.

Expression Pedal Calibration

The external expression pedal can be calibrated if it does not function properly. The procedure for calibrating the external expression pedal is as follows:

1. Turn the module selector to UTIL and connect the power while pressing and holding the PARA knob. "EXPE" appears on the display.



2. When the display prompts you with "SMIN", press the expression pedal all the way back (toe up) and press the PARA knob.



3. When the display prompts you with "SMAX", press the expression pedal forward (toe down) and press the PARA knob.



4. "CPLE" will appear on the display, and then the unit enters play mode.



Note: If the display shows "ERR", you should repeat step 2.

Effect Types and Parameters

Module Name

COMP (Compressors & Pre Effects) Module(15)

L.BST (Low Boost)

These 3 effects increase bass/mid/high frequency signal gain to make the sound more satiated and powerful.

Г	→ Para A	Para B	Para C	EXP Target (TYPE)
	G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	VOL (Volume)
	Adjusts the boost gain amout.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	Assigning the PARA C of this effect is controlled by EXP.

Parameters A-C & EXP Target

Type of Effects

EFFECT TYPES LIST

COMP (Compressors & Pre Effects) Module(15)

L.BST (Low Boost)

This effect increases bass frequency signal gain to make the sound more satiated and powerful.

Para A	Para B	Para C	EXP Target (TYPE)
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	VOL (Volume)
Adjusts the boost gain amout.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	Assigning the PARA C of this effect is controlled by EXP.

M.BST (Mid Boost)

This effect increases mid frequency signal gain to make the sound more satiated and powerful.

ı				
	Para A	Para B	Para C	EXP Target (TYPE)
	G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	VOL (Volume)
	Adjusts the boost gain amout.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	Assigning the PARA C of this effect is controlled by EXP.

H.BST	(High	Boost)	
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This effect increases high frequency signal gain to make the sound more satiated and powerful.

Para A	Para B	Para C	EXP Target (TYPE)
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	VOL (Volume)
Adjusts the boost gain amout.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	Assigning the PARA C of this effect is controlled by EXP.

R.CMP (Red Compressor)

Based on the MXR M132 Super Comp*.

Para A	Para B	Para C	EXP Target (TYPE)	
S (Sense): 01~50	A (Attack): 01~50	V (Volume): 01~50	VOL (Volume)	
Adjusts the sensitivity. Higher values result in higher sensitivity.	Adjusts the amount of time the compressor takes to respond to a signal that exceeds the threshold.	Adjusts the level of the signal after it has passed through the compressor.	Assigning the PARA C of this effect is controlled by EXP.	

L.CMP (LA Compressor)

This compressor allows more detailed adjustment.

Para A	Para B	Para C	EXP Target (TYPE)
C (Comp): 01~50	T (Tone): 01~50	V (Volume): 01~50	VOL (Volume)
Adjusts the compressor ratio.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the compressor.	Assigning the PARA C of this effect is controlled by EXP.

T.WAH (T-Wah Wah)

This effect provides a fully controllable wah effect depending on picking dynamics.

Para A	Para B	Para C	EXP Target (TYPE)	
S (Sense): 01~50	R (Reso): 01~50	V (Volume): 01~50	WAH (Sense)	
Adjusts the effect sensitivity	Adjusts the intensity of the resonance sound.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA A of this effect is controlled by EXP.	

A.WAH (A-Wah Wah)

This effect varies wah effect automatically with speed control.

Para A	Para B	Para C	EXP Target (TYPE)		
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	SPD (Speed)		
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA B of this effect is controlled by EXP.		

Q.WAH (Q-Wah Wah)

This effect varies wah effect automatically and provides a Q control.

Para A	Para B	Para C	EXP Target (TYPE)
Q: 01~50	S (Speed): 01~50	V (Volume): 01~50	SPD (Speed)
Adjusts the intensity of the resonance sound.	Adjusts the effect speed.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA B of this effect is controlled by EXP.

C.WAH (C-Wah Wah)

Based on the vintage CryBaby* wah pedal.

Para A	Para B	Para C	EXP Target (TYPE)
F (Freq): 01~50	Q: 01~50	V (Volume): 01~50	WAH (Freq)
Adjusts the emphasized frequency.	Adjusts the intensity of the resonance sound.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA A of this effect is controlled by EXP.

V.WAH (V-Wah Wah)

Based on the vintage Vox V846* wah pedal.

Para A	Para B	Para C	EXP Target (TYPE)	
F (Freq): 01~50	Q: 01~50	V (Volume): 01~50	WAH (Freq)	
Adjusts the emphasized frequency.	Adjusts the intensity of the resonance sound.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA A of this effect is controlled by EXP.	

LMT (Limiter)

This effect reduces high-level signals only.

Para A	Para B	Para C	EXP Target (TYPE)
T (Threshold): 01~50	R (Release): 01~50	V (Volume): 01~50	VOL (Volume)
Sets the level that activates the limiter.	Sets the release time.	Adjusts the level of the signal after it has passed through the limiter.	Assigning the PARA C of this effect is controlled by EXP.

S.ATK (Slow Attack)

Based on the BOSS SG-1 Slow Gear* pedal.

Para A	Para B	Para C	EXP Target (TYPE)
T (Threshold): 01~50	A (Attack): 01~50	V (Volume): 01~50	ATK (Attack)
Sets the level that activates the effect.	Adjusts the amount of time the effect takes to respond to a signal that exceeds the threshold.	Adjusts the level of the signal after it has passed through the effect.	Assigning the PARA B of this effect is controlled by EXP.

OCTA (Octave)

Based on the Electro-Harmonix Micro POG*, which allows adding two octave voices (below/above the original sound) blend with dry level control .

Para A	Para B	Para C	EXP Target (TYPE)
L (Low): 01~50	H (High): 01~50	D (Dry): 01~50	DRY
Sets the level of one Octave below.	Sets the level of one Octave above.	Adjusts the dry signal level.	Assigning the PARA C of this effect is controlled by EXP.

RMOD (RingMod)

This effect produces a magic ringing sound.

Para A	Para B	Para C	EXP Target (TYPE)
F (Freq): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	FREQ
Sets the modulation frequency.	Adjusts the tone.	Controls the mix level of the ringmod.	Assigning the PARA A of this effect is controlled by EXP.

LOFI (Lo-Fi) This effect produces a lo-fi style tone. Para A Para B Para C EXP Target (TYPE) T (Tone): 01~50 F (Freq): 01~50 MIX: -25 ~ +25 MIX Assigning the PARA C of Controls the mix level of the Sets the modulation frequency. Adjusts the tone. this effect is controlled by Lo-Fi.

EXP.

NR (Noise Reduction) Module(2)

ST.NR (Standard Noise Reduction)

This is a noise gate that eliminates the noise when you are not playing.

Para A	Para B	Para C	EXP Target (TYPE)
Рага А	Рага Б	Para C	EXF larger (TTFL)
T (Threshold): 01~50	A (Attack): 01~50	R (Release): 01~50	
Sets the level that activates the noise gate.	Sets the attack time.	Set the release time of noise.	_

HD.NR (Hard Noise Reduction)

This is a noise gate with a hard reduction process.

mis is a noise gate with a naid reduction process.					
Para A	Para B	Para C	EXP Target (TYPE)		
T (Threshold): 01~50	A (Attack): 01~50	R (Release): 01~50			
Sets the level that activates the noise gate.	Sets the attack time.	Set the release time of noise.			

DS/AMP (Overdrive/Distortion/Amplifier Simulator) Module(26)

A-30 (Heritage A-30)

Based on the vintage VOX Ac30* combo amplifier.

Para A	Para B	Para C	EXP Target (TYPE)
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	

Based on the MATCHLESS CHIEFTAIN* combo amplifier.				
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the		

D 20 (Ch:- f D 20)

module.

	TWDY (Tweedy Combo)				
	Based on the vintage Fender Tweed Deluxe* combo amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

FD 65 (Darkface '65)					
	Based on the vintage Fender '65 Deluxe Reverb* combo amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

JT 45 (Plexi JT-45)

Based on the Marshall JTM45* amplifier.

Para A	Para B	Para C	EXP Target (TYPE)
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50	
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_

	J800 (F	Plexi J-800)			
	Based on the Marshall JCM800* amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	PL 59 (Plexi Lead '59)				
Based on the Marshall 1959 SuperLead* amplifier.					
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.			

	CALI (California Crunch+)				
	Based on the MESA BOOGIE Mark C+* amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.			

	RCTO (California Recto)				
	Based on the MESA BOOGIE Dual Rectifier* amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.			

	FR 51 (Frankenstein 51)				
	Based on the PEAVEY EVH 5150* amplifier.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	SCR9 (Screamer Nine)				
	Based on the TS9 Tube Screamer* overdrive pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	JCOD (Juicy OD)				
	Based on the vintage BOSS OD-1 Over Drive* pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.			

	HPOD (Hyper OD)				
	Based on the BOSS SD-1Super OverDrive* pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	FOD (Forced OD)			
	Based on the Fulltone OCD* Overdrive pedal.			
Para A	Para B	Para C	EXP Target (TYPE)	
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

	250 (Preamp 250)				
	Based on the DOD 250 Overdrive Preamp* pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	DARK (Darktail Dist)				
	Based on the vintage PROCO RAT* Distortion pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.			

	SDS (Silk Dist)				
	Based on the BOSS DS-1 Distortion* pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50			
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_		

	MTAL (Metalyzer)			
	Based on the BOSS MT-2 Metal Zone* Distortion pedal.			
Para A	Para B	Para C	EXP Target (TYPE)	
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

	DRTY (Dirty Dist)			
	Based on the DOD FX69 GRUNGE* Distortion pedal.			
Para A	Para A Para B Para C EXP Target (TYPE			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_	

	CRCH (Crunch Master)			
	Based on the MI AUDIO CRUNCH BOX Distortion* pedal.			
Para A	Para A Para B Para C EXP Target (TYI			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

	AUTH (Authority Dist)			
	Based on the Marshall Guv'nor* Distortion pedal.			
Para A	Para A Para B Para C EXP Target (TYPE			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_	

	FRAG (Fragment Dist)			
	Based on the Marshall Shred Master* Distortion pedal.			
Para A	Para A Para B Para C EXP Target (TY			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

	FACE (Muddy Face)			
	Based on the vintage Dallas-Arbiter FUZZ FACE* fuzz pedal.			
Para A	Para A Para B Para C EXP Target (TYP			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

	MUFF (US Muffin Fuzz)			
	Based on the vintage Electro-Harmonix Big Muff PI* fuzz pedal.			
Para A	Para A Para B Para C EXP Target (TYPI			
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.		

FZBD (Fuzz Bender)				
Based on the vintage Vox Tone Bender* fuzz pedal.				
Para A	Para B	Para C	EXP Target (TYPE)	
G (Gain): 01~50	T (Tone): 01~50	V (Volume): 01~50		
Adjusts the gain.	Adjusts the tone.	Adjusts the level of the signal after it has passed through the module.	_	

ACSM (Acoustic Sim)			
This effect provides a large adjustable range which is to turn an electric guitar tone into a natural acoustic tones.			
Para A Para B Para C EXP Target (TYPE)			
B (Body): 01~50	T (Top): 01~50	V (Volume): 01~50	Volume (A.VOL)
Adjusts the acoustic guitar body resonance.	Adjusts the unique string tone of acoustic guitar.	Adjusts the level of the signal after it has passed through the module.	Assigning the PARA C of this effect is controlled by EXP.

EQ (Equalizer) Module (3)

EQ 1 (Equalizer 1)

This is a 3-band equalizer suited for guitar.

Para A	Para B	Para C	EXP Target (TYPE)
L (Low): -12 ~ +12	M (Mid): -12 ~ +12	H (Hi): -12 ~ +12	
Boosts or cuts the low (160 Hz) frequency band (±12dB).	Boosts or cuts the mid (800 Hz) frequency band (±12dB).	Boosts or cuts the high (3.2kHz) frequency band (±12dB).	

EQ 2 (Equalizer 2)

This is a 3-band equalizer suited for guitar.

Para A	Para B	Para C	EXP Target (TYPE)
L (Low): -12 ~ +12	M (Mid): -12 ~ +12	H (Hi): -12 ~ +12	
Boosts or cuts the low (125 Hz) frequency band (±12dB).	Boosts or cuts the mid (500 Hz) frequency band (±12dB).	Boosts or cuts the high (2kHz) frequency band (±12dB).	

EQ 3 (Equalizer 3)

This is a 3-band equalizer suited for guitar.

Para A	Para B	Para C	EXP Target (TYPE)
L (Low): -12 ~ +12	M (Mid): -12 ~ +12	H (Hi): -12 ~ +12	
Boosts or cuts the low (100 Hz) frequency band (±12dB).	Boosts or cuts the mid (1kHz) frequency band (±12dB).	Boosts or cuts the high (6.4kHz) frequency band (±12dB).	

CAB (Cabinet) Module (15)

H.112 (Heritage 112)

Based on the VOX AC15* 1x12 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	_

H.212 (Heritage 212)

Based on the VOX AC30* 2x12 Cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	—

Based on the Marshall* 4x12 cabinet with Greenback* speakers. Para A Para B Para C EXP Target (TYPE) M (Mic Distance): 01~50 P (Presence): 01~50 V (Volume): 01~50 Adjusts the distance between microphone and cabinet. Adjusts the presence. Adjusts the presence. Adjusts the bevel of the signal after it has passed through the effect.

VT 30 (Plexi Vintage 412)				
	Based on the Marshall* 4x12 cabinet with Vintage 30* speakers.			
Para A Para B Para C EXP Target				
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50		
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.		

TWD8 (Tweed 8)

Based on the Fender Tweed Champ* 1x8 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

D.112 (Darkface 112)

Based on the Fender Deluxe Reverb* 1x12 cabinet.

D A	EVD Toward (TVDE)		
Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	_

D.212 (Darkface 212)

Based on the Fender Twin Reverb* 2x12 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

B.410 (Bassist 410)

Based on the Fender BASSMAN* 4x10 bass cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	go:(/
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	_

JAZZ (Jazz 212)

Based on the Roland JC120*2x12 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

C.412 (Bassist 410)

Based on the MESA BOOGIE* 4x12 cabinet.

based on the MESA BOOGLE 4X12 Cabinet.				
Para A	Para B	Para C	EXP Target (TYPE)	
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50		
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.		

GRET (Great 110)

Based on the GRETSCH 6156* 1x10 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

F.412 (Frankenstein 412)

Based on the PEAVEY 5150* 4x12 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

HIWY (Highway 412)				
Based on the HIWATT DR103* 4x12 bass cabinet.				
Para A	Para B	Para C	EXP Target (TYPE)	
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50		
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.		

E.212 (Chief 212)					
	Based on the MATCHLESS CHIEFTAIN* 2x12 Cabinet.				
Para A	Para B	Para C	EXP Target (TYPE)		
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50			
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	_		

SOLO (Soloist 412)

Based on the SOLDANO* 4x12 cabinet.

Para A	Para B	Para C	EXP Target (TYPE)
M (Mic Distance): 01~50	P (Presence): 01~50	V (Volume): 01~50	
Adjusts the distance between microphone and cabinet.	Adjusts the presence.	Adjusts the level of the signal after it has passed through the effect.	

MOD (Modulation) Module (22)

DRCH (Dream Chorus)

Based on the BOSS CE-1 Chorus* pedal.

Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.MIX
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

HDCH (Hard Chorus)

This effect produces a modern feeling chorus sound, bright and deep.

Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.MIX
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

CCH (Concrete Chorus)

This effect produces a thick and lush sound.

Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.MIX
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

SCH	(Sky	Chorus)	

This effect produces a bright and clear chorus.

Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.MIX
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

VVB (Vintage Vibrato)

Based on the vintage Boss VB-2 Vibrato* pedal.

Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD(Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.

BVB (Bright Vibrato)			
This effect modulates the pitch of the incoming signal at an even rate.			
Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.

OPTR (Opto Tremolo)			
Based on the DEMETER TREMULATOR* tremolo pedal.			
Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.

BITR (Bias Tremolo)				
	This effect modulates the volume of the signal at an even rate.			
Para A Para B Para C EXP Target (TY				
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD (Speed)	
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.	

TUTR (Tube Tremolo)			
Based on the Electro-Harmonix WIGGLER* tremolo pedal.			
Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.

ROTA (Rotary)				
	Based on the vintage SHIN-EI UNI-VIBE* rotary pedal.			
Para A Para B Para C EXP Target (TYP				
D (Depth): 01~50	S (Speed): 01~50	V (Volume): 01~50	M.SPD (Speed)	
Adjusts the effect depth.	Adjusts the effect speed.	Adjusts the effect volume.	Assigning the PARA B of this effect is controlled by EXP.	

PHAS (Phaser)			
This effect splits the incoming signal and changes the phasing of the signal.			
Para A	Para B	Para C	EXP Target (TYPE)
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.

FBPH (Feedback Phaser)			
This effect produces a phasing sound with feedback.			
Para A Para B Para C EXP Target (TYP			
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.

FLNG (Flanger)				
This effect produces a standard flanger tone.				
Para A	Para B	Para C	EXP Target (TYPE)	
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)	
A di	A div + - + b +	Controls the mix with	Assigning the PARA B of	

the original signal.

this effect is controlled by

EXP.

Adjusts the effect speed.

Adjusts the effect depth.

NFLG (Negative Flanger)				
This effect produces a exaggerated flanger tone with negative feedback.				
Para A	Para B	Para C	EXP Target (TYPE)	
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)	
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.	

JTLY (Jetlyzer) This effect produces a massive flanger tone with plenty of feedback.			
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.

STEP (Step Flanger)				
This effect produces an automatic flanger tone with step variation.				
Para A	Para B	Para C	EXP Target (TYPE)	
D (Depth): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	M.SPD (Speed)	
Adjusts the effect depth.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.	

DTUN (Detune)

This effect mixes a dry signal and a signal that is slightly out of tune.

Para A	Para B	Para C	EXP Target (TYPE)
C (Cent): -25 ~ +25	Pre Delay: 001~200 (ms)	MIX: -25 ~ +25	M.MIX
Adjusts the detuning in cents.	Sets the pre-delay time of the effect sound	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

PBND (Pitch Bender)				
This effect shifts the pitch from -12 semitones to +12 semitones.				
Para A	Para B	Para C	EXP Target (TYPE)	
R (Range): -12 ~ +12	T (Tone): 01~50	MIX: -25 ~ +25	RAN (Range)	
Adjusts the pitch shift amount in semitones.	Adjusts the tone.	Controls the mix with the original signal.	Assigning the PARA A of this effect is controlled by EXP.	

FBPB (Feedback Pitch Bender)

This effect shifts the pitch with a short delay and feedback.

Para A	Para B	Para C	EXP Target (TYPE)
R (Range): -12 ~ +12	F (Feedback): 01~50	MIX: -25 ~ +25	RAN (Range)
Adjusts the pitch shift amount in semitones.	Adjusts the amout of feedback.	Controls the mix with the original signal.	Assigning the PARA A of this effect is controlled by EXP.

A.LPF (Auto Low Pass Filter)

This effect produces low filter variation at an even rate.

Para A	Para B	Para C	EXP Target (TYPE)
F (Freq): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	RATE
Adjusts the filter working frequency.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.

A.BPF (Auto Band Pass Filter)

This effect produces an auto band pass filter effect.

Para A	Para B	Para C	EXP Target (TYPE)
F (Freq): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	RATE
Adjusts the filter working frequency.	Adjusts the effect speed.	Controls the mix with the original signal.	Assigning the PARA B of this effect is controlled by EXP.

A HDE (Auto High Dass Filter)

A.HFF (Auto High Fass Filter)				
This effect produces high filter variation at an even rate.				
Para A	Para B	Para C	EXP Target (TYPE)	
F (Freq): 01~50	S (Speed): 01~50	MIX: -25 ~ +25	RATE	
Adjusts the filter working	Adjusts the effect	Controls the mix with	Assigning the PARA B of	

the original signal.

this effect is controlled by

EXP.

speed.

frequency.

DLY (DELAY) Module (9)

DDLL (Digital Delay Long)

This effect produces a pure, accurate delay effect.

Para A	Para B	Para C	EXP Target (TYPE)
F (Feedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.

DDLS (Digital Delay Short)

This effect produces a pure, accurate delay effect.

Para A	Para B	Para C	EXP Target (TYPE)
F (Feedback): 01~50	Time:50 (ms)~500 (ms)	L (Level): 01~50	FDBK (Feedback)、TIME
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.

ADLL (Analog Delay Long)				
Based on the Electro-Harmonix DELUXE MEMORY MAN* analog delay pedal.				
Para A	Para B	Para C	EXP Target (TYPE)	
F (Feedback): 01~50	Time:50 (ms)~100 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME	
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.	

ADLS (Analog Delay Short)					
	Based on the BOSS DM-2 DELAY* pedal.				
Para A	Para B	Para C	EXP Target (TYPE)		
F (Feedback): 01~50	Time:50 (ms)~300 (ms)	L (Level): 01~50	FDBK (Feedback)、TIME		
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.		

MODL (Mod Delay)				
This effect produces a pure delay with chorus effect.				
Para A	Para B	Para C	EXP Target (TYPE)	
F (Feedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME	
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.	

	DNDL (Dynamic Delay)				
	This effect produces a pure delay effects with variation in dynamic.				
Para A	Para B	Para C	EXP Target (TYPE)		
F (Feedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME		
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.		

TPEC (Tape Echo)

This effect simulates the echo tone from a tape machine.

Para A	Para B	Para C	EXP Target (TYPE)
F (Feedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.

TREC (Tube Echo)

F (Feedback): Adjusts the amout of

feedback.

TBEO (Tabe Edito)				
This effect simulates the sound from a tube-driven echo machine.				
Para A	Para B	Para C	EXP Target (TYPE)	
eedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME	
usts the amout of	Adjusts the delay time	Adjusts the offeet level	Assigning the PARA A or B of	

Adjusts the effect level.

this effect is controlled by EXP.

Adjusts the delay time.

PPDL (Ping Pong Delay)				
This ping-pong delay outputs the delay sound alternately to the left and right.				
Para A	Para B	Para C	EXP Target (TYPE)	
F (Feedback): 01~50	Time:50 (ms)~200 (10ms)	L (Level): 01~50	FDBK (Feedback)、TIME	
Adjusts the amout of feedback.	Adjusts the delay time.	Adjusts the effect level.	Assigning the PARA A or B of this effect is controlled by EXP.	

REV (REVERB) Module (8)

SPRN (Spring Box)

This reverb effect simulates a spring reverberator.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

ROOM (Room Reverb)

This reverb effect simulates a room reverberation.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

CHUR (Church Reverb)

This reverb effect simulatesa a church reverberation.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

CLUB (Club Reverb)

This reverb effect simulates a club reverberation.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

HALL (Hall Reverb)

This reverb effect simulates a music hall reverberation.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

PLAT (Vintage Plate)

This reverb effect simulates a plate reverberator.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

ARNA (Arena Reverb)

This reverb effect simulates a arena reverberation.

Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

M.RVB (Mod Reverb)

This reverb effect provides a reverb with modulation.

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Para A	Para B	Para C	EXP Target (TYPE)
D (Decay): 01~50	T (Tone): 01~50	MIX: -25 ~ +25	R.MIX (Mix)
Sets the duration of the reverberation.	Adjusts the effect tone.	Controls the mix with the original signal.	Assigning the PARA C of this effect is controlled by EXP.

PRESETS PATCH LIST

No.	TYPE	EXP
P00	Solo Dist	Time
P01	Overdrive	Vol
P02	Chorus + Reverb	M.Mix
P03	Touch Wah	Wah
P04	Distortion + Reverb	Vol
P05	Slow Attack	R.Mix
P06	Overdrive + Delay	Time
P07	Distortion + Delay	Vol
P08	Flanger + Reverb	R.Mix
P09	Detune + Reverb	Range
P10	Distortion + Reverb	Vol
P11	Pitch Shifter + Reverb	Range
P12	Distortion + Reverb	Feedback
P13	Auto Wah	Speed

No.	TYPE	EXP
P14	Distortion + Delay	Feedback
P15	Distortion + Reverb	Vol
P16	Distortion + Delay	Time
P17	Flanger + Delay	M.Speed
P18	Overdrive	Vol
P19	Compressor + Delay	Time
P20	Auto Wah + Delay	Speed
P21	Distortion	Vol
P22	Tremolo + Reverb	M.Speed
P23	Vibrato + Delay	M.Speed
P24	Distortion + Reverb	R.Mix
P25	Distortion + Chorus	Vol
P26	Clean Delay	Time
P27	Short Delay	Vol

No.	TYPE	EXP
P28	Bit Krush + Delay	Feedback
P29	Chorus + Delay	Time
P30	Auto Wah + Delay	Feedback
P31	Slow Attack + Delay	Feedback
P32	Compressor + Delay	Vol
P33	Low Pass Filter + Delay	Vol
P34	Ring Mod + Delay	Freq
P35	Detune + Delay	M.Mix
P36	Chorus + Delay	Feedback
P37	Distortion + Delay	Master Volume
P38	Auto Wah + Delay	Master Volume
P39	Detune + Delay	Time
P40	High Gain Distortion + Delay	M.Mix
P41	Mod Delay	M.Speed

No.	TYPE	EXP
P42	Compressor + Chorus	M.Mix
P43	Compressor + Flanger	M.Speed
P44	Distortion + Vibrato	M.Speed
P45	Slow Attack + Tremolo	M.Speed
P46	Distortion + Phaser	M.Speed
P47	Tremolo + Reverb	Vol
P48	Distortion + Rotary	M.Speed
P49	Vibrato + Reverb	R.Mix
P50	Chorus + Reverb	M.Mix
P51	Vibrato + Delay	Time
P52	Flanger + Delay	M.Speed
P53	Compressor + Rotary	M.Speed
P54	Bit Krush + Rotary	M.Mix
P55	Tremolo + Reverb	M.Speed

TYPE	EXP
Tremolo + Delay	M.Speed
Fuzz + Rotary	M.Speed
Flanger + Delay	Master Volume
Auto Wah + Flanger	Speed
Slow Attack + Vibrato	Master Volume
Compressor + Flanger	M.Speed
Distortion + Tremolo	Master Volume
Auto Wah + Detune	Speed
Compressor + Low Pass Filter	Vol
Touch Wah + Vibrato	Wah
Band Pass Filter	Rate
Low Pass Filter	Rate
Feedback Phaser	Vol
Ring Mod + Band Pass Filter	Freq
	Tremolo + Delay Fuzz + Rotary Flanger + Delay Auto Wah + Flanger Slow Attack + Vibrato Compressor + Flanger Distortion + Tremolo Auto Wah + Detune Compressor + Low Pass Filter Touch Wah + Vibrato Band Pass Filter Low Pass Filter Feedback Phaser

No.	TYPE	EXP
P70	Compressor + High Pass Filter	Vol
P71	Band Pass Filter + Phaser	Speed
P72	Delay + Reverb	R.Mix
P73	Fuzz + Reverb	R.Mix
P74	Band Pass Filter + Reverb	Master Volume
P75	Delay + Reverb	M.Mix
P76	Auto Wah + Reverb	Speed
P77	Feedback Phaser + Reverb	R.Mix
P78	Chorus + Reverb	M.Mix
P79	Overdrive + Reverb	R.Mix
P80	Distortion + Reverb	Master Volume
P81	Vibrato + Reverb	M.Speed
P82	Acoustic Guitar	Master Volume
P83	Slow Attack + Rotary	Attack

No.	TYPE	EXP
P84	Octave + Chorus	Dry
P85	Ring Mod + Reverb	Freq
P86	Compressor + Pitch Shifter	Range
P87	Slow Attack + Pitch Shifter	Master Volume
P88	Octave + Detune	Dry
P89	Super Bass	Vol
P90	Compressor + Pitch Shifter	Range
P91	Octave + Chorus	Master Volume
P92	Feedback Pitch Shifter + Reverb	R.Mix
P93	Pitch Shifter + Reverb	Vol
P94	Slow Attack + Phaser	Master Volume
P95	Acoustic Sim + Reverb	Vol
P96	Auto Wah + Pitch Shifter	Speed
P97	Compressor + Pitch Shifter	Range

No.	TYPE	EXP
P98	Band Pass Filter + Pitch Shifter	Speed
P99	Distortion + Pitch Shifter	Master Volume

DRUM RHYTHM LIST

Genre	No.	Type	Time Signature	Default Tempo
	00	Nu-Metal 1	4/4	110BPM
N 4 - 4 - 1	01	Nu-Metal 2	4/4	130BPM
Metal	02	Metal 1	4/4	160BPM
	03	Metal 2	4/4	160BPM
Poggoo	04	Reggae 1	4/4	150BPM
Reggae	05	Reggae 2	4/4	120BPM
	06	Post Rock 1	4/4	110BPM
Post Rock	07	Post Rock 2	4/4	105BPM
	08	Post Rock 2	4/4	135BPM
	09	Drum & Bass	4/4	170BPM
Electronic	10	Electronic 1	4/4	135BPM
	11	Electronic 2	4/4	120BPM
	12	Techno	4/4	150BPM
	13	Trip Hop	4/4	70BPM

Genre	No.	Type	Time Signature	Default Tempo
Clastica is	14	Electronic Pop	4/4	100BPM
Electronic	15	Break Beat	4/4	120BPM
	16	Hip Hop 1	4/4	170BPM
∐in ∐on	17	Hip Hop 2	4/4	170BPM
Hip Hop	18	Hip Hop 3	4/4	80BPM
	19	Hip Hop Rock	4/4	160BPM
	20	Bluegrass	4/4	170BPM
Country	21	Country	4/4	170BPM
	22	Country Folk	4/4	100BPM
	23	Prog Rock	6/8	95BPM
Rock	24	Rock 1	4/4	80BPM
	25	Rock 2	4/4	130BPM
	26	Surfin	4/4	160BPM
	27	Rock Shuffle	4/4	120BPM

Genre	No.	Type	Time Signature	Default Tempo
	28	Rock n' Roll	4/4	180BPM
	29	Rock Ballad	4/4	70BPM
	30	Shuffle 3/4	3/4	110BPM
	31	Rock 5/4	5/4	150BPM
	32	Classic Rock	4/4	110BPM
Rock	33	Shuffle 4/4	4/4	180BPM
	34	Garage Rock	4/4	95BPM
	35	Hard Rock 1	4/4	90BPM
	36	Hard Rock 2	4/4	95BPM
	37	Hard Rock 3	4/4	120BPM
	38	Grunge	4/4	100BPM
	39	Funk 1	4/4	110BPM
Funk	40	Funk 2	4/4	100BPM
	41	Funk 3	4/4	100BPM

Genre	No.	Type	Time Signature	Default Tempo
Funk	42	Funk 4	4/4	100BPM
	43	Punk 1	4/4	220BPM
	44	Punk 2	4/4	200BPM
	45	Punk 3	4/4	150BPM
	46	Punk 4	4/4	150BPM
Describ	47	Punk 5	4/4	240BPM
Punk	48	Post Punk 1	4/4	150BPM
	49	Post Punk 2	4/4	120BPM
	50	Emo Core	4/4	90BPM
	51	Hardcore	4/4	160BPM
	52	New Wave	4/4	140BPM
	53	Pub	4/4	75BPM
Pop	54	Pop 1	4/4	90BPM
	55	Pop 2	4/4	100BPM

Genre	No.	Type	Time Signature	Default Tempo
Pop	56	Pop 3	4/4	120BPM
	57	Blues 1	4/4	120BPM
Division	58	Blues 2	4/4	100BPM
Blues	59	Blues 3	6/8	70BPM
	60	Blues 4	4/4	130BPM
	61	Latin 1	4/4	125BPM
	62	Latin 2	4/4	220BPM
	63	Latin 3	4/4	120BPM
	64	Latin Pop 1	4/4	110BPM
Latin	65	Bossanova 1	4/4	90BPM
	66	Bossanova 2	4/4	100BPM
	67	Beguine	4/4	110BPM
	68	Mazuke	3/4	120BPM
	69	Samba	4/4	230BPM

Genre	No.	Type	Time Signature	Default Tempo
Latin	70	Latin Pop 2	4/4	140BPM
	71	Army March	4/4	100BPM
	72	March 1	4/4	120BPM
	73	March 2	4/4	170BPM
	74	Musette	3/4	180BPM
	75	New Age 1	4/4	90BPM
World	76	New Age 2	4/4	100BPM
	77	Polka	4/4	120BPM
	78	Tango	4/4	120BPM
	79	Ska	4/4	160BPM
	80	Waltz	3/4	160BPM
	81	World	4/4	110BPM
lozz	82	Jazz 1	4/4	150BPM
Jazz	83	Jazz 2	4/4	80BPM

Genre	No.	Type	Time Signature	Default Tempo
	84	Jazz 3	4/4	120BPM
	85	Jazz 4	4/4	105BPM
Jazz	86	Jazz Funk 1	4/4	120BPM
	87	Jazz Funk 2	4/4	90BPM
	88	Jazz Funk 3	4/4	115BPM
	89	Fusion	4/4	110BPM
	90	Metro 1/4	1/4	120BPM
	91	Metro 2/4	2/4	120BPM
	92	Metro 3/4	3/4	120BPM
Metro	93	Metro 4/4	4/4	120BPM
	94	Metro 5/4	5/4	120BPM
	95	Metro 6/4	6/4	120BPM
	96	Metro 7/4	7/4	120BPM
	97	Metro 6/8	6/8	120BPM

Genre	No.	Type	Time Signature	Default Tempo
Materia	98	Metro 7/8	7/8	120BPM
Metro	99	Metro 5/4	5/4	120BPM

SPECIFICATIONS

Effect types: 100 types

Effect modules: Max. 8 simultaneous modules

Number of user banks/patches: 10 patches x 10 banks

Preset banks/patches: 10 patches x 10 banks

Sampling frequency: 44.1kHz

A/D conversion: 24-bit with 512 x oversampling **D/A conversion:** 24-bit with 512 x oversampling

Signal processing: 32-bit

Maximum recording time (looper mode): 25 seconds

INPUT jack: Standard 1/4" (6.35mm) mono jack

OUTPUT jack: Standard 1/4" (6.35mm) stereo jack

Input impedance: $470k\Omega$ Output impedance: 100Ω

S/N Ratio (equivalent input noise): 90dB

Power: AC adapter: DC 9V (center negative), 500mA

Batteries: Max. 6.5 hours of continuous operation using

4 AAA size alkaline batteries

Dimensions: 138mm (D) x 115mm (W) x 48mm (H)

Weight: 305g (without batteries)









