Bass Effects & Amp Simulator

B3

OPERATION MANUAL

Thank you very much for purchasing the ZOOM B3.

Please read this manual carefully to learn about all the functions of the B3 so that you will be able to use it fully for a long time.

Keep this manual in a convenient place for reference when necessary.

Contents

ZOOM

Usage and Safety Precautions

SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions that you must read to prevent accidents. The meanings of these symbols are as follows:

⚠️ **Warning**	Something that could cause serious injury or death.
⚠️ **Caution**	Something that could cause injury or damage to the equipment.

Other symbols

❗	Required (mandatory) actions
🚫	Prohibited actions

⚠️ Warning

Operation using an AC adapter

❗ Use only a ZOOM AD-16 AC adapter with this unit.

🚫 Do not use or do anything that could exceed the ratings of outlets and other electrical wiring equipment. Before using the equipment in a foreign country or other region where the electrical voltage differs from that indicated on the AC adapter, always consult with a shop that carries ZOOM products beforehand and use the appropriate AC adapter.

Operation using batteries

❗ Use 4 conventional 1.5-volt AA batteries (alkaline or nickel-metal hydride).

❗ Read battery warning labels carefully.

❗ Always close the battery compartment cover when using the unit.

Alterations

🚫 Never open the case or attempt to modify the product.

⚠️ Precautions

Product handling

❗ Do not drop, bump or apply excessive force to the unit.

❗ Be careful not to allow foreign objects or liquids to enter the unit.

Operating environment

🚫 Do not use in extremely high or low temperatures.

🚫 Do not use near heaters, stoves and other heat sources.

🚫 Do not use in very high humidity or near splashing water.

🚫 Do not use in places with excessive vibrations.

🚫 Do not use in places with excessive dust or sand.

AC adapter handling

❗ When disconnecting the AC adapter from an outlet, always pull the body of the adapter itself.

❗ During lightning storms or when not using the unit for a long time, disconnect the power plug from the AC outlet.

Battery handling

❗ Install the batteries with the correct +/- orientation.

❗ Use a specified battery type. Do not mix new and old batteries or different brands or types at the same time. When not using the unit for an extended period of time, remove the batteries from the unit.

❗ If a battery leak should occur, wipe the battery compartment and the battery terminals carefully to remove all battery residue.

Connecting cables with input and output jacks

❗ Always turn the power OFF for all equipment before connecting any cables.

❗ Always disconnect all connection cables and the AC adapter before moving the unit.

Volume

🚫 Do not use the product at a loud volume for a long time.

Usage Precautions

Interference with other electrical equipment

In consideration of safety, the **B3** has been designed to minimize the emission of electromagnetic radiation from the device and to minimize external electromagnetic interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves could result in interference if placed nearby. If this occurs, place the **B3** and the other device farther apart. With any type of electronic device that uses digital control, including the **B3**, electromagnetic interference could cause malfunction, corrupt or destroy data and result in other unexpected trouble. Always use caution.

Cleaning

Use a soft cloth to clean the panels of the unit if they become dirty. If necessary, use a damp cloth that has been wrung out well. Never use abrasive cleansers, wax or solvents, including alcohol, benzene and paint thinner.

Malfunction

If the unit becomes broken or malfunctions, immediately disconnect the AC adapter, turn the power OFF and disconnect other cables. Contact the store where you bought the unit or ZOOM service with the following information: product model, serial number and specific symptoms of failure or malfunction, along with your name, address and telephone number.

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Introduction

Feels just like using effect pedals

The three effects each have their own displays, parameter knobs and footswitches, allowing you to control all of them intuitively.

Realistic amplifier modeling

With our new ZFX-4 DSP, we have magnificently recreated low-end thickness, pitch clarity and loudness, which are elements that contribute to a natural playing feel. Models range from famous historical amps to recent popular ones, covering a great variety of bass sounds.

Combine diverse effects as you like

You can freely combine the over 100 types of onboard effects, including preamps and stomp boxes tuned for bass guitars.

Looper that can be synchronized with rhythms

The looper can be synchronized with rhythms and record phrases of up to 40 seconds.

Automatic saving

The auto save function reliably stores the changes you make.

Works with ZOOM Edit & Share software

The *B3* can be used with Edit & Share software, which is a patch editor and librarian, on a computer to back up patches and change the order of effects.
See the ZOOM website (http://www.zoom.co.jp/) for further information about Edit & Share.

Terms Used in this Manual

Patch

The ON/OFF status and the parameter settings of each effect are stored as "patches." Use patches to recall and save effects. The *B3* can store 100 patches.

Bank

A set of 10 patches is called a "bank." The *B3* has 10 banks labeled A–J.

Part Names

Top Panel

TOTAL key

RHYTHM [▶/■] key

STORE/SWAP key

TAP key

GLOBAL key

PATCH SELECT keys

TYPE keys

PAGE keys

Displays

Parameter knobs 1-3

Foot switches 1-3
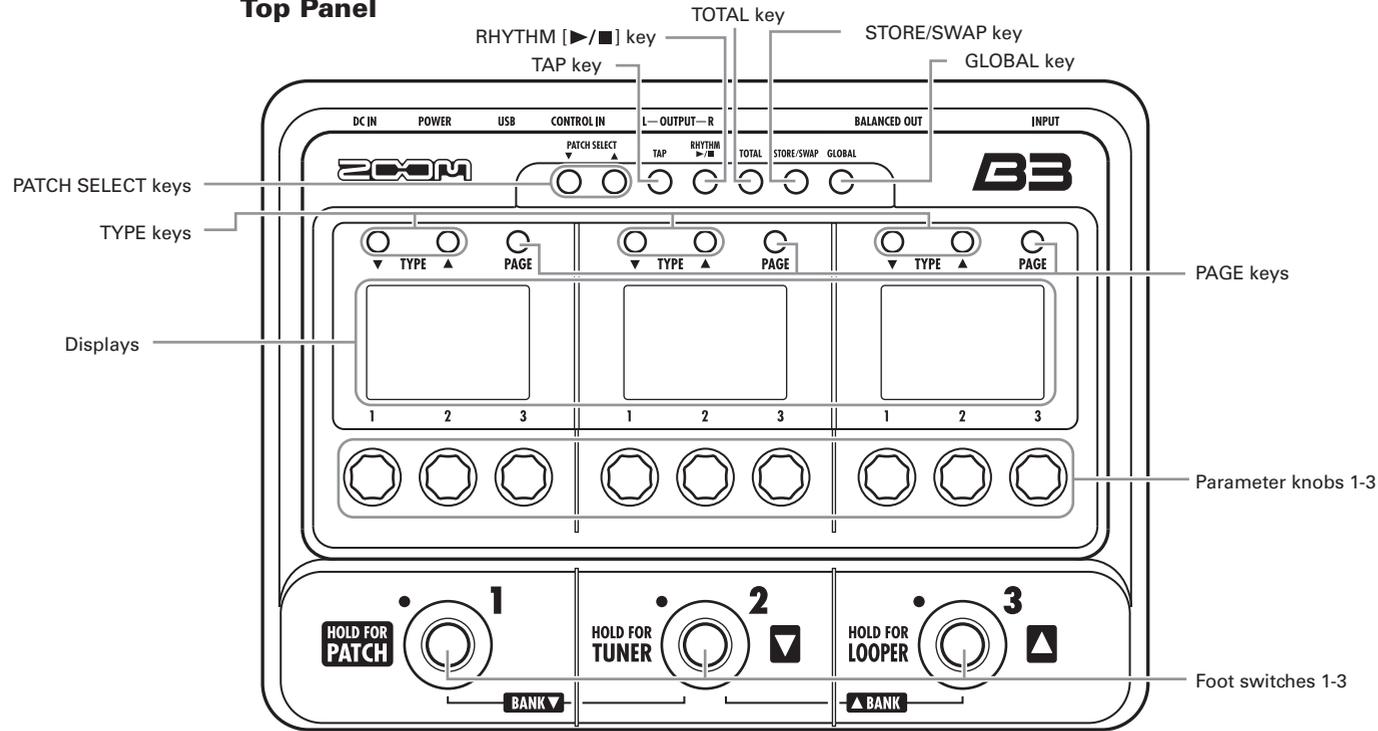
ACTIVE/PASSIVE switch
Use this switch to set the *B3* INPUT impedance.
Set this to "ACTIVE" (pushed in) if you have an effect pedal connected between your instrument and the *B3* or you are directly connecting a bass guitar with active pickups.
Set this to "PASSIVE" (not pushed in) if you are directly connecting a bass guitar with passive pickups.

Rear Panel
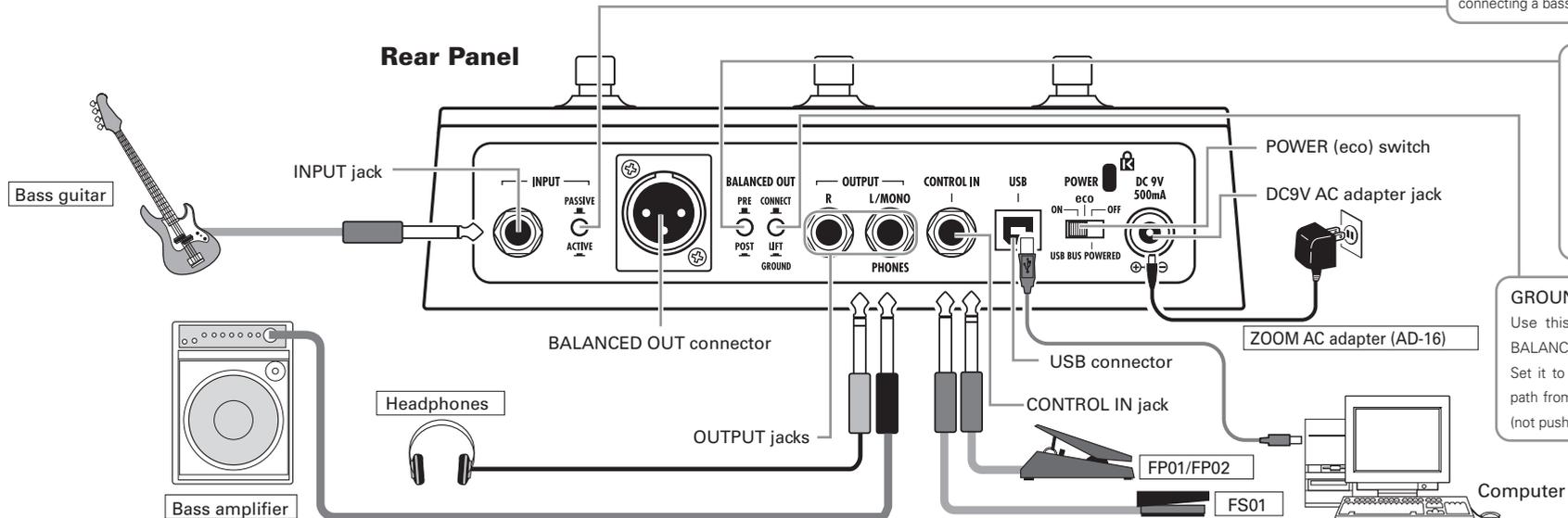
PRE/POST switch
Use this switch to set the point when the signal is output from the BALANCED OUT connector.
Set it to "POST" (pushed in) to output the signal after the *B3* effects. Set it to "PRE" (not pushed in) to output the signal before the *B3* effects.

POWER (eco) switch

INPUT jack

DC9V AC adapter jack

Bass guitar

BALANCED OUT connector

ZOOM AC adapter (AD-16)

USB connector

GROUND switch
Use this switch to connect or disconnect the BALANCED OUT connector with the ground.
Set it to "LIFT" (pushed in) to separate the signal path from the grounding pin. Set it to "CONNECT" (not pushed in) to connect it to the grounding pin.

Headphones

CONTROL IN jack

OUTPUT jacks

FP01/FP02

Computer

Bass amplifier

FS01

Turn the Power on and Play

To turn the power on

Always lower the amplifier's volume all the way before turning the power on.

■ When using batteries

Insert batteries into the battery compartment and set the POWER switch to ON.
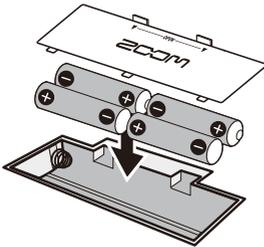
Bottom of the unit
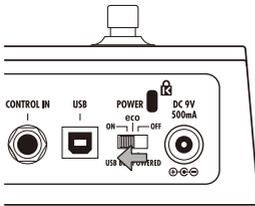
■ When using an adapter

Connect the AC adapter and set the POWER switch to ON.
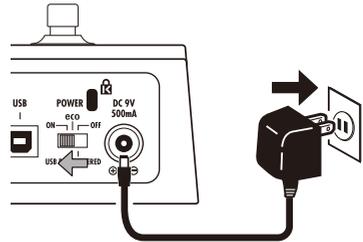
Turn the amplifier's power on and raise its volume.

> **HINT**
>
> • POWER switch options
>
> eco: If the **B3** is not used for about 25 minutes, it will be set to standby.
> The **B3** will not be set to standby as long as there is a signal input from a bass guitar.
>
> OFF: When set to "OFF", the **B3** can be powered from a USB bus by connecting it to a computer's USB port.

Display information

■ Home Screens show the current patch

Graphic for selected effect
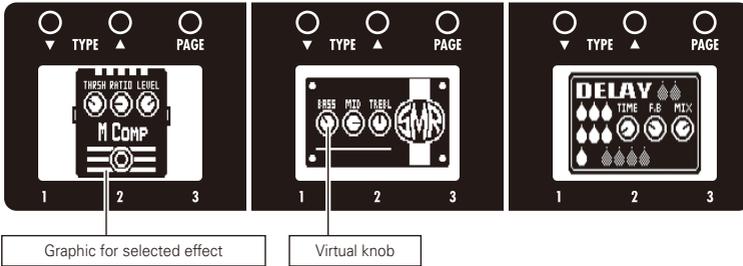
Virtual knob

> **HINT**
> • The positions of the virtual knobs change with the parameter values.

■ Edit Screens show parameters being edited

Parameter names

Page tabs

Parameter values
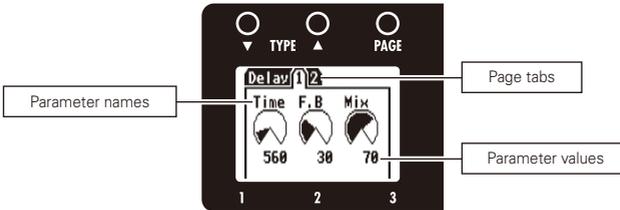
> **HINT**
> • If there are 4 or more parameters that can be adjusted, multiple page tabs will be shown.

Adjusting Effects

Confirm that the Home screens are shown.
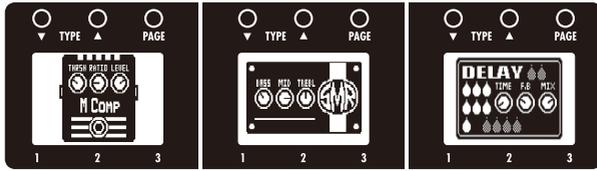
1 | To turn effects ON and OFF

- Press (○)¹ , (○)² and (○)³ .

∨

- Turns the effect ON/OFF.

OFF   ON
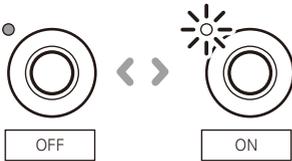
NOTE

- An effect is ON when its footswitch LED is lit.
- An effect is OFF when its footswitch LED is not lit.

2 | To select an effect type

- Press ○ ○ .
  ▼ TYPE ▲

∨

- The effect type changes.
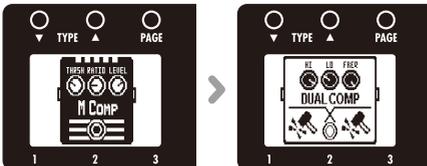
HINT

- See page 33 for information about effect types and parameters.
- Adjustments are automatically saved.

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3 | To adjust parameters

- Turn **1**, **2** and **3** .

- The editing screen opens where you can adjust parameters.
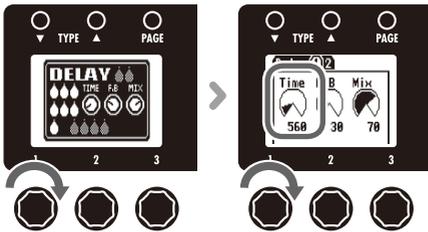
NOTE

- Time, rate and some other effect parameters can be set in note durations that are synchronized to the tempo.

4 | To change the page

- Press ○ .
  PAGE

- The next page opens.
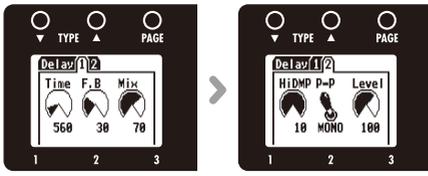
Effect processing capacity

The *B3* allows you to combine three effects as you like. However, if you combine effect types that require great amounts of processing power, it is possible to exceed the processing capacity of the *B3*. If the processing required for the effect exceeds the capacity of the *B3*, "THRU" is shown over the effect graphic and the effect is bypassed. This can be avoided by changing one or more of the effect types.

NOTE

- An effect requires the same amount of processing power whether it is on or off.

HINT

- Amp models require great amounts of processing.

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Selecting Patches

Confirm that the Home display is shown.
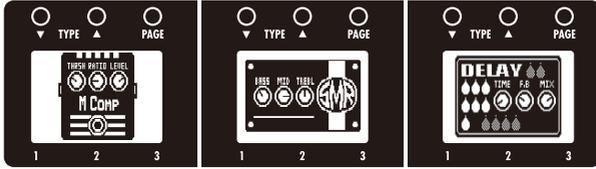
1 | To activate patch selection

- Press and Hold **HOLD FOR PATCH** for 1 second to activate patch selection.

- The screens show the patch bank, number and name.
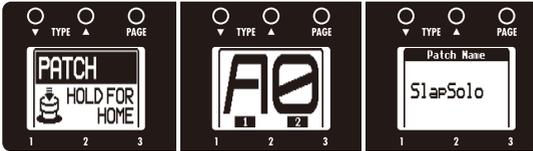
2 | To change the patch

- Press to select the next lower patch.

- Press to select the next higher patch.

- Turn of the middle effect.

- The patch number and name changes.
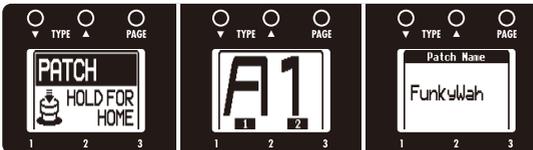
HINT

- You can also change patches using **PATCH SELECT**.

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3 | To change the bank

- Press ① and ② at the same time to select the next lower bank.

- Press ② and ③ at the same time to select the next higher bank.

- Turn ❶ of the middle effect.

⌄

- The patch bank and name changes.
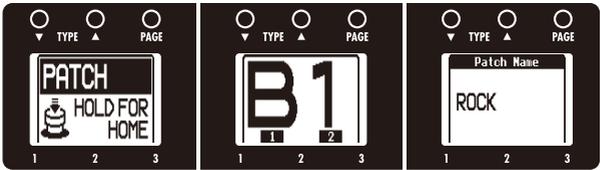
NOTE

- When pressing two footswitches at the same time, the sound could be affected by the footswitch that is pressed slightly earlier. To avoid this, do not make sound when switching banks.

4 | To return to the Home Screens

- Press and hold **HOLD FOR PATCH** ❶ for 1 second.

⌄
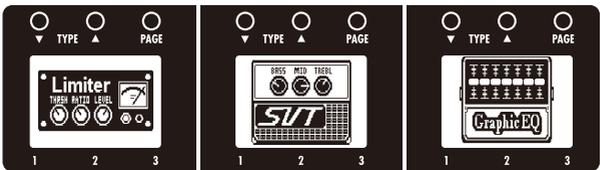
Storing Patches

The B3 automatically saves settings when parameters are adjusted.

1 | To store a patch or swap with a different patch

- Press **STORE/SWAP** ○ .

⌄

- **STORE/SWAP** ○ blinks and the screens appear as below.

○ ○ ○ ▼ TYPE ▲ PAGE **1** **STORE** SWAP EXECUTE:STORE CANCEL :ANY KEY 1　2　3	○ ○ ○ ▼ TYPE ▲ PAGE CURRENT PATCH **A0** ➡ SlapSolo 1　2　3	○ ○ ○ ▼ TYPE ▲ PAGE SELECT LOCATION **--** 1:BANK 2:PATCH 1　2　3
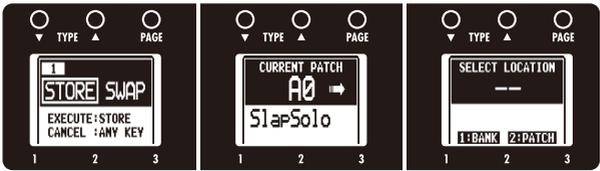
2 | To select whether to store or swap the patch

- Turn **1** ⬡ of the left effect.

⌄

Store   Swap

○ ○ ○ ▼ TYPE ▲ PAGE **1** **STORE** SWAP EXECUTE:STORE CANCEL :ANY KEY 1　2　3	❮ ❯	○ ○ ○ ▼ TYPE ▲ PAGE **1** STORE **SWAP** EXECUTE:STORE CANCEL :ANY KEY 1　2　3
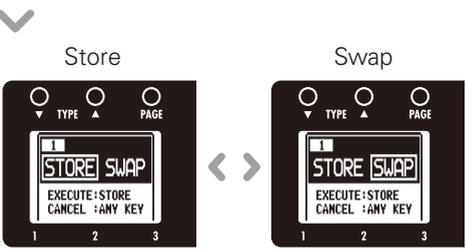
3 | To set where to store or swap the new patch

■ To change the patch number where stored/swapped

• Turn **2** of the right effect.

Change the patch number
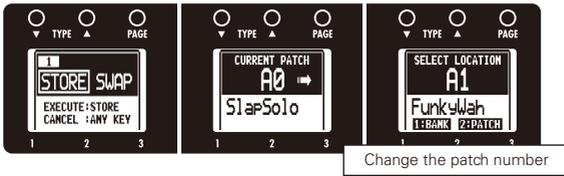
■ To change the bank where stored/swapped

• Turn **1** of the right effect.

Change the bank

NOTE

• The currently active patch cannot be selected as the destination.
• The current setting values are automatically saved.

4 | To complete patch storing/swapping

• Press **STORE/SWAP** ○ .

• After "COMPLETE!" appears on the display, the stored/swapped patch opens.

HINT

• To cancel this, press any key instead of **STORE/SWAP** ○ .

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Setting Specific Patch Parameters

1 | To activate the TOTAL menu

• Press ⭕ TOTAL.

PATCH   CHAIN/NAME   CTRL PDL/CTRL SW
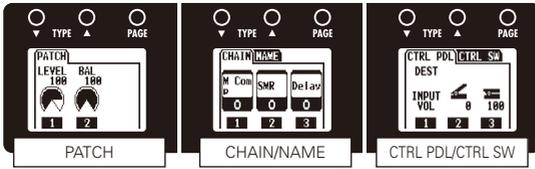
NOTE

• Settings made for total parameters are saved separately for each patch.

2 | To adjust the patch level

• Turn ⬡ 1 of the left effect.
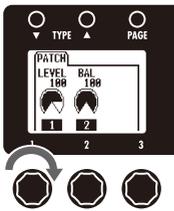
NOTE

• The setting range is 0-120.

HINT

• To change the overall volume of all patches, adjust the master level (see page 18).

3 | To adjust the balance between original and effected sounds

• Turn ⬡ 2 of the left effect.
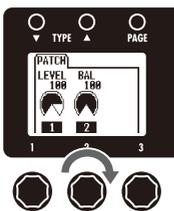
NOTE

• The setting range is 0-100. Set to 0 for only the original sound or 100 for only the effect sound.

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4 | To change the order of the effects

• Turn **1** ⬢ , **2** ⬢ and **3** ⬢ of the middle effect to exchange effect locations.

⌄
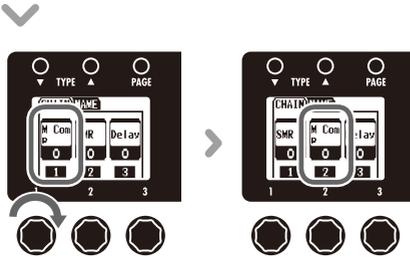
5 | To change the patch name

• Press ◯ of the middle effect.

⌄ **PAGE**
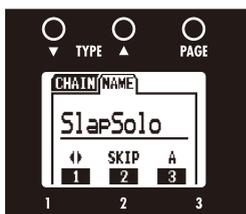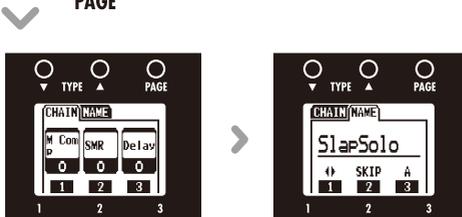
◀▶ **1** : Turn **1** ⬢ to move the cursor.

SKIP 2 : Turn **2** ⬢ to change the type of character/ symbol.

A 3 : Turn **3** ⬢ to change the character.

─ **NOTE** ─

• The following characters and symbols can be used.
  ! # $ % & ' () +, -. ; = @ [] ^ _ ` { } ~A-Z, a-z, 0-9, (space)

6 | To set an expression pedal function

Set the control destination.

- Turn ◯ **1** of the right effect.
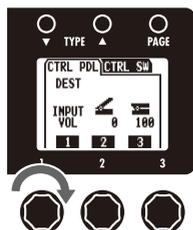
NOTE

- INPUT VOL: Use this to control the input level.
- OUTPUT VOL: Use this to control the output level.
- NO ASSIGN: No function is assigned.
- BAL: The balance between the original sound and the effect sound can be adjusted.

HINT

- Turn ◯ **1** to show the different parameters that can be controlled by the expression pedal.
- See "Effect types and parameters" for details about the parameters that can be controlled for each effect.
- Rhythm and looper output levels are not affected when controlling the Output Volume with an expression pedal.

Set the adjustment range.

- Turn ◯ **2** of the right effect to set the minimum value.

- Turn ◯ **3** of the right effect to set the maximum value.
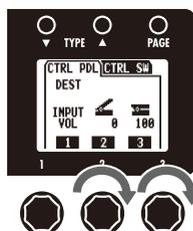
HINT

- The minimum value can be set higher than the maximum value. When set this way, pushing the pedal down decreases the effect, while letting it up increases the effect.

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7 | To set an optional footswitch function

- Press ○ on the right effect.
  PAGE
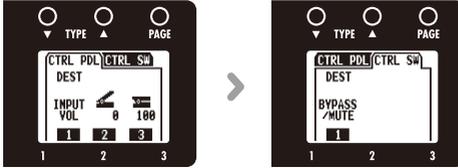
- Turn ⬡ of the right effect.
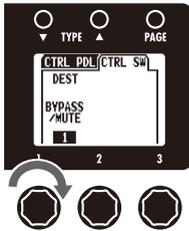
BYPASS/MUTE
Sets the effect to bypass or mute.

TAP TEMPO
Press the footswitch repeatedly at the desired tempo to set the tempo used for rhythms, the looper and effects.

NO ASSIGN
No function is assigned to the footswitch.

NOTE
- When more than one function can be assigned, use ⬡ to select one.

HINT
- In order to use the function set, the corresponding effect must also be ON.
- See "Effect types and parameters" for details about the parameters that can be assigned for each effect.

8 | To exit the TOTAL menu

- Press ○ .
  TOTAL

Changing Various Settings

1 | To activate the GLOBAL menu

• Press **GLOBAL** ◯ .

MASTER/1-2-3   BATTERY/CONTRAST   USB AUDIO/VERSION
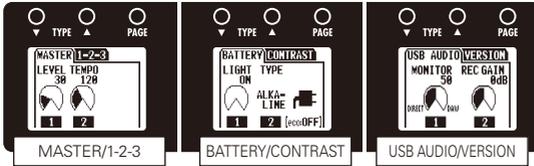
NOTE

• Global parameter settings affect all patches.

2 | To adjust the master level

• Turn ⬡¹ of the left effect.
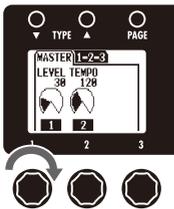
NOTE

• The setting range is 0-120.

3 | To set the master tempo

• Turn ⬡² of the left effect.
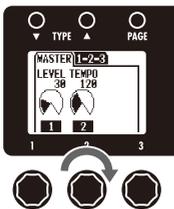
HINT

• You can also set the tempo using **TAP** ◯ .

NOTE

• The setting range is 40-250.
• This tempo setting is used by every effect, rhythms and the looper.

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■ **Setting the tempo by tapping**

- Press ◯ **TAP** two or more times at the desired tempo.
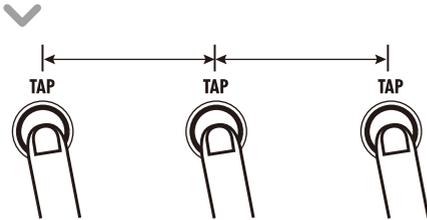
TAP   TAP   TAP

---

4 | To change the direction of the signal flow

- Press ◯ on the left effect.
  PAGE

- Turn ◉ **1** to set the signal flow direction.

TYPE ▲ PAGE MASTER 1-2-3 SIGNAL PATH ▸1▸2▸3▸ ‹ › TYPE ▲ PAGE MASTER 1-2-3 SIGNAL PATH ◂1◂2◂3◂

---
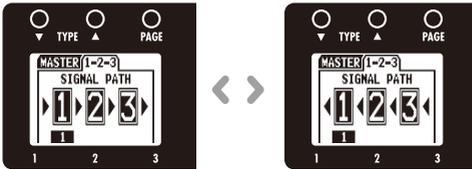
5 | To set the amount of time until the backlight dims

- Turn ◉ **1** of the middle effect.

TYPE ▲ PAGE BATTERY CONTRAST LIGHT TYPE ON ALKA-LINE ecoOFF

---

6 | To select the battery type

• Turn ⬡ of the middle effect to set the battery type to ALKALINE or Ni-MH (nickel-metal hydride).
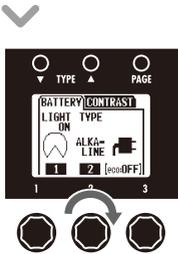
▮▮▮ : Operating on batteries

▬▬ : Operating on adapter power

↤ : Operating on USB bus power

NOTE
• Set the battery type correctly in order to allow the remaining battery charge to be shown accurately.

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7 | To adjust the USB audio monitoring balance

• Turn ⬡ of the right effect.

NOTE
• This adjusts the balance between the signals sent from a connected computer (DAW) and the signal input and processed through the unit (DIRECT).
• The setting range is 0-100.
• Set to 0 to monitor only the DIRECT signal or 100 to monitor only the DAW signal.

---

8 | To adjust the recording level

• Turn ⬡ of the right effect.

NOTE
• This adjusts the level of the signal sent to the computer.
• The setting range is ±6 dB.

9 | To view the firmware versions

- Press ○ of the right effect.
  PAGE

⌄
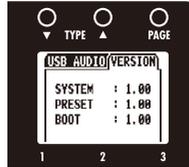
10 | To adjust the display contrast

- Press ○ of the middle effect.
  PAGE

⌄

- Turn **1** , **2** and **3** of the middle effect.

⌄
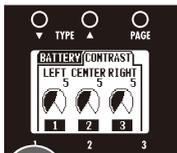
1 : Left display

2 : Center display

3 : Right display

11 | To exit the GLOBAL menu

- Press ○ .
  GLOBAL

Using the Tuner

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1 | To activate the tuner

- Press ⊚² for 1 second.

∨
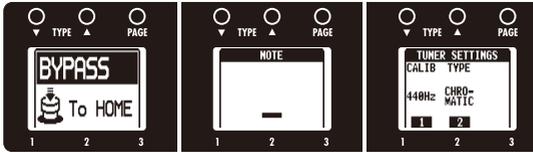
NOTE

- Pressing ⊚² for 1 second will bypass the effects.
- Pressing ⊚² for 2 seconds will mute the output.

---

2 | To change the tuner's standard pitch

- Turn ⬡¹ of the right effect.

∨
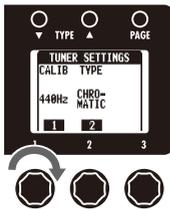
NOTE

- The standard pitch for middle A can be adjusted to 435-445 Hz.

---

3 | To select the tuner type

- Turn ⬡² of the right effect.

∨
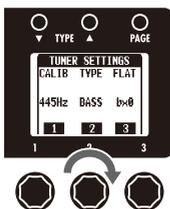
CHROMATIC
The chromatic tuner shows the nearest pitch name (semitone) and how far the input sound is from that pitch.

BASS
Depending on the selected type, the nearest string name and how far the sound input is from that pitch are shown.

4 | To use a drop tuning

- Turn **3** of the right effect.
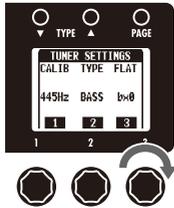
5 | Tune the bass guitar

- Play the open string that you want to tune and tune it.

■ CHROMATIC TUNER

The name of the nearest note and the pitch accuracy are shown.

| Flat | Correct pitch | Sharp |
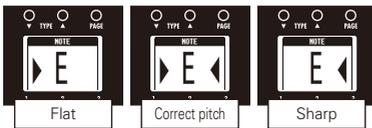
■ BASS TUNER

The number of the nearest string and the pitch accuracy are shown.

| Flat | Correct pitch | Sharp |
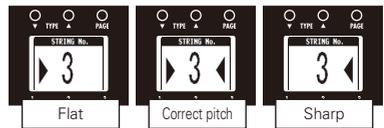
HINT
- The keys above the displays also light to show the pitch accuracy.

Pitch too low ←——— Pitch correct ———→ Pitch too high
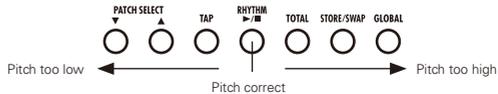
6 | To end tuning

- Press **1** , **2** or **3** .

Using Rhythms

1 | To activate a rhythm

- Press ^{RHYTHM} ▶/■ ◯ .

∨

- The rhythm pattern starts to play automatically and the rhythm setting screens open.

RHYTHM PATTERN   TEMPO   LEVEL

HINT
- You can use a rhythm pattern while using the looper.

2 | To select the rhythm pattern

- Turn ◯ of the left effect.

∨
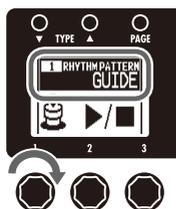
NOTE
- See page 50 for types of patterns

3 | To adjust the tempo

- Turn ◯ of the middle effect.
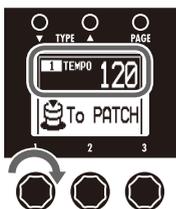
∨

HINT
- You can also set the tempo using ^{TAP} ◯ .

NOTE
- The setting range is 40-250.
- This tempo setting is used by every effect, rhythms and the looper.

| 4 | To adjust the rhythm level |

- Turn ⬢¹ of the right effect.

⌄
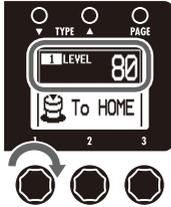
NOTE
- The setting range is 0-100.

| 5 | To stop the rhythm |

- Press ◎¹ .

HINT
- Press ◎¹ again to restart playback of the rhythm.

| 6 | To complete setting the rhythm |

■ **The rhythm stops and the previous screen reappears**

- Press **RHYTHM ▶/■** ◯ .

■ **To select a patch (and keep the rhythm playing)**

- Press ◎² .

■ **To return to the Home Screens (and keep the rhythm playing)**

- Press ◎³ .

Using the Looper

1 | To activate the Looper

• Press $\bigcirc^{3}$ for 1 second.

∨
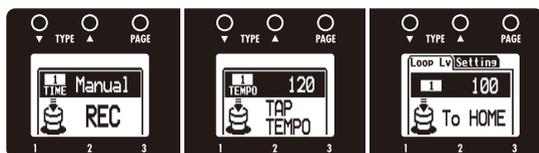
2 | To set the recording time

• Turn $\bigcirc^{1}$ on the left unit.

∨
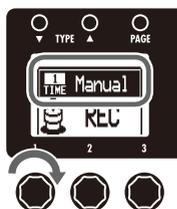
Manual
Use the footswitch to start and stop recording.

Note mark
Set the recording time by setting the tempo and the number of quarter notes.

NOTE

- The looper can record 1.5–40 seconds (20 seconds when UNDO is enabled).
- If the setting (number of quarter notes) would not fall in this range, it will automatically be adjusted.
- Changing the TIME setting will erase the currently recorded loop.

3 | To adjust the tempo

• Turn $\bigcirc^{1}$ of the middle unit.

∨
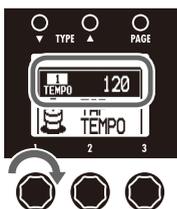
HINT

- You can also set the tempo using $\overset{TAP}{\bigcirc}$.
- If no loop has been recorded yet, you can also set the tempo by tapping $\bigcirc^{2}$.

NOTE

- The setting range is 40-250.
- Changing the tempo will erase the currently recorded loop.
- This tempo setting is used by every effect, rhythms and the looper.

4 | To record a phrase and play it back

• Press ⓞ¹ .
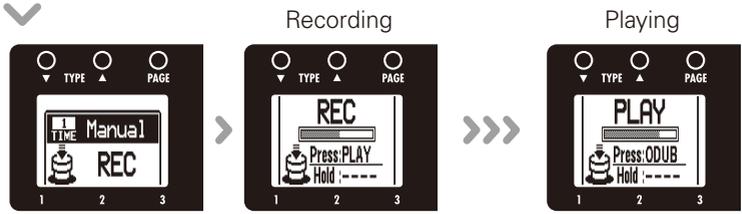
Recording | Playing

■ If set to "Manual"

• When ⓞ¹ is pressed again or the maximum recording time (about 40 seconds) is reached, loop playback starts (and "PLAY" appears on the display).

■ If set to a note mark

• Recording continues for the set time and then loop playback starts (and "PLAY" appears on the display).

HINT
• During recording, press ⓞ² to cancel recording.

NOTE
• When using a rhythm, recording will start after the precount.
• When using a rhythm, the loop timing will be quantized, so even if you stop the loop recording a little out of time, the loop end point will be adjusted to match the tempo correctly.

5 | To adjust the loop volume

• Turn ⬡¹ of the right unit.
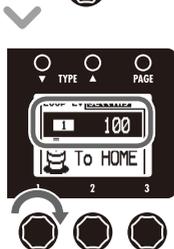
NOTE
• The setting range is 0-100.

6 | To overdub a recorded loop

■ To start overdubbing

• During loop playback, press (◎)**1**.

Playing → Overdubbing
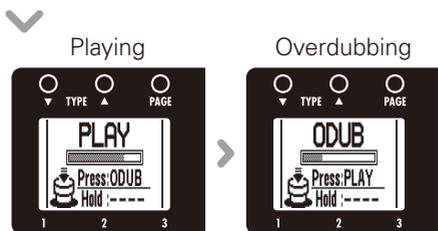
■ To end overdubbing

• Press (◎)**1** again.

Overdubbing → Playing

7 | To stop loop playback

• Press (◎)**2**.

8 | To erase the loop

• Press (◎)**2** for 1 second.

• "CLEAR" appears on the display.
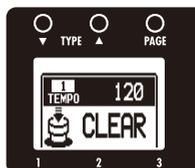
9 | To return to the Home Screens

- Press ⦾ ³.

HINT
- You can return to the Home Screens while the loop is playing.

NOTE
- Returning to the Home Screens will not erase the loop.
- Turning the power OFF will erase the loop.

To change the Looper settings

- Press ○ PAGE of the right unit.
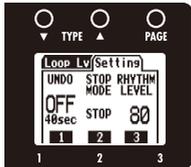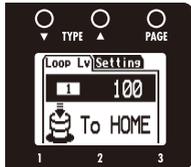
• To activate the Undo function
Turn ● ¹ of the right unit.

NOTE
- When Undo is ON, the maximum loop recording time is limited to 20 seconds.

HINT
- When Undo is ON, you can cancel the last overdubbing by pressing ⦾ ¹ for 1 second.
  After undoing, you can also redo by pressing ⦾ ¹ for 1 second again, restoring the last overdubbing.

• To select the STOP MODE
Turn ● ² of the right unit.

STOP MODE	How loop playback stops
STOP	Playback stops immediately
FINISH	Playback stops after the loop plays to its end
FADE OUT	Playback stops after fading out

HINT
- Even when set to "FINISH" or "FADE OUT", you can stop loop playback immediately by pressing and holding down ⦾ ².

• To adjust the RHYTHM LEVEL
Turn ● ³ of the right unit.

Updating the Firmware

To download the latest firmware version updater application:

- Visit the ZOOM Website (http://www.zoom.co.jp).

1 | To prepare to update the firmware version

- Confirm that the POWER switch is set to OFF.

PATCH SELECT

- While pressing both ◯ ◯ , connect the unit to a computer using the USB cable.
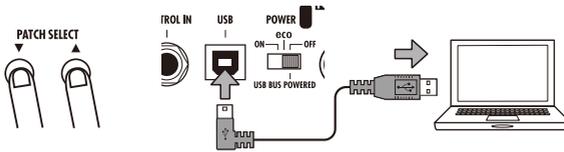
- The VERSION UPDATE screen appears.

VERSION UPDATE

Ready for
version update!

2 | To update the firmware

- Launch the version update application on your computer, and execute the update.

NOTE

- Do not disconnect the USB cable while the firmware is being upgraded.

HINT

- See the ZOOM website for instructions about how to use the application.

3 | To complete updating

• When the **B3** has finished updating, "COMPLETE!" appears on the display.

∨

• Disconnect the USB cable.

> **HINT**
> • Updating the firmware version will not erase saved patches.

Restoring the **B3** to its factory default settings.

1. To use the All Initialize function

• While pressing STORE/SWAP ◯ , set the POWER switch to ON.

STORE/SWAP

USB   POWER   D
            eco   5(
        ON ─ | ─ OFF

USB BUS POWERED
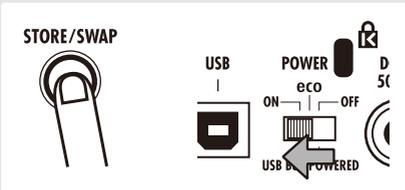
• The All Initialize screen appears.

All Initialize

Are You Sure?

YES : STORE
NO : ANY KEY

2. To execute the All Initialize function.

• Press STORE/SWAP ◯ .

> **NOTE**
> • Press any key other than STORE/SWAP ◯ to cancel.

> **HINT**
> • Executing the All Initialize function will restore all the settings of the **B3**, including its patches, to factory defaults. Do not use this function unless you are certain that you want to do this.

Using Audio Interface Functions

This unit can be used with computers running the following operating systems

■ Compatible OS

Windows

Windows® XP SP3 (32bit) or newer

Windows Vista® SP1 (32bit, 64bit) or newer

Windows® 7 (32bit, 64bit)

32bit: Intel® Pentium® 4 1.8GHz or faster, 1GB RAM or more

64bit: Intel® Pentium® DualCore 2.7GHz or faster, 2GB RAM or more

Intel Mac

OSX 10.5.8/10.6.5 or later

Intel® CoreDuo 1.83GHz or faster

1GB RAM or more

■ Quantization (bit-rate)

16-bit

■ Sampling frequency

44.1kHz

For details about recording, playback and other functions, please see the included startup guide.

HINT

- You can adjust the balance between the signals from the **B3** and the computer. (See page 20.)
- You can adjust the recording level. (See page 20.)
- When its POWER switch is set to OFF, the **B3** can be connected to a computer by USB and powered by its USB bus.

NOTE

- To monitor the signal of your connected bass guitar after it has passed through your DAW software, set the USB AUDIO MONITOR balance to 100. (See page 20.)
  At other settings, the signals from the computer and the **B3** will be mixed, causing the output signal to sound like a flanger effect is being used.

Effect Types and Parameters

Effect number | Parameter | Parameter range

Effect type

Effect explanation

Footswitch function

088	DynaDelay	This dynamic delay adjusts the volume of the effect sound according to the input signal level.	FS	InputMute

		Knob1			Knob2			Knob3		
Page01	Time	1–2000	♪	Sense	-10—1, 1–10		Mix	0–100		P
	Sets the delay time.			Adjusts the effect sensitivity.			Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	F.B	0–100		Level	0–150					
	Adjusts the feedback amount.			Adjusts the output level.						

Effect screen

Tempo synchronization possible icon

Pedal control possible icon

Parameter explanation

■ Effect Types and Parameters

001	OptComp	This compressor is in the style of an APHEX Punch Factory.

		Knob1			Knob2			Knob3		
Page01	Drive	0–100	P	Tone	0–100		Level	0–150		
	Adjusts the depth of the compression.			Adjusts the tone.			Adjusts the output level.			

002	D Comp	This compressor in the style of the MXR Dyna Comp.

		Knob1			Knob2			Knob3		
Page01	Sense	0–10		Tone	0–10		Level	0–150		P
	Adjusts the compressor sensitivity.			Adjusts the tone.			Adjusts the output level.			
Page02	ATTCK	Slow, Fast								
	Sets compressor attack speed to Fast or Slow.									

003	M Comp	This compressor provides a more natural sound.

		Knob1			Knob2			Knob3		
Page01	THRSH	0–50	P	Ratio	1–10		Level	0–150		
	Sets the level that activates the compressor.			Adjusts the compression ratio.			Adjusts the output level.			
Page02	ATTCK	1–10								
	Adjusts the compressor attack rate.									

004	DualComp	This is a compressor which allows separate settings for the low frequency and high frequency range.

		Knob1			Knob2			Knob3		
Page01	Hi	0–50		Lo	0–50		Freq	300Hz– 1.5kHz		P
	Adjusts the compression depth in the high frequency range.			Adjusts the compression depth in the low frequency range.			Adjusts the crossover point between the high frequency and low frequency range.			
Page02	Level	0–150		Tone	0–10					
	Adjusts the output level.			Adjusts the tonal quality of the sound.						

005	160 Comp	This compressor is in the style of the dbx 160A.

		Knob1			Knob2			Knob3		
Page01	THRSH	-60–0		Ratio	1.0–10.0		Gain	0–20		
	Adjusts the threshold that determines when the effect is activated.			Adjusts the compression ratio.			Adjusts the gain after compression.			
Page02	Knee	Hard, Soft		Level	0–150	P				
	Sets the type of knee.			Adjusts the output level.						

Effect Types and Parameters

006 Limiter

This is a limiter that suppresses signal peaks above a certain reference level.

		Knob1			Knob2			Knob3		
Page01	THRSH	0–50	P	Ratio	1–10		Level	0–150		
	Adjusts the reference signal level for the limiter action.			Adjusts the compression ratio of the limiter.			Adjusts the output level.			
Page02	REL	1–10								
	Adjusts the delay between the point where the signal level falls below the threshold level and the limiter release.									

007 SlowATTCK

This effect slows the attack of each note, resulting in a violin-like performance.

		Knob1			Knob2			Knob3		
Page01	Time	1–50	P	Curve	0–10		Level	0–150		
	Adjusts the attack time.			Set the curve of volume change during attack.			Adjusts the output level.			

008 ZNR

ZOOM's unique noise reduction cuts noise during pauses in playing without affecting the tone.

		Knob1			Knob2			Knob3		
Page01	THRSH	1–25	P	DETCT	GtrIn, EfxIn		Level	0–150		
	Adjusts the effect sensitivity.			Sets control signal detected.			Adjusts the output level.			

009 GraphicEQ

This unit has a seven band equalizer.

		Knob1			Knob2			Knob3		
Page01	50Hz	-12–12		120Hz	-12–12		400Hz	-12–12		
	Adjusts the amount of boost/cut at 50 Hz.			Adjusts the amount of boost/cut at 120 Hz.			Adjusts the amount of boost/cut at 400 Hz.			
Page02	500Hz	-12–12		800Hz	-12–12		4.5kHz	-12–12		
	Adjusts the amount of boost/cut at 500 Hz.			Adjusts the amount of boost/cut at 800 Hz.			Adjusts the amount of boost/cut at 4.5 kHz			
Page03	10kHz	-12–12		Level	0–150					
	Adjusts the amount of boost/cut at 10 kHz.			Adjusts the output level.						

010 ParaEQ

This is a 2-band parametric equalizer.

		Knob1			Knob2			Knob3		
Page01	Freq1	20Hz–20kHz		Q1	0.5, 1, 2, 4, 8, 16		Gain1	-20–20		
	Adjusts center frequency of EQ1.			Adjusts EQ1 Q.			Adjusts EQ1 gain.			
Page02	Freq2	20Hz–20kHz		Q2	0.5, 1, 2, 4, 8, 16		Gain2	-20–20		
	Adjusts center frequency of EQ2.			Adjusts EQ2 Q.			Adjusts EQ2 gain.			
Page03	Level	0–150								
	Adjusts the output level.									

011 Splitter

This effect divides the signal into two bands (high/low) and lets you freely adjust the mix ratio of the two bands.

		Knob1			Knob2			Knob3		
Page01	Hi	0–100		Lo	0–100		Freq	80Hz–2.5kHz		
	Adjusts the mix ratio of the high frequency band.			Adjusts the mix ratio of the low frequency band.			Adjusts the crossover point between the high frequency and low frequency band.			
Page02	Level	0–150	P							
	Adjusts the output level.									

012 Bottom B

Emphasizes the low and high frequencies.

		Knob1			Knob2			Knob3		
Page01	Bass	0–10	P	Trebl	0–10		Level	0–150		
	Adjusts the amount of low-frequency boost.			Adjusts the amount of high-frequency boost.			Adjusts the output level.			

013 Exciter

This exciter is in the style of the BBE Sonic Maximizer.

		Knob1			Knob2			Knob3		
Page01	Bass	0–10	P	Trebl	0–10		Level	0–150		
	Adjusts the amount of low-frequency phase correction.			Adjusts the amount of high-frequency phase correction.			Adjusts the output level.			

014 CombFLTR		This effect uses the comb filter that results from fixing the modulation of the flanger like an equalizer.						
		Knob1			Knob2		Knob3	
	Page01	Freq	1–50	P	Reso	-10–0–10	Mix	0–100
		This sets the emphasized frequency.			Adjusts the intensity of the resonance sound of the effect.		Adjusts the amount of effected sound that is mixed with the original sound.	
	Page02	HiDMP	0–10		Level	0–150		
		Adjusts the treble attenuation of the effect sound.			Adjusts the output level.			

015 AutoWah		This effect varies wah in accordance with picking intensity.						
		Knob1			Knob2		Knob3	
	Page01	Sense	-10—1, 1–10	P	Reso	0–10	Dry	0–100
		Adjusts the sensitivity of the effect.			Adjusts the intensity of the resonance sound.		Adjusts level of original sound.	
	Page02	Level	0–150					
		Adjusts the output level.						

016 Z Tron		This is like a Q-Tron Envelope Filter in LP mode.						
		Knob1			Knob2		Knob3	
	Page01	Sense	-10—1, 1–10	P	Reso	0–10	Dry	0–100
		Adjusts the sensitivity of the effect.			Adjusts the intensity of the resonance sound.		Adjusts level of original sound.	
	Page02	Level	0–150					
		Adjusts the output level.						

017 M-Filter		This envelope filter with MOOG MF-101 low pass filter favor can be set in a wide range.						
		Knob1			Knob2		Knob3	
	Page01	Freq	0–100	P	Sense	0–10	Reso	0–10
		Sets minimum frequency of envelope filter.			Sets effect sensitivity.		Sets effect resonance.	
	Page02	Type	HPF, BPF, LPF		Chara	2Pole, 4Pole	VLCTY	Fast, Slow
		Sets filter type.			Adjusts amount of filter applied.		Sets speed of filter action.	
	Page03	Bal	0–100		Level	0–150		
		Adjusts the balance between original and effect sounds.			Adjusts the output level.			

018 A-Filter		This is a resonance filter with a sharp envelope.						
		Knob1			Knob2		Knob3	
	Page01	Sense	1–10	P	Peak	0–10	Mode	Up/Down
		Adjusts the effect sensitivity.			Adjusts the Q value of the filter.		Selects whether the direction of filter change is up or down.	
	Page02	Dry	0–100		Level	0–150		
		Adjusts level of original sound.			Adjusts the output level.			

019 Cry		This effect varies the sound like a talking modulator.						
		Knob1			Knob2		Knob3	
	Page01	Range	1–10		Reso	0–10	Sense	-10—1, 1–10	P
		Adjusts the frequency range processed by the effect.			Adjusts the intensity of the modulation resonance sound.		Adjusts the sensitivity of the effect.	
	Page02	Bal	0–100		Level	0–150		
		Adjusts the balance between original and effect sounds.			Adjusts the output level.			

020 Step		This special effect gives the sound a stepped quality.						
		Knob1			Knob2		Knob3	
	Page01	Depth	0–100		Rate	0–50	♪ P	Reso	0–10
		Sets the depth of the modulation.			Sets the speed of the modulation.		Adjusts the intensity of the modulation resonance sound.	
	Page02	Shape	0–10		Level	0–150		
		Adjusts the effect envelope.			Adjusts the output level.			

35

Effect Types and Parameters

021 SEQ FLTR — The sequence filter has the flavor of a Z.Vex Seek-Wah.

		Knob1				Knob2				Knob3			
Page01	Step	2–8			PTTRN	1–8			Speed	1–50		♪	P
	Adjusts number of sequence steps.				Sets effect pattern.				Sets modulation speed.				
Page02	Shape	0–10			Reso	0–10			Level	0–150			
	Sets effect sound envelope.				Sets effect resonance.				Adjusts the output level.				

022 RNDM FLTR — This filter effect changes character randomly.

		Knob1				Knob2				Knob3			
Page01	Speed	1–50	♪	P	Range	0–100			Reso	0–10			
	Sets modulation speed.				Adjusts frequency range affected.				Sets effect resonance.				
Page02	Type	HPF, BPF, LPF			Chara	2Pole, 4Pole			Bal	0–100			
	Sets filter type.				Adjusts amount of filter applied.				Adjusts the balance between original and effect sounds.				
Page03	Level	0–150											
	Adjusts the output level.												

023 Booster — This is a simulation of the Xotic EP Booster, which is warm and firm.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Bass	-10–10			Trebl	-10–10			
	Adjusts the gain.				Adjusts the low frequency level.				Adjusts the high frequency level.				
Page02	Level	0–150											
	Adjusts the output level.												

024 OverDrive — Simulates the ODB-3 overdrive bass machine from Boss.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Tone	0–100			Level	0–150			
	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.				
Page02	Bal	0–100											
	Adjusts the balance between the original sound and the effected sound.												

025 Bass Muff — This is a simulation of the Electro-Harmonix Bass Big Muff.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Tone	0–100			Level	0–150			
	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.				
Page02	Mode	NORM, BsBST			Bal	0–100							
	Selects the distortion mode.				Adjusts the balance between the original sound and the effected sound.								

026 T Scream — Simulation of the Ibanez TS808, which is loved by many guitarists as a booster and has inspired numerous clones.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Tone	0–100			Level	0–150			
	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.				
Page02	Bal	0–100											
	Adjusts the balance between the original sound and the effected sound.												

027 Dist 1 — Simulation of the Boss DS-1 distortion pedal, which has been a long-seller.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Tone	0–100			Level	0–150			
	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.				
Page02	Bal	0–100											
	Adjusts the balance between the original sound and the effected sound.												

028 Squeak — Simulation of the popular Pro Co Rat famous for its edgy distortion sound.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100		P	Tone	0–100			Level	0–150			
	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.				
Page02	Bal	0–100											
	Adjusts the balance between the original sound and the effected sound.												

029	FuzzSmile	Simulation of the Fuzz Face, which has made rock history with its humorous panel design and smashing sound.						
			Knob1			**Knob2**		**Knob3**
		Page01	Gain	0–100	P	Tone	0–100	Level	0–150
			Adjusts the gain.			Adjusts the tone.		Adjusts the output level.
		Page02	Bal	0–100				
			Adjusts the balance between the original sound and the effected sound.					

030	GreatMuff	Simulation of the Electro-Harmonix Big Muff, which is loved by famous artists around the world for its fat, sweet fuzz sound.						
			Knob1			**Knob2**		**Knob3**
		Page01	Gain	0–100	P	Tone	0–100	Level	0–150
			Adjusts the gain.			Adjusts the tone.		Adjusts the output level.
		Page02	Bal	0–100				
			Adjusts the balance between the original sound and the effected sound.					

031	MetalWRLD	Simulation of the Boss Metal Zone, which is characterized by long sustain and a powerful lower midrange.						
			Knob1			**Knob2**		**Knob3**
		Page01	Gain	0–100	P	Tone	0–100	Level	0–150
			Adjusts the gain.			Adjusts the tone.		Adjusts the output level.
		Page02	Bal	0–100				
			Adjusts the balance between the original sound and the effected sound.					

032	BassDrive	Simulation of the Sansamp Bass Driver DI, highly popular among bass players.						
			Knob1			**Knob2**		**Knob3**
		Page01	Bass	-10–10		Trebl	-10–10	Prese	-10–10
			Adjusts the low frequency level.			Adjusts the high frequency level.		Adjusts the super-high frequency level.
		Page02	Gain	0–100	P	Blend	0–100	Level	0–150
			Adjusts the gain.			Adjusts the balance between the original sound and the effected sound.		Adjusts the output level.
		Page03	Mid	-10–10				
			Adjusts the middle frequency level.					

033	D.I Plus	This is a simulation of the MXR Bass D.I.+, which has both clean and distortion channels.						
			Knob1			**Knob2**		**Knob3**
		Page01	Bass	-10–10		Trebl	-10–10	Prese	-10–10
			Adjusts the low frequency level.			Adjusts the middle frequency level.		Adjusts the high frequency level.
		Page02	Gain	0–100	P	Blend	0–100	Level	0–150
			Adjusts the gain.			Adjusts the balance between the original sound and the effected sound.		Adjusts the output level.
		Page03	Color	On/Off		CHAN	CLN / DIST	
			Turns preset EQ on or off.			Switches between clean and distortion channels.		

034	Bass BB	This is a simulation of the Xotic Bass BB Preamp, which has a tube-like, thick sound.						
			Knob1			**Knob2**		**Knob3**
		Page01	Gain	0–100	P	Bass	-10–10	Trebl	-10–10
			Adjusts the gain.			Adjusts the low frequency level.		Adjusts the high frequency level.
		Page02	Dry	0–100		Level	0–150	
			Adjusts level of original sound.			Adjusts the output level.		

035	DI5	This simulates the AVALON DESIGN U5 preamp.						
			Knob1			**Knob2**		**Knob3**
		Page01	Gain	0–100		Tone	Off, 1–6	Level	0–150	P
			Adjusts the gain.			Adjusts the tone.		Adjusts the output level.
		Page02	HiCut	On/Off				
			Cuts high frequencies when ON.					

036 Bass Pre — This is a preamp model with a semi-parametric equalizer for the mid-range.

		Knob1				Knob2				Knob3			
Page01	Bass	0–10			Trebl	0–10			Level	0–150			P
	Adjusts the low frequency level.				Adjusts the high frequency level.				Adjusts the output level.				
Page02	Mid	-10–10			Freq	100Hz–4.5kHz							
	Adjusts the middle frequency level.				Adjusts the center frequency of the mid-range.								

037 AC Bs Pre — This is a preamp model with a graphic equalizer.

		Knob1				Knob2				Knob3			
Page01	Gain	0–100			Depth	0–10			Level	0–150			P
	Adjusts the gain.				Adjusts the low frequency level.				Adjusts the output level.				
Page02	Bass	-10–10			L-Mid	-10–10			LM_F	32Hz–6.3kHz			
	Adjusts the low frequency level.				Adjusts the low mid frequency level.				Adjusts the L-Mid center frequency.				
Page03	Mid	-10–10			H-Mid	-10–10			Trebl	-10–10			
	Adjusts the middle frequency level.				Adjusts the high mid frequency level.				Adjusts the high frequency level.				

038 SVT — Simulation of the ultimate rock bass amp, the Ampeg SVT.

		Knob1				Knob2				Knob3			
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10			
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.				
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150			
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.				
Page03	Ultra	Off, Low, Hi, Both, Cut			CAB	See Table 1			Mix	0–100			
	Emphasizes high and low frequencies.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.				

039 B-Man — Simulation of the Fender Bassman 100.

		Knob1				Knob2				Knob3			
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10			
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.				
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150			
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.				
Page03	Deep	On/Off			CAB	See Table 1			Mix	0–100			
	Adjusts the low-frequency character.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.				

040 HRT3500 — Simulation of the Hartke HA3500 famous for its aluminum cone.

		Knob1				Knob2				Knob3			
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10			
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.				
Page02	Mid_F	32Hz–6.3kHz			TUBE	0–100		P	Level	0–150			
	Adjusts the center frequency of the mid-range.				Adjusts the mix of tube and transistor type sounds.				Adjusts the output level.				
Page03	Comp	Off,1–10			CAB	See Table 1			Mix	0–100			
	Adjusts the amount of compression.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.				

041 SMR — Simulation of the SWR SM-900, famous for its hi-fi sound.

		Knob1				Knob2				Knob3			
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10			
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.				
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150			
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.				
Page03	ENHNC	0–10			CAB	See Table 1			Mix	0–100			
	This tone control changes the frequency and level according to the knob position.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.				

042	Flip Top	Simulation of the Ampeg B-15 made famous by the Motown sound of the 1960s.								
			Knob1			Knob2			Knob3	
	Page01	Bass	-10–10		Mid	-10–10		Trebl	-10–10	
		Adjusts the low frequency level.			Adjusts the middle frequency level.			Adjusts the high frequency level.		
	Page02	Mid_F	32Hz–6.3kHz		Gain	0–100	P	Level	0–150	
		Adjusts the center frequency of the mid-range.			Adjusts the gain.			Adjusts the output level.		
	Page03	Ultra	Off, Low, Hi, Both		CAB	See Table 1		Mix	0–100	
		Emphasizes high and low frequencies.			Selects the cabinet.			Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.		

043	Acoustic	Simulation of the Acoustic 360 well known for its gutsy midrange.								
			Knob1			Knob2			Knob3	
	Page01	Bass	-10–10		Mid	-10–10		Trebl	-10–10	
		Adjusts the low frequency level.			Adjusts the middle frequency level.			Adjusts the high frequency level.		
	Page02	Mid_F	32Hz–6.3kHz		Gain	0–100	P	Level	0–150	
		Adjusts the center frequency of the mid-range.			Adjusts the gain.			Adjusts the output level.		
	Page03	Bright	On/Off		CAB	See Table 1		Mix	0–100	
		Emphasizes high frequencies when ON.			Selects the cabinet.			Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.		

044	Ag Amp	Simulation of the Aguilar DB750 famous for its powerful sound.								
			Knob1			Knob2			Knob3	
	Page01	Bass	-10–10		Mid	-10–10		Trebl	-10–10	
		Adjusts the low frequency level.			Adjusts the middle frequency level.			Adjusts the high frequency level.		
	Page02	Mid_F	32Hz–6.3kHz		Gain	0–100	P	Level	0–150	
		Adjusts the center frequency of the mid-range.			Adjusts the gain.			Adjusts the output level.		
	Page03	Char	Off, Deep, Brght, Both		CAB	See Table 1		Mix	0–100	
		Selects one of 4 types of preset tones.			Selects the cabinet.			Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.		

045	Monotone	Simulation of the POLYTONE MINI-BRUTE III with its distinct midrange, often used by Jazz musicians.								
			Knob1			Knob2			Knob3	
	Page01	Bass	-10–10		Mid	-10–10		Trebl	-10–10	
		Adjusts the low frequency level.			Adjusts the middle frequency level.			Adjusts the high frequency level.		
	Page02	Mid_F	32Hz–6.3kHz		Gain	0–100	P	Level	0–150	
		Adjusts the center frequency of the mid-range.			Adjusts the gain.			Adjusts the output level.		
	Page03	Char	Dark, Brght, Flat		CAB	See Table 1		Mix	0–100	
		Selects one of 3 types of preset tones.			Selects the cabinet.			Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.		

046	SuperB	Simulation of the Marshall Super Bass that made rock history.								
			Knob1			Knob2			Knob3	
	Page01	Bass	-10–10		Mid	-10–10		Trebl	-10–10	
		Adjusts the low frequency level.			Adjusts the middle frequency level.			Adjusts the high frequency level.		
	Page02	Mid_F	32Hz–6.3kHz		Gain	0–100	P	Level	0–150	
		Adjusts the center frequency of the mid-range.			Adjusts the gain.			Adjusts the output level.		
	Page03	Prese	0–10		CAB	See Table 1		Mix	0–100	
		Adjusts the super-high frequency level.			Selects the cabinet.			Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.		

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Effect Types and Parameters

047 G-Krueger

Simulation of the famous metal bass amp Gallien-Krueger 800RB from the eighties.

		Knob1				Knob2				Knob3		
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10		
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.			
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150		
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.			
Page03	Color	Off, Low, Mid, Hi			CAB	See Table 1			Mix	0–100		
	Adjusts the preset tone.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.			

048 Heaven

This simulation of the Eden WT-800 can be used with a wide variety of playing styles.

		Knob1				Knob2				Knob3		
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10		
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.			
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150		
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.			
Page03	ENHNC	0–10			CAB	See Table 1			Mix	0–100		
	This tone control changes the frequency and level according to the knob position.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.			

049 Mark B

This simulates the Italian Markbass Little Mark III.

		Knob1				Knob2				Knob3		
Page01	Bass	-10–10			Mid	-10–10			Trebl	-10–10		
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the high frequency level.			
Page02	Mid_F	32Hz–6.3kHz			Gain	0–100		P	Level	0–150		
	Adjusts the center frequency of the mid-range.				Adjusts the gain.				Adjusts the output level.			
Page03	Color	0–6			CAB	See Table 1			Mix	0–100		
	Adjusts low and high frequencies.				Selects the cabinet.				Adjusts the mix balance of the signal after the pre-amp and the signal after the cabinet.			

050 Tremolo

This effect varies the volume at a regular rate.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	0–50	♪	P	Level	0–150		
	Adjust the depth of the modulation.				Adjusts the rate of the modulation.				Adjusts the output level.			
Page02	Wave	UP 0–UP 9, DWN 0–DWN 9, TRI 0–TRI 9										
	Sets the modulation waveform.											

051 Slicer

This effect creates a rhythmical sound by continuously slicing the input.

		Knob1				Knob2				Knob3		
Page01	PTTRN	1–20			Speed	1–50	♪		Bal	0–100		P
	Sets effect pattern.				Sets modulation speed.				Adjusts the balance between original and effect sounds.			
Page02	THRSH	0–50			Level	0–150						
	Adjusts effect threshold.				Adjusts the output level.							

052 4-Phaser

This is a 4-stage phaser effect that produces a swooshing sound.

		Knob1				Knob2				Knob3		
Page01	Rate	0–50	♪	P	Reso	-10–10			Level	0–150		
	Adjusts the modulation rate.				Adjusts the intensity of the effect character.				Adjusts the output level.			
Page02	LoCut	Off–800Hz										
	Sets the cut frequency in the low range of the effect sound.											

053 8-Phaser

This is an 8-stage phaser effect that produces a swooshing sound. Compared to the 4-stage phaser, the effect sound is more detailed.

		Knob1				Knob2				Knob3		
Page01	Rate	0–50		♪	P	Reso	-10–10			Level	0–150		
	Adjusts the modulation rate.					Adjusts the intensity of the effect character.				Adjusts the output level.		
Page02	LoCut	Off–800Hz											
	Sets the cut frequency in the low range of the effect sound.											

054 The Vibe

This vibe sound features unique undulations.

		Knob1				Knob2				Knob3		
Page01	Speed	0–50			P	Depth	0–100			Bias	0–100		
	Sets modulation speed.					Sets the depth of the modulation.				Adjusts bias of waveform modulation.		
Page02	Wave	0–100				Mode	VIBRT, CHORS			Level	0–150		
	Adjusts modulation waveform.					Sets effect to vibrato or chorus.				Adjusts the output level.		

055 DuoPhase

This effect combines two phasers.

		Knob1				Knob2				Knob3		
Page01	RateA	1–50		♪	P	RateB	1–50, SyncA, RvrsA			Level	0–150		
	Adjusts speed of LFO A modulation.					Adjusts speed of LFO B modulation.				Adjusts the output level.		
Page02	ResoA	0–10				ResoB	0–10			Link	Seri, Para, STR		
	Adjusts resonance of LFO A modulation.					Adjusts resonance of LFO B modulation.				Sets how two phasers are connected.		
Page03	DPT_A	1–100				DPT_B	1–100						
	Adjusts depth of LFO A modulation.					Adjusts depth of LFO B modulation.						

056 WarpPhase

This phaser has a one way effect.

		Knob1				Knob2				Knob3		
Page01	Speed	1–50		♪	P	Reso	0–10			Level	0–150		
	Sets modulation speed.					Sets effect resonance.				Adjusts the output level.		
Page02	DRCTN	Go, Back											
	Sets direction of warping.											

057 Chorus

This effect mixes a shifted pitch with the original sound to add movement and thickness.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100				Rate	1–50			Mix	0–100		P
	Sets the depth of the modulation.					Sets the speed of the modulation.				Adjusts the amount of effected sound that is mixed with the original sound.		
Page02	LoCut	Off–800Hz				Level	0–150			PreD	On/Off		
	Specifies the low-range cutoff point for the effect sound.					Adjusts the output level.				Turns pre-delay on or off.		

058 Detune

By mixing an effect sound that is slightly pitch-shifted with the original sound, this effect type has a chorus effect without much sense of modulation.

		Knob1				Knob2				Knob3		
Page01	Cent	-50–50				PreD	0–50			Mix	0–100		P
	Adjusts the detuning in cents, which are fine increments of 1/100-semitone.					Sets the pre-delay time of the effect sound.				Adjusts the amount of effected sound that is mixed with the original sound.		
Page02	Tone	0–10				Level	0–150			LoCut	Off–800Hz		
	Adjusts the tone.					Adjusts the output level.				Sets the cut frequency in the low range of the effect sound.		

059 VintageCE

This is a simulation of the BOSS CE-1.

		Knob1				Knob2				Knob3		
Page01	Comp	0–9				Rate	1–50			Mix	0–100		P
	Sets the sensitivity of the compressor.					Sets the speed of the modulation.				Adjusts the amount of effected sound that is mixed with the original sound.		
Page02	Level	0–150											
	Adjusts the output level.											

Effect Types and Parameters

060 StereoCho

This is a stereo chorus with a clear tone.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	1–50			Mix	0–100		P
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	LoCut	Off–800Hz			Level	0–150						
	Specifies the low-range cutoff point for the effect sound.				Adjusts the output level.							

061 Ensemble

This is a chorus ensemble that features three-dimensional movement.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	1–50			Mix	0–100		P
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	Tone	0–10			Level	0–150						
	Adjusts the tone.				Adjusts the output level.							

062 VinFLNGR

This analog flanger sound is similar to an MXR M-117R.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	0–50	♪	P	Reso	-10—1, 0,1–10		
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the intensity of the modulation resonance.			
Page02	PreD	0–50			Mix	0–100			Level	0–150		
	Sets pre-delay time of effect sound.				Adjusts the amount of effected sound that is mixed with the original sound.				Adjusts the output level.			
Page03	LoCut	Off–800Hz										
	Sets the cut-off frequency in the low range of the effect sound.											

063 Flanger

This is a jet sound like an ADA flanger.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	0–50	♪	P	Reso	-10—1, 0,1–10		
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the intensity of the modulation resonance.			
Page02	PreD	0–50			Mix	0–100			Level	0–150		
	Sets pre-delay time of effect sound.				Adjusts the amount of effected sound that is mixed with the original sound.				Adjusts the output level.			
Page03	LoCut	Off–800Hz										
	Sets the cut-off frequency in the low range of the effect sound.											

064 DynaFLNGR

The volume of the effect sound changes according to the input signal level with this dynamic flanger.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	0–50	♪	P	Sense	-10—1, 1–10		
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the sensitivity of the effect.			
Page02	Reso	-10—1, 0, 1–10			Level	0–150						
	Adjusts the intensity of the modulation resonance.				Adjusts the output level.							

065 Vibrato

This effect automatically adds vibrato.

		Knob1				Knob2				Knob3		
Page01	Depth	0–100			Rate	0–50	♪	P	Bal	0–100		
	Sets the depth of the modulation.				Sets the speed of the modulation.				Adjusts the balance between original and effect sounds.			
Page02	Tone	0–10			Level	0–150						
	Adjusts the tone.				Adjusts the output level.							

066 Octave

This effect adds sound one octave below the original sound.

		Knob1				Knob2				Knob3		
Page01	Oct			P	Dry	0–100			Tone			
	Adjusts the level of the one-octave lower sound component.				Adjusts the level of the original sound.				Adjusts the tonal quality of the one-octave lower sound component.			
Page02	Low	0–10			Mid	0–10			Level	0–150		
	Adjusts the low frequency level.				Adjusts the middle frequency level.				Adjusts the output level.			

067 PitchSHFT	This effect shifts the pitch up or down.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Shift	-12—1, 0, 1–12, 24		Tone	0–10		Bal	0–100	P
		Adjusts the pitch shift amount in semitones. Selecting "0" gives a detuning effect.		Adjusts the tone.			Adjusts the balance between original and effect sounds.	
	Page02	Fine	-25—1, 0, 1–25		Level	0–150			
		Allows fine adjustment of pitch shift amount in cent (1/100 semitone) steps.		Adjusts the output level.				

068 MonoPitch	This is a pitch shifter with little sound variance for monophonic (single note) playing.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Shift	-12—1, 0, 1–12, 24		Tone	0–10		Bal	0–100	P
		Adjusts the pitch shift amount in semitones. Selecting "0" gives a detuning effect.		Adjusts the tone.			Adjusts the balance between original and effect sounds.	
	Page02	Fine	-25—1, 0, 1–25		Level	0–150			
		Allows fine adjustment of pitch shift amount in cent (1/100 semitone) steps.		Adjusts the output level.				

069 H.P.S	This intelligent pitch shifter outputs the pitch-shifted sound according to scale and key settings.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Scale	-6, -5, -4, -3, -m, m, 3, 4, 5, 6 (See Table 2)		Key	C, C#, D, D#, E, F, F#, G, G#, A, A#, B		Mix	0–100	P
		Sets the pitch of the pitch-shifted sound added to the original sound.		Sets the tonic (root) of the scale used for pitch shifting.			Adjusts the amount of effected sound that is mixed with the original sound.	
	Page02	Tone	0–10		Level	0–150			
		Adjusts the tone.		Adjusts the output level.				

070 BendCho	This effect bends the pitch using the input signal as the trigger and processes each note separately.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Depth	0–100		Time	0–50	P	Bal	0–100	
		Adjusts the effect depth.		Sets time before effect starts.			Adjusts the balance between original and effect sounds.	
	Page02	Mode	Up, Down		Tone	0–10		Level	0–150	
		Sets direction of pitch bend.		Adjusts the tone.			Adjusts the output level.	

071 RingMod	This effect produces a metallic ringing sound. Adjusting the "Freq" parameter results in a drastic change of sound character.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Freq	1–50	P	Tone	0–10		Bal	0–100	
		Sets the frequency of the modulation.		Adjusts the tone.			Adjusts the balance between original and effect sounds.	
	Page02	Level	0–150						
		Adjusts the output level.						

072 BitCrush	This effect creates a lo-fi sound.								
		Knob1			**Knob2**			**Knob3**	
	Page01	Bit	4–16		SMPL	0–50	P	Bal	0–100	
		Sets bit depth.		Sets sampling rate.			Adjusts the balance between original and effect sounds.	
	Page02	Tone	0–10		Level	0–150			
		Adjusts the tone.		Adjusts the output level.				

073 Bomber	This effect produces an explosive sound when picking.				FS	Trigger			
		Knob1			**Knob2**			**Knob3**	
	Page01	PTTRN	HndGn, Arm, Bomb, Thndr		Decay	1–100	P	Bal	0–100	
		Sets type of effect sound.		Sets length of reverberations.			Adjusts the balance between original and effect sounds.	
	Page02	THRSH	0–50		Power	0–30		Tone	0–10	
		Adjusts effect threshold.		Adjusts strength of explosive sound.			Adjusts the tone.	
	Page03	Level	0–150						
		Adjusts the output level.						

Effect Types and Parameters

074 MonoSyn	This effect produces the sound of a monophonic (single-note playing) bass synthesizer that detects the pitch of the input signal.		
		Knob1	Knob2	Knob3
Page01	Decay 0–100	Wave Saw, Pulse, PWM	Reso 0–10
	Adjusts the rate of sound change.	Sets the waveform type to "Saw" (sawtooth), "Pulse" (square wave), or PWM (pulse width modulation resulting in fatter sound).	Adjusts the intensity of the effect character.
Page02	Synth 0–100	Dry 0–100 P	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

075 StdSyn	ZOOM original bass synthesizer sound.		
		Knob1	Knob2	Knob3
Page01	Sense 0–100	Sound 1–4	Tone 0–10
	Adjusts the sensitivity for trigger detection.	Selects a synthesizer variation.	Adjusts the tonal quality of the sound.
Page02	Synth 0–100	Dry 0–100 P	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

076 SynTlk	This effect produces a synthesizer sound similar to a talking modulator producing vowels.		
		Knob1	Knob2	Knob3
Page01	Decay 0–100	Type iA, UE, UA, oA	Tone 0–10
	Adjusts the rate of sound change.	Selects a vowel variation.	Adjusts the tonal quality of the sound.
Page02	Synth 0–100	Dry 0–100 P	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

077 V-Syn	This effect produces a vintage bass synthesizer sound.		
		Knob1	Knob2	Knob3
Page01	Decay 0–100	Sense 0–30	Range -10–10
	Adjusts the rate of sound change.	Adjusts the sensitivity for trigger detection.	Adjusts the filter shift range.
Page02	Synth 0–100	Dry 0–100 P	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

078 4VoiceSyn	This effect type adds synthesizer harmony components to single notes played on the bass. The harmony components are determined by the Mode and Scale parameters.		
		Knob1	Knob2	Knob3
Page01	ATTCK 0–10	Mode 1–9	Scale 1, 2
	Adjusts the attack rate of the synthesizer sound.	Selects a harmony type from 1 - 9. (See Table 4)	Selects a harmony variation. Two variations are available for each of the 1-9 modes. (See Table 4)
Page02	Synth 0–100	Dry 0–100 P	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

079 Z-Syn	This bass synthesizer sound adds analog synth fatness.		
		Knob1	Knob2	Knob3
Page01	Wave Saw, Sqr	Decay 0–100 P	Tone 0–10
	Selects the waveform.	Adjusts the speed of tone modulation.	Adjusts the tone.
Page02	Freq 0–10	Range 0–20	Reso 0–20
	Sets the cut-off frequency of the low-pass filter.	Adjusts the amount of cut-off frequency modulation.	Adjusts the intensity of the filter resonance.
Page03	Synth 0–100	Dry 0–100	Level 0–150
	Adjusts level of synthesizer sound.	Adjusts level of original sound.	Adjusts the output level.

080 Z-Organ	This effect simulates an organ sound.		
		Knob1	Knob2	Knob3
Page01	Upper 0–100 P	Lower 0–100	Dry 0–100
	Adjusts volume of high frequencies.	Adjusts volume of low frequencies.	Adjusts level of original sound.
Page02	HPF 0–10	LPF 0–10	Level 0–150
	Adjusts high-pass filter cutoff frequency.	Adjusts low-pass filter cutoff frequency.	Adjusts the output level.

081 Defret

Turns the sound from any bass guitar into a fretless bass sound.

	Knob1				Knob2				Knob3			
Page01	Sense	0–30			Color	1–10			Level	0–150		
	Adjusts the effect sensitivity.				Adjusts the harmonics contents of the sound. Higher setting values result in stronger effect character.				Adjusts the output level.			
Page02	Tone	1–50	P									
	Adjusts the tonal quality of the sound.											

082 Delay

This long delay has a maximum length of 5000 mS. **FS** Hold, InputMute

	Knob1				Knob2				Knob3			
Page01	Time	1–5000	♪		F.B	0–100			Mix	0–100		P
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	HiDMP	0–10			P-P	MONO, P-P			Level	0–150		
	Adjusts the treble attenuation of the delay sound.				Sets delay output to mono or ping-pong.				Adjusts the output level.			

083 TapeEcho

This effect simulates a tape echo. Changing the "Time" parameter changes the pitch of the echoes. **FS** InputMute

	Knob1				Knob2				Knob3			
Page01	Time	1–2000	♪	P	F.B	0–100			Mix	0–100		
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	HiDMP	0–10			Level	0–150						
	Adjusts the treble attenuation of the delay sound.				Adjusts the output level.							

084 ModDelay

This delay effect allows the use of modulation. **FS** InputMute

	Knob1				Knob2				Knob3			
Page01	Time	1–2000	♪		F.B	0–100			Mix	0–100		
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	Rate	1–50		P	Level	0–150			Depth	0–100		
	Sets the speed of the modulation.				Adjusts the output level.				Sets the depth of the modulation.			

085 AnalogDly

This analog delay simulation has a long delay with a maximum length of 5000 mS. **FS** Hold, InputMute

	Knob1				Knob2				Knob3			
Page01	Time	1–5000	♪		F.B	0–100			Mix	0–100		P
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	HiDMP	0–10			P-P	MONO, P-P			Level	0–150		
	Adjusts the treble attenuation of the delay sound.				Sets delay output to mono or ping-pong.				Adjusts the output level.			

086 ReverseDL

This reverse delay is a long delay with a maximum length of 2500 mS. **FS** Hold, InputMute

	Knob1				Knob2				Knob3			
Page01	Time	10–2500	♪		F.B	0–100			Bal	0–100		P
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the balance between original and effect sounds.			
Page02	HiDMP	0–10			Level	0–150						
	Adjusts the treble attenuation of the delay sound.				Adjusts the output level.							

087 MultiTapD

This effect produces several delay sounds with different delay times. **FS** InputMute

	Knob1				Knob2				Knob3			
Page01	Time	1–3000	♪		PTTRN	1–8			Mix	0–100		P
	Sets the delay time.				Sets the tap pattern, which varies from rhythmical to random patterns.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	Tone	0–10			Level	0–150						
	Adjusts the tone.				Adjusts the output level.							

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Effect Types and Parameters

088 DynaDelay

This dynamic delay adjusts the volume of the effect sound according to the input signal level.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Time	1–2000	♪		Sense	-10—1, 1–10			Mix	0–100		P
	Sets the delay time.				Adjusts the effect sensitivity.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	F.B	0–100			Level	0–150						
	Adjusts the feedback amount.				Adjusts the output level.							

089 FilterDly

This effect filters a delayed sound.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Time	1–2000	♪		F.B	0–100			Mix	0–100		
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	Rate	1–50	P		Depth	0–100			Reso	0–10		
	Sets the speed of the modulation.				Sets the depth of the modulation.				Adjusts the intensity of the modulation resonance.			
Page03	Level	0–150										
	Adjusts the output level.											

090 PitchDly

This effect applies pitch shift to a delayed sound.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Time	1–2000			Pitch	-12–12	P		Mix	0–100		
	Sets the delay time.				Sets volume of pitch shift applied to delayed sound.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	F.B	0–100			Tone	0–10			Level	0–150		
	Adjusts the feedback amount.				Adjusts the tone.				Adjusts the output level.			

091 StereoDly

This stereo delay allows the left and right delay times to be set separately.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	TimeL	1–2000	♪		TimeR	1–2000	♪		Mix	0–100		P
	Adjusts delay time of left channel delay.				Adjusts delay time of right channel delay.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	LchFB	0–100			RchFB	0–100			Level	0–150		
	Adjusts delay feedback of left channel.				Adjusts delay feedback of right channel.				Adjusts the output level.			
Page03	LchLv	0–100			RchLv	0–100						
	Adjusts delay output of left channel.				Adjusts delay output of right channel.							

092 PhaseDly

This effect applies a phaser to a delayed sound.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Time	1–2000	♪		F.B	0–100			Mix	0–100		
	Sets the delay time.				Adjusts the feedback amount.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	Rate	1–50	P		Color	4 STG, 8 STG, inv 4, inv 8			Level	0–150		
	Sets the speed of the modulation.				Sets the tone of the effect type.				Adjusts the output level.			

093 TrgHldDly

This delay samples and holds using picking as the trigger.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Time	10–1000			Duty	25–100			Mix	0–100		P
	Sets the delay time.				Sets the time that the sample-and-hold sound is produced.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	THRSH	0–30			Level	0–150						
	Adjusts effect threshold.				Adjusts the output level.							

094 HD Reverb

This is a high-definition reverb.

FS InputMute

		Knob1				Knob2				Knob3			
Page01	Decay	0–100			Tone	0–10			Mix	0–100		P
	Sets the duration of the reverberations.				Adjusts the tone.				Adjusts the amount of effected sound that is mixed with the original sound.			
Page02	PreD	1–200			HPF	0–10			Level	0–150		
	Adjusts the delay between input of the original sound and start of the reverb sound.				Adjusts high-pass filter cutoff frequency.				Adjusts the output level.			

095	Hall	This reverb effect simulates the acoustics of a concert hall.		FS	InputMute

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Tone	0–10	Mix	0–100	P
		Sets the duration of the reverberations.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		PreD	1–100	Level	0–150			
		Adjusts the delay between input of the original sound and start of the reverb sound.		Adjusts the output level.				

096	Room	This reverb effect simulates the acoustics of a room.		FS	InputMute

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Tone	0–10	Mix	0–100	P
		Sets the duration of the reverberations.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		PreD	1–100	Level	0–150			
		Adjusts the delay between input of the original sound and start of the reverb sound.		Adjusts the output level.				

097	TiledRoom	This reverb effect simulates the acoustics of a tiled room.		FS	InputMute

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Tone	0–10	Mix	0–100	P
		Sets the duration of the reverberations.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		PreD	1–100	Level	0–150			
		Adjusts the delay between input of the original sound and start of the reverb sound.		Adjusts the output level.				

098	Spring	This reverb effect simulates a spring reverb.		FS	InputMute

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Tone	0–10	Mix	0–100	P
		Sets the duration of the reverberations.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		PreD	1–100	Level	0–150			
		Adjusts the delay between input of the original sound and start of the reverb sound.		Adjusts the output level.				

099	Arena	This reverb effect simulates the acoustics of a large enclosure such as a sports arena.		FS	InputMute

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Tone	0–10	Mix	0–100	P
		Sets the duration of the reverberations.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		PreD	1–100	Level	0–150			
		Adjusts the delay between input of the original sound and start of the reverb sound.		Adjusts the output level.				

100	EarlyRef	This effect reproduces only the early reflections of reverb.			

		Knob1		Knob2		Knob3		
Page01		Decay	1–30	Shape	-10–10	Mix	0–100	P
		Adjusts the duration of the reverb.		Adjusts the effect envelope.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		Tone	0–10	Level	0–150			
		Adjusts the tone.		Adjusts the output level.				

101	Air	This effect reproduces the ambience of a room to create spatial depth.			

		Knob1		Knob2		Knob3		
Page01		Size	1–100	Tone	0–10	Mix	0–100	P
		Sets the size of the space.		Adjusts the tone.		Adjusts the amount of effected sound that is mixed with the original sound.		
Page02		Ref	0–10	Level	0–150			
		Adjusts the amount of reflection from the wall.		Adjusts the output level.				

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Effect Types and Parameters

102 Comp+Dist

This effect combines a compressor and distortion.

		Knob1			Knob2			Knob3		
Page01	THRSH	0–50		Gain	0–100	P	Level	0–150		
	Sets the level that activates the compressor.			Adjusts the gain.			Adjusts the output level.			
Page02	Dry	0–100		Tone	0–100		Ratio	1–10		
	Adjusts level of original sound.			Adjusts the tone.			Adjusts the compression ratio.			
Page03	ATTCK	1–10								
	Adjusts the compressor attack rate.									

103 Oct+Dist

This effect combines an octaver and distortion.

		Knob1			Knob2			Knob3		
Page01	Oct	0–100	P	Gain	0–100		Level	0–150		
	Adjusts the volume of the effect sound one octave down.			Adjusts the gain.			Adjusts the output level.			
Page02	Dry	0–100		Tone	0–100		Chain	Befr/Aftr		
	Adjusts level of original sound.			Adjusts the tone.			Sets the distortion insertion point.			

104 Awah+Dist

This effect combines auto-wah with distortion.

		Knob1			Knob2			Knob3		
Page01	Sense	-10–1, 1–10		Gain	0–100	P	Level	0–150		
	Adjusts the sensitivity of the effect.			Adjusts the gain.			Adjusts the output level.			
Page02	Dry	0–100		Tone	0–100		Reso	0–10		
	Adjusts level of original sound.			Adjusts the tone.			Adjusts the intensity of the resonance sound.			
Page03	Chain	Befr/Aftr								
	Sets the distortion insertion point.									

105 Comp+AWah

This effect combines compressor and auto-wah.

		Knob1			Knob2			Knob3		
Page01	THRSH	0–50		Sense	-10–1, 1–10	P	Level	0–150		
	Sets the level that activates the compressor.			Adjusts the sensitivity of the effect.			Adjusts the output level.			
Page02	Dry	0–100		Reso	0–10		Ratio	1–10		
	Adjusts level of original sound.			Adjusts the intensity of the resonance sound.			Adjusts the compression ratio.			
Page03	ATTCK	1–10								
	Adjusts the compressor attack rate.									

106 PH+Dist

This effect combines a phaser and distortion in the style of the Roland JET PHASER.

		Knob1			Knob2			Knob3		
Page01	Gain	0–100		Mode	1–4		Reso	0–10		
	Adjusts the gain.			Selects the jet sound mode.			Adjusts the intensity of the effect character.			
Page02	Rate	0–50	P	Tone	0–10		Level	0–150		
	Adjusts the modulation rate.			Adjusts the tone.			Adjusts the output level.			

107 PedalVox

This simulates a vintage Vox wah pedal.

		Knob1			Knob2			Knob3		
Page01	Freq	1–50	P	DryMX	0–100		Level	0–150		
	Adjusts the emphasized frequency.			Adjusts the mix with the unaffected sound.			Adjusts the output level.			

108 PedalWah

This is a pedal wah effect for bass guitar.

		Knob1			Knob2			Knob3		
Page01	Freq	1–50	P	DryMX	0–100		Level	0–150		
	Adjusts the frequency that is emphasized.			Adjusts the mix with the unaffected sound.			Adjusts the output level.			

109 PDL Reso

Pedal wah with a strong character.

		Knob1			Knob2			Knob3		
Page01	Freq	1–50	P	Reso	0–10		Level	0–150		
	Adjusts the emphasized frequency.			Adjusts the intensity of the effect character.			Adjusts the output level.			
Page02	DryMX	0–100								
	Adjusts the amount of original sound in the mix.									

110	PDL Pitch	Use an expression pedal to change the pitch in real time with this effect.								
			Knob1			Knob2			Knob3	
		Page01	Color	1–9 (See Table 3)		Tone	0–10		Bend	0–100	P
			Sets the type of pitch change control with the expression pedal.			Adjusts the tone.			Sets the amount of pitch shift.	
		Page02	Mode	Up, Down		Level	0–150			
			Sets the direction of the pitch change to Up or Down.			Adjusts the output level.				

111	PDL MnPit	This is a pitch shifter specially for monophonic sound (single-note playing), which allows the pitch to be shifted in real time with the expression pedal.								
			Knob1			Knob2			Knob3	
		Page01	Color	1–9 (See Table 3)	P	Tone	0–10		Bend	0–100	P
			Sets the type of pitch change control with the expression pedal.			Adjusts the tone.			Sets the amount of pitch shift.	
		Page02	Mode	Up, Down		Level	0-150			
			Sets the direction of the pitch change to Up or Down.			Adjusts the output level.				

■Table 1

Type	Modeled cabinet and speakers
ORGN	The recommended cabinet will be selected.
8x10 AG	AMPEG 810E simulation
4x12 SB	MARSHALL 1935A simulation
4x12 BM	FENDER BASSMAN simulation
4x10 HA	HARTKE 4.5XL simulation
4x10 SWR	SWR GOLIATH simulation
4X10 AL	AGUILAR GS410 simulation
4x10 GK	GALLIEN KRUEGER 410RBH simulation
4x10 E	EDEN D410XLT simulation
1x18 AC	ACOUSTIC 301 simulation
1x15 PT	POLYTONE MINI BRUTE III combo amp cabinet simulation
1x15 AG	AMPEG B-15 combo amp cabinet simulation
1x12 MB	Markbass 12-inch combo amp cabinet simulation

■Table 2

Setting	Scale used	Interval
–6	Major	6th down
–5		5th down
–4		4th down
–3		3rd down
–m	Minor	3rd down
m		3rd up
3	Major	3rd up
4		4th up
5		5th up
6		6th up

■Table 3

Color	Pedal min	Pedal max
1	0 cents	+1 octave
2	0 cents	+2 octaves
3	0 cents	-100 cents
4	0 cents	-2 octaves
5	0 cents	−∞
6	-1 octave + original	+1 octave + original
7	-700 cents + original	+500 cents + original
8	Doubling	Detuned + original
9	-∞ (0 Hz) + original	+1 octave + original

■Table 4

Note played on bass 🎼 (Example : C)

	Scale1	Scale 2		Scale1	Scale 2		Scale1	Scale 2
Mode 1	C	Cm	Mode 4	FonC	FonC	Mode 7	C7	F7
Mode 2	C7 (omit 5)	Cm7 (omit 5)	Mode 5	C	C	Mode 8	CMaJ7	FMaJ7
Mode 3	CMaJ7 (omit 5)	Cm MaJ7 (omit 5)	Mode 6	Cdim	E dim	Mode 9	Csus4	Cadd9

Troubleshooting

The unit will not turn ON

- Confirm that the POWER switch is set to "ON". When using bus power, confirm that the switch is "OFF" before connecting the USB cable.
- When using batteries, confirm that they are still charged.

No sound or very low volume

- Check the connections (→P4–6).
- Adjust the patch level (→P14).
- Adjust the master level (→P18).
- When adjusting the volume with an expression pedal, make sure that a suitable volume setting has been set with the pedal.
- Confirm that unit is not in mute mode (→P22).
- The unit might have switched to standby to save power (→P6). In standby, audio input and output are disabled.

There is a lot of noise

- Check the shielded cables that you are using for defects.
- Use only a genuine ZOOM AC adapter.

The sound distorts strangely/has an odd timbre

- Set the Active/Passive switch according to the type of bass guitar pickups or the device connected directly to the **B3**.

An effect is not working

If the effect processing capacity is exceeded, "THRU" appears on the effect graphic. In this case, the effect is bypassed.

The expression pedal is not working well

Check the expression pedal settings (→P16).

The recorded level in a DAW is low

Check the recording level setting (→P20).

Batteries lose their charge quickly

- Are you using manganese batteries? Alkaline batteries should provide 6 hours of operation.
- Check the battery setting (→P20). Set the type of battery being used for a more accurate display of the remaining charge.

Rhythm List

#	Pattern Name	Tim Sig.
1	GUIDE	4/4
2	8Beat1	4/4
3	8Beat2	4/4
4	8Beat3	4/4
5	8SHFFL	4/4
6	16Beat1	4/4
7	16Beat2	4/4
8	16SHFFL	4/4
9	Rock	4/4
10	Hard	4/4
11	Metal1	4/4
12	Metal2	4/4
13	Thrash	4/4
14	Punk	4/4

#	Pattern Name	Tim Sig.
15	DnB	4/4
16	Funk1	4/4
17	Funk2	4/4
18	Hiphop	4/4
19	R'nR	4/4
20	Pop1	4/4
21	Pop2	4/4
22	Pop3	4/4
23	Dance1	4/4
24	Dance2	4/4
25	Dance3	4/4
26	Dance4	4/4
27	3Per4	3/4
28	6Per8	3/4

#	Pattern Name	Tim Sig.
29	5Per4_1	5/4
30	5Per4_2	5/4
31	Latin	4/4
32	Ballad1	4/4
33	Ballad2	3/4
34	Blues1	4/4
35	Blues2	3/4
36	Jazz1	4/4
37	Jazz2	3/4
38	Metro3	3/4
39	Metro4	4/4
40	Metro5	5/4
41	Metro	

Specifications

Effect types	111 types	
Number of simultaneous effects	3	
Number of user banks/patches	10 patches x 10 banks	
Sampling frequency	44.1kHz	
A/D conversion	24-bit with 128x oversampling	
D/A conversion	24-bit with 128x oversampling	
Signal processing	32-bit floating point & 32-bit fixed point	
Frequency characteristics	20-20 kHz +1 dB, -3 dB (10 kΩ load)	
Display	LCD x 3	
Input	Standard mono phone jack	
	Rated input level	-20dBm
	Input impedance	1MΩ
	ACTIVE/PASSIVE (switch selectable)	
Output R	Standard mono phone jack	
	Maximum output level:	
	Line: +5 dBm (with output load impedance of 10 kΩ or more)	
L/Mono/Phone	Standard stereo phone jack (line/headphones)	
	Maximum output level:	
	Line: +5 dBm (with output load impedance of 10 kΩ or more)	
	Headphones: 20 mW + 20 mW (into 32 Ω load)	
Balanced output	XLR connector	
	Output impedance	
	100 Ω (HOT-GND, COLD-GND), 200 Ω (HOT-COLD)	
	PRE/POST (switch selectable)	
	GND LIFT (switch selectable)	
Control input	For FP01/FP02/FS01	
Noise floor (residual noise)	-100dBm	
Power	AC adapter	DC9V (center minus plug), 500 mA (ZOOM AD-16)
	Batteries	6 hours of continuous operation using 4 AA alkaline batteries
	USB	Bus power
Dimensions	170 (D) x 234 (W) x 54 (H) mm	
USB	USB Audio	
Weight	1.2kg	
Options	FP01/FP02 expression pedal and FS01 foot switch	

• 0dBm = 0.775Vrms

FCC regulation warning (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

For EU Countries

$\mathsf{C}\,\mathsf{E}$ Declaration of Conformity

B3
Bass Effects & Amp Simulator
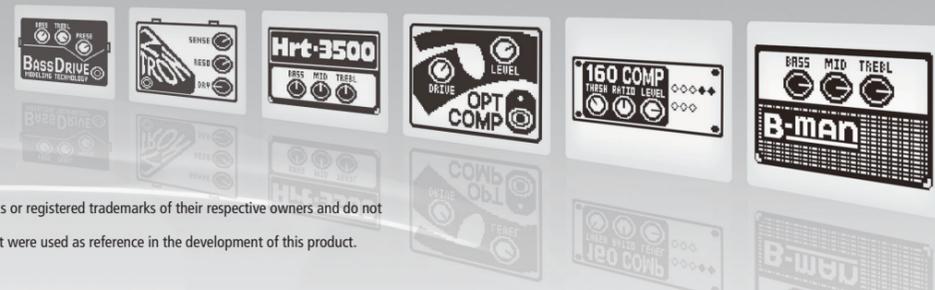
Manufacturer names and product names mentioned in this patch list are trademarks or registered trademarks of their respective owners and do not indicate any affiliation with ZOOM CORPORATION.
All product and artist names are intended only to illustrate sonic characteristics that were used as reference in the development of this product.

Group	Bank	#	Patch Name	Comment
DEMO	A	0	MarkBoost	This uses modeling of the all-around Markbass sound. Switch the graphic EQ on for a tighter low end when using an amplifier.
		1	Polytone	This has the characteristic mid range of the Polytone MINI-BRUTE, which is popular among jazz players. Switch the EQ on for a tighter low end when using an amplifier.
		2	SLAP WAH	This patch with additional auto-wah is useful for slapping solos.
		3	bass tank	Less overdriven style into an SVT style amp modeler.
		4	Hartke	A Hartke HA3500 is combined with a 4.5XL cabinet with aluminum cone drivers. Switch the EQ on for tighter low end when using an amplifier.
		5	SansCmp	A basic combination of SansAmp and Punch Factory, which are two favorite effects among bass players. Add EQ to your taste.
		6	Jaco Jazz	Jaco Jazz Ah yes the famous Jaco and his sound this sound emulates a fretless bass very well.
		7	SVT	The all-tube Ampeg SVT is combined with an 810E cabinet. Switch the EQ on for a tighter low end when using an amplifier.
		8	tl octave	My basic beefed up octave sound, big lows and fat sine wave.
		9	RecU5	The AVALON U5 model contributes to this clear and crispy bass sound.
Victor Wooten	B	0	W10 Big D	Very powerful Octave and Distortion sound.
		1	W10 Thumb1	Moog filter sound for thumb play style.
		2	W10 Thumb2	Q-Tron filter sound for thumb play style.
		3	W10 StepUp	Long time delay sound with Hall reverb.
		4	W10 Up Top	Pitch shifter with delay for bass guitar solo.
		5	W10 Bottom	Nice bottom sound with booster and Bottom B.
		6	W10LesFret	Fretless sound with Hall reverb.
		7	W10 DreamX	Dreamy sound using Reverse Delay.
		8	W10 DreamY	Dreamy sound using Pitch Delay.
		9	W10 BowTie	Slow attack sound with Hall reverb.
Frank Bello	C	0	HintoCliff	This patch is a tribute dedicated to my friend Cliff Burton. I think of him when I hear it.
		1	GalePlus	This patch is a kind of straight-ahead vibe plus a little more "stuff " I added to it…
		2	Smoothfun	This patch says to me that this bass sound is so smooth, I should have some fun with it.
		3	WahTalkin	With this patch, I have this picture in my head of having a conversation with a wah pedal.
		4	Horrorfuzz	This patch is my horror movie bass sound. To me it sounds like it's from a horror movie soundtrack.
		5	Tremozep	When I'm playing with this patch, it sounds like it has a Led Zeppelin vibe to it. Tremolo all the way!
		6	FollowMe	When I hear this patch, it makes me feel like there is a sound following me every note I play.
		7	LeStandard	With this patch, I just wanted to have a cool, straight ahead bass sound to jam to.
		8	Believe it	This patch has a journey-bass sound vibe to it. Big Chorus going on.
		9	Cureme	I think-This patch has a Cure-ish (the band) vibe to it. Fun with the Flanger!
David Ellefson	D	0	Crunch Fuz	FuzzSmile gives hard edge fuzz.
		1	Amused	Synth & OptComp creates a modern alt metal talk box type sound.
		2	UR No Good	Derived from Van Halen II "You're No Good" bass intro. Classic Phaser and Compression. Great bass intro patch.
		3	Wid Sprd	D.I Plus with the Vibe gives useful effect for blues or rock songs.
		4	Nat Bg Wah	A natural bass wah created with Bottom B, Pedal Wah and Early Reflection.
		5	Big Room	Oct Stomp, Reverb and Flip Top create an ambient hall setting with a lower octave added.
		6	Space Driv	Exciter, Phaser, Fuzz. Good for solo bass and oddity pieces.
		7	Bass Synth	Mono Synth creates outstanding effect for solos and special effects.
		8	Lo Down	Octave creates lower octave while Random Filter adds mystic.
		9	Spc Fusion	Vibrato with 4 Voice Synth provides fusion jazz voicing.
Doug Wimbish	E	0	cto Stomp	A combination of Bottom B and Flip Top rounded out through the 160 COMP delivers a FAT SOLID SOUND.
		1	Pump House	SVT Amp with a twist of Mono Pitch and 160 Comp creates controllable Sub Low with the expression pedal. PUMP IT!
		2	Propeller	A Bass Drive merged with Trigger Hold then the 160 Comp evens it out. Expression Pedal makes it pulse.
		3	Swirl	With the Vibrato, Arena Reverb and Exciter, you create a Whirling Leslie Vibe.
ARTIST	E	4	Jaco Solo	Jaco Solo is a very dreamy sound thick with a nice reverb can be used for solo's or a main sound.
		5	Earth W&F	This is a cool synth patch emulating the famous tune "Let's Groove Tonight" by Earth Wind & Fire.
		6	Anthony J	This patch simulates Anthony Jackson's trademark sound with a flanger. The swelling effect of the flanger fits nicely with tight rhythmic figures played with a pick.
		7	Fat&Bright	Use this patch for a fat and bright slapping sound. Remember that funky guy who performed with Miles and the Stones?
		8	Slplss Tny	This simulates the sound of that impressive intro played by that skinhead guy with a "disciplined" British prog group. Try slapping with this.
		9	Percy J	A set of the favorite effects used by the legendary fretless player of Brand X.

Group	Bank	#	Patch Name	Comment
ARTIST	F	0	JP&360Amp	This reproduces the sound of that legendary master of the fretless bass. Explore the world of "Word of Mouth" with chorus and distortion!
		1	Larry	This reproduction of that Jet Phaser sound favored by Larry Graham is a great enhancement to wild bass solos!
		2	M Miller	This simulates the slapping sound of Marcus Miller using SWR amplifiers.
		3	STANLEY	This simulates the bass sound of Stanley Clarke on "School Days" and is optimized for chord stroking and slapping.
		4	Tim B	This reproduces the sounds of the wild guy of "Fudge" and "BBA." Try to control the depth of distortion with your picking touch.
		5	pino	Octaver into a Flip Top B-15 simulator, emulates the classic d'angelo pino p sound.
CLEAN	F	6	BasicSet	This basic compressor, overdrive and preamp setup can be used like a chain of compact effect pedals.
		7	RockSet	This "rock" setup of octave, booster and preamp effects can be used like a chain of compact pedals.
		8	POPSet	An all-round "pop" setup of compressor, booster and exciter effects that can be used like a chain of compact effect pedals.
		9	FusionSet	A setup of compressor, chorus and delay effects for fusion that can be used like a chain of compact effect pedals.
	G	0	JumpSet	This set is stuffed with three wild weapons. Use any of these when you need to be "in-your-face"!
		1	Z TRON	This auto-wah sound with a heavy bottom end is a combination of the Q-Tron-inspired Z Tron effect and a preamp.
		2	DblComp	This patch gives a hard compression sound using two compressors in a row and is good for cool slapping solos.
		3	PHASER	This phaser sound is very effective in certain sections of songs.
		4	WahAttack	This adds an auto-wah sound to the natural dry sound of the bass.
		5	SLAP	This slapping sound cuts though with natural compression and low and high registers enhanced by an exciter.
		6	SLAP SOLO	This adds a short delay to a classic 80s slapping solo sound.
		7	TAPPING	This patch is optimized for tapping. The signal is compressed fairly heavily and enhanced with EQ for a broader sound.
		8	CHORD	This patch is optimized for chord work. Room and reverb effects add depth to the sound.
		9	PULL MELO	Use this patch for beautiful melodies played with a pull-off technique.
	H	0	HARMONICS	This patch is effective for harmonics. Chorus and reverb effects contribute to the floating sound.
		1	Bassman	This is a simulation of the Fender Bassman 100 amp once used by Paul McCartney. Switch the graphic EQ on for tighter low end when using an amplifier.
		2	Super Bass	This is a simulation of a Marshall 1992 Superbass with a 1935A cabinet. Switch the graphic EQ on for tighter low end when using an amplifier.
		3	Aguilar	This models the powerful and clean sound of an Aguilar amp. Switch the graphic EQ on for tighter low end when using an amplifier.
		4	G-Kruger	This is a simulation of a Gallien-Krueger 800RB with a 410RBH cabinet. Switch the graphic EQ on for tighter low end when using an amplifier.
		5	nice warm	Just a nice tube amp warm patch, good for any use.
		6	BritHardRk	This is just like the name suggests—a typical sound of British hard rock. Perfect with a pick.
		7	huge clean	Nice eq'd lo mid boosted sound sent into an SWR style amp.
		8	REC CLEAN	This clean sound is suitable for recording and has added fatness from Hartke HA3500 modeling.
		9	REC SLAP	This simulation of an amp sound with punchy lows and highs is suitable for recording slapped basses.
DISTORTION	I	0	2COMP	This patch simulates settings for recording using both studio and pedal compressors.
		1	ReggaeNo.1	This popular reggae sound has a big bottom. Add the octaver if you like a more aggressive sound.
		2	NORMAL DIS	This standard distortion sound blends well with the mix. This sound is good for everything but ballads!
		3	SOLO DIS	This distortion sound accompanied by a delay effect is suitable for soloing with fast passages.
		4	LudditeSyn	This synth bass is simulated only with analog-type effects. Of course, the whole thing is still digitally simulated!
		5	oct OD	Heavy fuzz and the bottom end give this patch a retro feel.
		6	BigJet	This jet sound has that characteristic wild swell.
		7	MuffCmp	This distortion sound uses the modeled Big Muff, which is a popular effect among many bass players. Switch on the exciter for a more contoured sound.
		8	meshugger	Distorted, sounds amazing with bass tuned to low c with roundwound strings.
		9	70fuzzoct	Retro fuzz and octave through a resonance filter.
SPECIAL FX	J	0	REC DIST	This natural distortion sound is suitable for recording.
		1	BottomSyn	This fat bass synth sound with a pleasant attack is suitable for recording.
		2	Big Brass	This is another big brassy cool analogue sound very useful in synth sounds.
		3	Fast Pick	This is a sound emulating you playing very fast 1/8 notes very accurate.
		4	longambien	Reverse delay into a rich delay with mega feedback. Excellent ambience for looping.
		5	Big Moog	This is a very cool impression of the Mini Moog synth very analogue.
		6	Duck Wah B	No, this is not the sound of the Stax legend. This is a sonic imitation of a "real" duck!
		7	Retro Game	This is a simulation of the sound of those 8-bit game machines that took the world by storm in the 80s.
		8	fairwarnin	Sub bass analog synth sound, most effective tracked slowly with long sustains.
		9	DistSeq	This spacey sound combines Dist1, Seq Filter and Stereo Delay effects.