

Guitar Effects & Amp Simulator



OPERATION MANUAL

Thank you very much for purchasing the ZOOM **GB**.

Please read this manual carefully to learn about all the functions of the **GB** 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.

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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:



	Something that could cause serious injury or death.
	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 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 **GSB** 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 **GSB** and the other device farther apart. With any type of electronic device that uses digital control, including the **GSB**, 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

Using our new ZFX-IV DSP, we have faithfully recreated the distortion rich with harmonics and the compression characteristic of tube amps.

The precisely-crafted modeled sounds are extremely responsive to picking dynamics and guitar volume control.

Combine diverse effects as you like

With over 100 types of effects that you can freely combine, the **GB** is a multi-effects unit that will let your imagination run wild.

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 **GB** 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

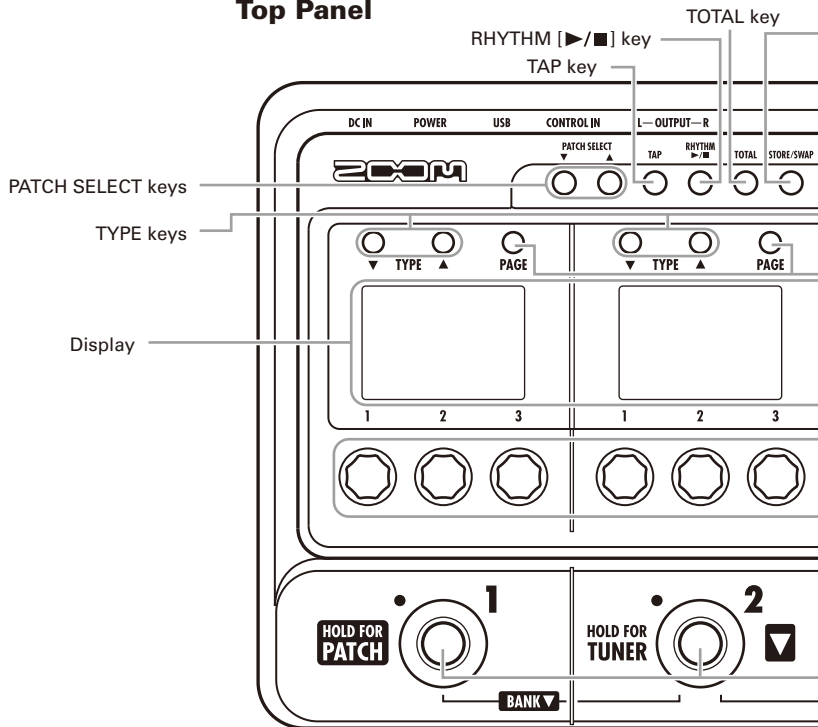
The ON/OFF status and the parameter settings of each effect are stored as "patches." Use patches to recall and save effects. The **GB** can store 100 patches.

Bank

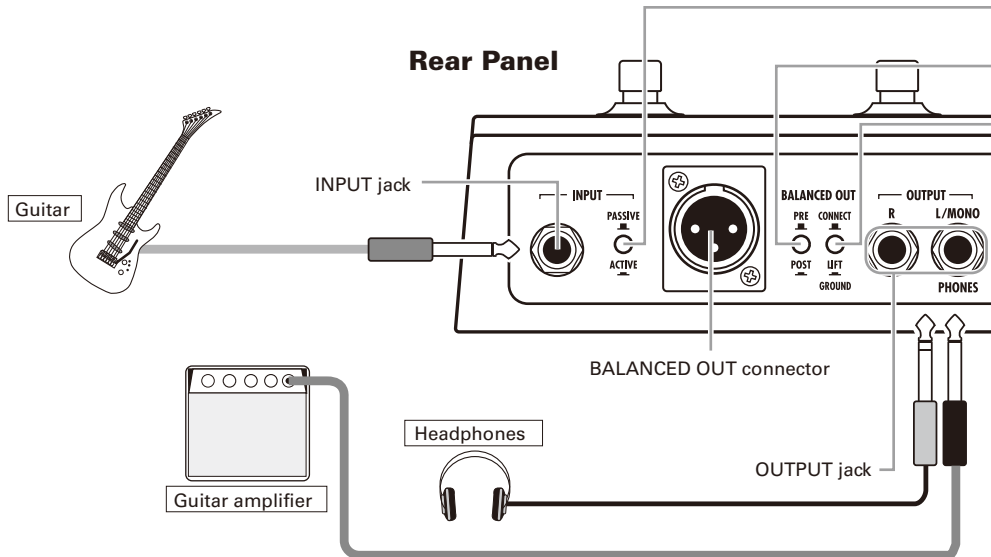
A set of 10 patches is called a "bank." The **GB** has 10 banks labeled A–J.

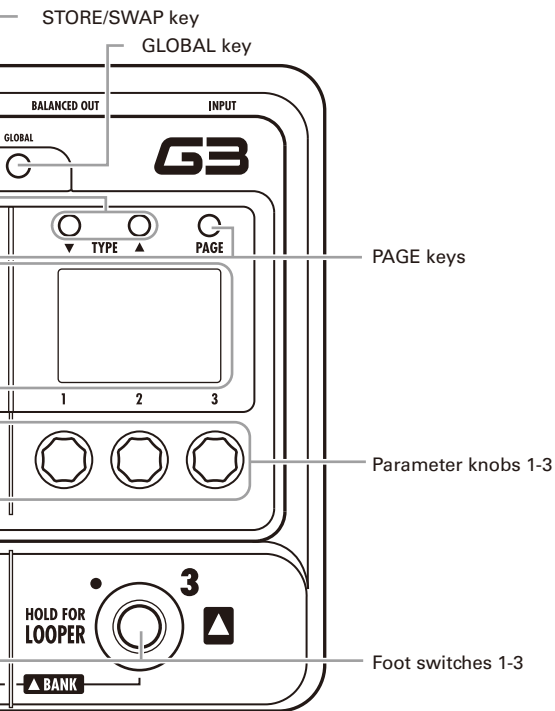
Part Names

Top Panel



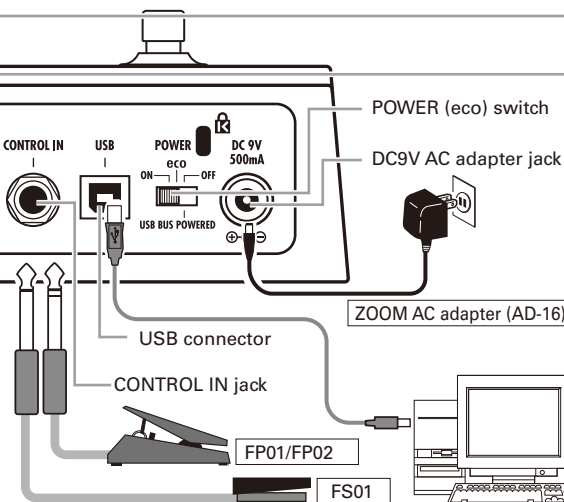
Rear Panel





ACTIVE/PASSIVE switch

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



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 **GB** effects. Set it to "PRE" (not pushed in) to output the signal before the **GB** effects.

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.

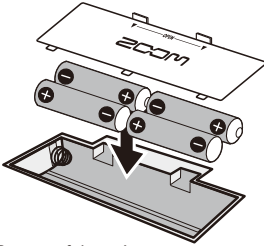
Turn the power on and play

To turn the power on

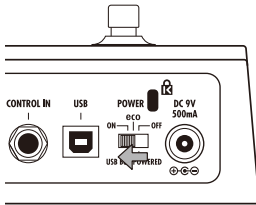
Lower the amplifier's volume all the way.

■ When using batteries

Insert batteries into the battery compartment

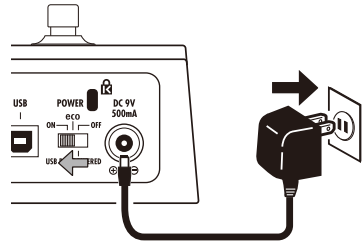


Bottom of the unit



■ 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

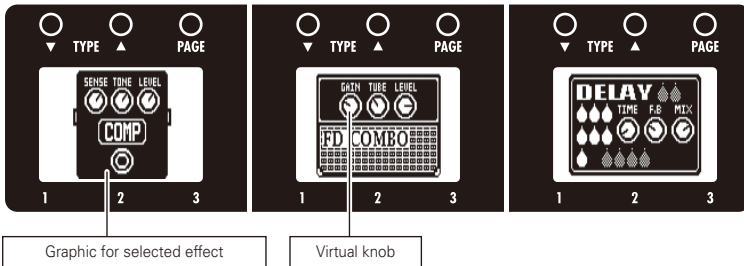
eco: If the **GB** is not used for about 25 minutes, it will be set to standby.

The **GB** will not be set to standby as long as there is a signal input from a guitar.

OFF: When set to "OFF", the **GB** can be powered from a USB bus by connecting it to a computer's USB port.

Display information

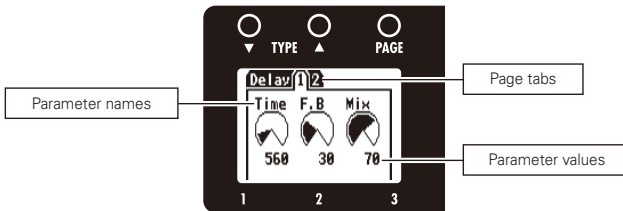
■ Home Screens show the current patch



HINT

- The positions of the virtual knobs change with the parameter values.

■ Edit Screens show parameters being edited



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.

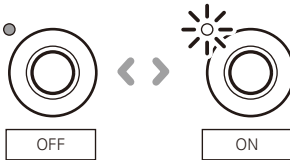


1 To turn effects ON and OFF

- Press   and .



- Turns the effect ON/OFF.



NOTE

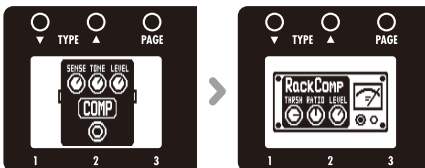
- An effect is ON when its footswitch LED is lit.
- An effect is OFF when its footswitch LED is not lit.

2 To select an effect type

- Press  **TYPE** .



- The effect type changes.



HINT

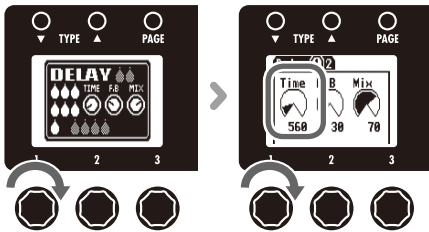
- See page 33 for information about effect types and parameters.
- Adjustments are automatically saved.

3 To adjust parameters

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



- The editing screen opens where you can adjust parameters.



NOTE

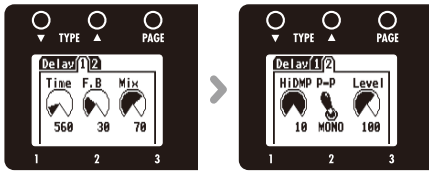
- Time, rate and some other effect parameters can be set in note durations that are synchronized to the tempo.

4 To change the page

- Press **PAGE**.



- The next page opens.



Effect processing capacity



The **GB** 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 **GB**. If the processing required for the effect exceeds the capacity of the **GB**, "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

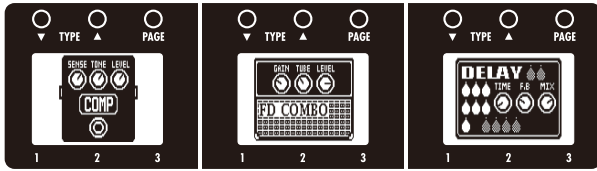
- An effect requires the same amount of processing power whether it is on or off.

HINT


- Amp models and the HD Reverb effect require great amounts of processing.

Selecting Patches

Confirm that the Home display is shown.

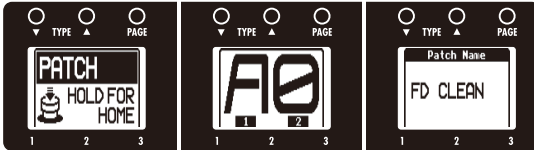


1 To activate patch selection




- Press and Hold  for 1 second to activate patch selection.



- The screens show the patch bank, number and name.

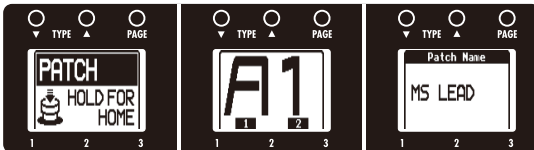


2 To change the patch


- 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.



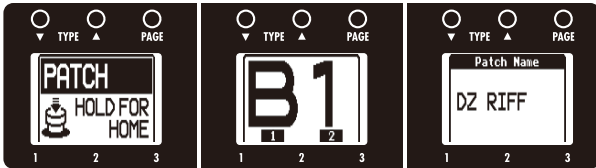
HINT

- You can also change patches using .

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  ¹ 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  ¹ for 1 second.

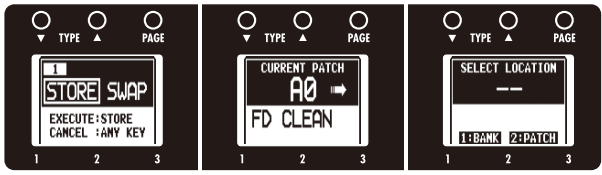


Storing Patches

The **GB** automatically saves settings when parameters are adjusted.

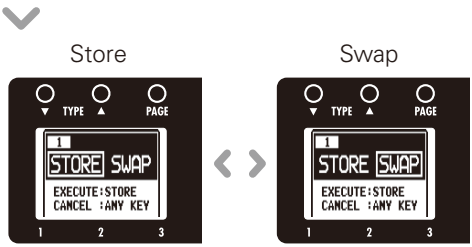
1 To store a patch or swap with a different patch

- Press  .
-  blinks and the screens appear as below.



2 To select whether to store or swap the patch

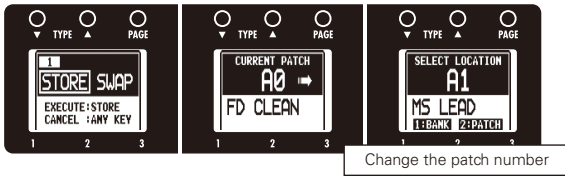
- Turn  of the left effect.



3 To set where to store or swap the new patch

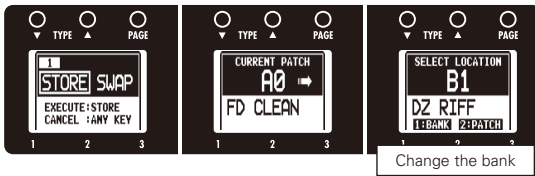
■ To change the patch number where stored/swapped

- Turn  of the right effect.



■ To change the bank where stored/swapped

- Turn  of the right effect.



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 .



- After "COMPLETE!" appears on the display, the store/swap patch opens.



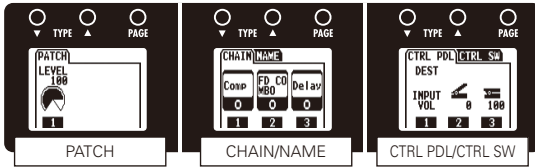
HINT

- To cancel this, press any key instead of .

Setting specific patch parameters

1 To activate the TOTAL menu

- Press **TOTAL** 

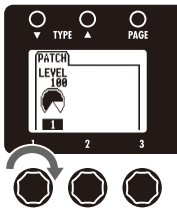


NOTE

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

2 To adjust the patch level

- Turn **1**  of the left effect.



NOTE

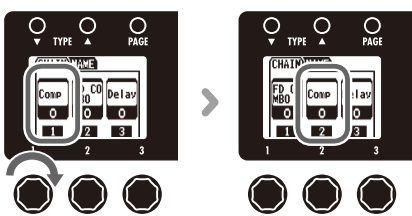
- The setting range is 0-120.

HINT


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

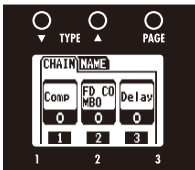
3 To change the order of the effects



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







4 To change the patch name

- Press  of the middle effect.
PAGE



 **1** : Turn  to move the cursor.

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

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

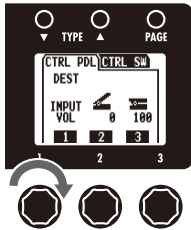
NOTE

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

5 To set an expression pedal function

Set the control destination.

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



NOTE

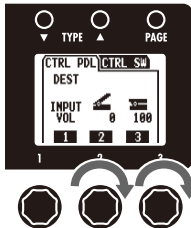
- INPUT VOL: Use this to control the input level.
- OUTPUT VOL: Use this to control the output level.
- NO ASSIGN: No function is assigned.

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.

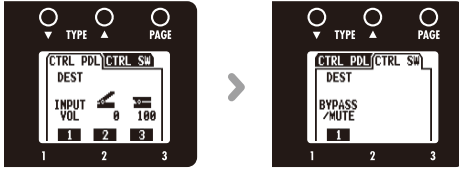


HINT

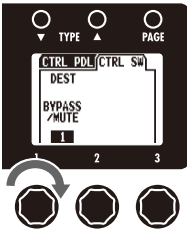
- The minimum value can be set higher than the maximum value. When set this way, pushing the pedal down decreases the effect, while letting it up increases the effect.

6 To set an optional footswitch function

- Press  on the right effect.



- Turn  of the right effect.



BYPASS/MUTE

Sets the effect to bypass or mute.


TAPTEMPO

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.

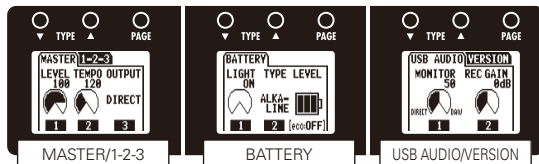
7 To exit the TOTAL menu

- Press .

Changing Various Settings

1 To activate the GLOBAL menu

- Press  .

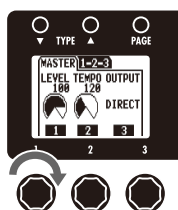


NOTE

- Global parameter settings affect all patches.

2 To adjust the master level

- Turn  of the left effect.

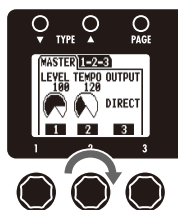


NOTE


- The setting range is 0-120.

3 To set the master tempo

- Turn  of the left effect.




HINT

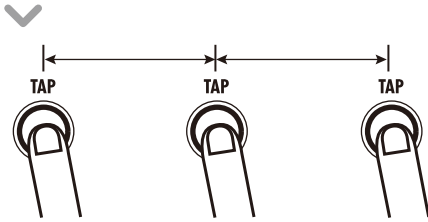
- You can also set the tempo using  .

NOTE

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

■ Setting the tempo by tapping

- Press  two or more times at the desired tempo.

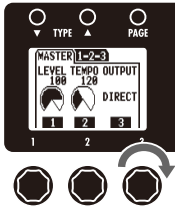


HINT

- You can also set the tempo using an FS01 footswitch (sold separately). (See page 17)

4 To select the connected equipment


- Turn  of the left effect.

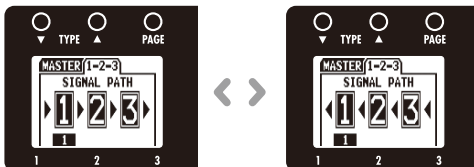


Parameter value	Meaning
DIRECT	Use when connected to headphones or monitor speakers
COMBO FRONT	Use when connected to an ordinary combo amp input
STACK FRONT	Use when connected to an ordinary stack amp input
COMBO POWER AMP	Use when connected to an ordinary combo amp return
STACK POWER AMP	Use when connected to an ordinary stack amp return

5 To change the direction of the signal flow


- Press  on the left effect.

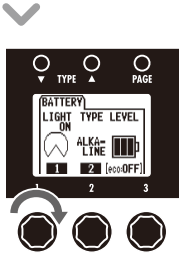
- Turn  to set the signal flow direction.



Changing Various Settings

6 To set the amount of time until the backlight dims

- Turn  of the middle effect.




NOTE

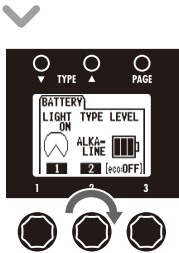
- The setting options are ON and 1–30 seconds.

HINT

- The amount of power consumed can be reduced by dimming the backlight.

7 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




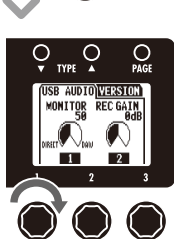
: Operating on USB bus power

NOTE

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

8 To adjust the USB audio monitoring balance


- Turn  of the right effect.

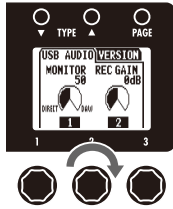


NOTE

- 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.

9 To adjust the recording level


- Turn  of the right effect.

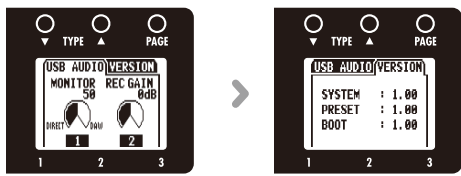


NOTE

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

10 To view the firmware versions

- Press  of the right effect.



HINT

- Check the ZOOM website (<http://www.zoom.co.jp>) for the latest firmware versions.

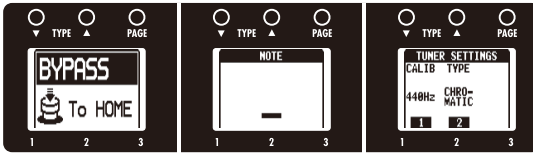
11 To exit the GLOBAL menu

- Press .



Using the Tuner

1 To activate the tuner


- Press  ² for 1 second.

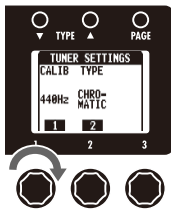


NOTE

- 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.

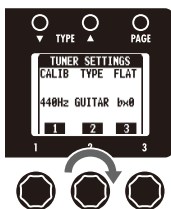


NOTE

- 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.

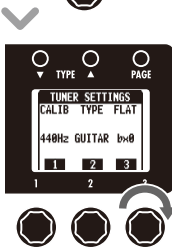
Other tuner types

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

Display	Meaning	String number/Note name						
		7	6	5	4	3	2	1
GUITAR	Standard tuning for guitars, including 7-string guitars	B	E	A	D	G	B	E
OPEN A	In open A tuning, the open strings make an A chord	-	E	A	E	A	C#	E
OPEN D	In open D tuning, the open strings make a D chord	-	D	A	D	F#	A	D
OPEN E	In open E tuning, the open strings make an E chord	-	E	B	E	G#	B	E
OPEN G	In open G tuning, the open strings make a G chord	-	D	G	D	G	B	D
DADGAD	This alternate tuning is often used for tapping, etc.	-	D	A	D	G	A	D

4 To use a drop tuning

- Turn  of the right effect.



NOTE

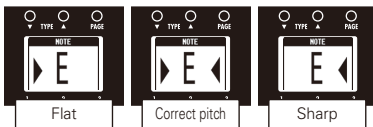
- Drop tuning is not possible when the TYPE is set to CHROMATIC.

5 Tune the guitar

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

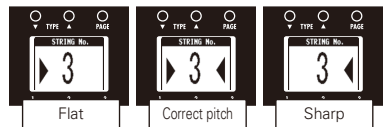
■ CHROMATIC TUNER

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



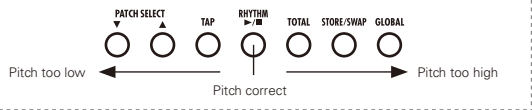
■ OTHER TUNERS

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



HINT

- The keys above the displays also light to show the pitch accuracy.



6 To end tuning

- Press  ,  or .

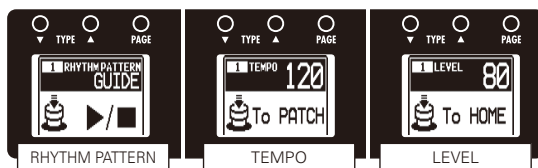
Using Rhythms

1 To activate a rhythm

- Press .



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

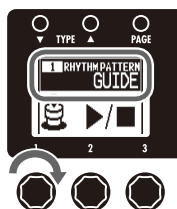


HINT

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

2 To select the rhythm pattern

- Turn  of the left effect.

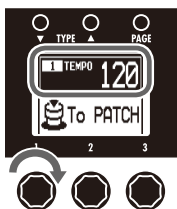


NOTE

- See page 51 for types of patterns

3 To adjust the tempo

- Turn  of the middle effect.




HINT

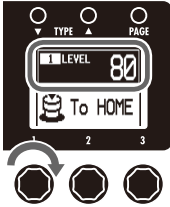
- You can also set the tempo using .

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  of the right effect.




NOTE

- The setting range is 0-100.

5 To stop the rhythm

- Press .

HINT

- Press  again to start playback of the rhythm again.

6 To complete setting the rhythm

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

- Press .

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

- Press .

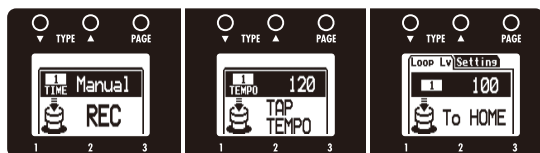
■ **To return to the Home Screens (and keep the rhythm playing)**

- Press .

Using the Looper

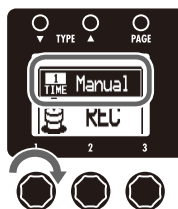
1 To activate the Looper

- Press  ³ for 1 second.



2 To set the recording time

- Turn  ¹ on the left unit.



Manual

Use the footswitch to start and stop recording.


Note mark

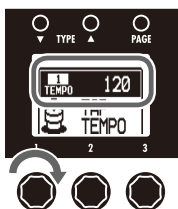
Set the recording time by setting the tempo and the number of quarter notes.

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  ¹ of the middle unit.



HINT

- You can also set the tempo using .
- If no loop has been recorded yet, you can also set the tempo by tapping  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.




■ 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

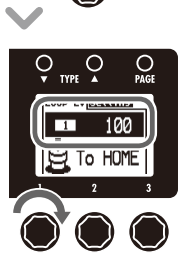
- During recording, press  2 to cancel recording.

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.



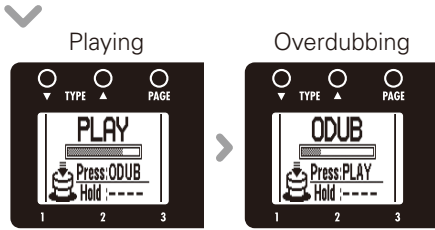
NOTE

- The setting range is 0-100.

6 To overdub a recorded loop

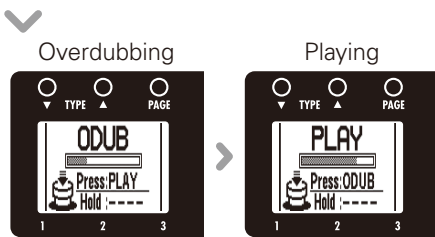
■ To start overdubbing

- During loop playback, press  ¹.



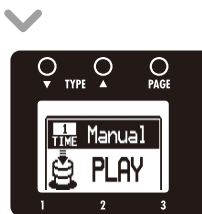
■ To end overdubbing

- Press  ¹ again.



7 To stop loop playback

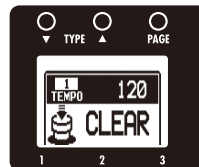
- Press  ².



8 To erase the loop

- Press  ² for 1 second.

- "CLEAR" appears on the display.



9 To return to the Home Screens

- Press .

HINT

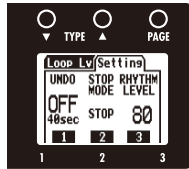
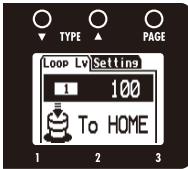
- You can return to the Home Screens while the loop is playing.

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  of the right unit.



- **To activate the Undo function**

Turn  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  for 1 second. After undoing, you can also redo by pressing  for 1 second again, restoring the last overdubbing.

- **To select the STOP MODE**

Turn  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 .

- **To adjust the RHYTHM LEVEL**

Turn  of the right unit.

Updating the firmware

To download the latest firmware version Update application:


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

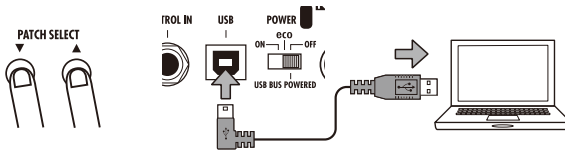
HINT

- Open the GLOBAL menu to check the current firmware versions. (See page 21.)

1 To prepare to update the firmware version

- Confirm that the POWER switch is set to OFF.

- While pressing both  , connect the unit to a computer using the USB cable.



- The VERSION UPDATE screen appears.



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 **GB** has finished updating, “COMPLETE!” appears on the display.




- Disconnect the USB cable.

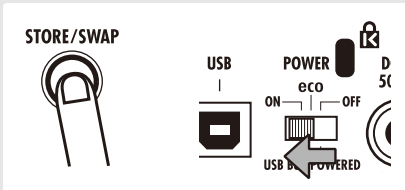
HINT

- Updating the firmware version will not erase saved patches.

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

1. To use the All Initialize function

- While pressing  , set the POWER switch to ON.



- The All Initialize screen appears.



2. To execute the All Initialize function.

- Press  .

NOTE

- Press any key other than  to cancel.

HINT

- Executing the All Initialize function will restore all the settings of the **GB**, 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, RAM 1GB or more

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

Intel Mac

OSX 10.5.8/10.6.5 or later

Intel® CoreDuo 1.83GHz or faster

RAM 1GB 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 **GB** and the computer. (See page 20.)
- You can adjust the recording level. (See page 21.)
- When its POWER switch is set to OFF, the **GB** can be connected to a computer by USB and powered by its USB bus.





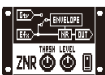
NOTE

- To monitor the signal of your connected 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 **GB** 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																				
083	DynaDelay	This dynamic delay adjusts the volume of the effect sound according to the input signal level.			FS InputMute																				
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>Time 1-2000</td> <td>Sense -10-1, 1-10</td> <td>Mix 0-100</td> </tr> <tr> <td colspan="4">Sets the delay time. Adjusts the effect sensitivity. Adjusts the amount of effected sound that is mixed with the original sound.</td> </tr> <tr> <td>Page02</td> <td>FB 0-100</td> <td>Level 0-150</td> <td></td> </tr> <tr> <td colspan="4">Adjusts the feedback amount. Adjusts the output level.</td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	Time 1-2000	Sense -10-1, 1-10	Mix 0-100	Sets the delay time. Adjusts the effect sensitivity. Adjusts the amount of effected sound that is mixed with the original sound.				Page02	FB 0-100	Level 0-150		Adjusts the feedback amount. Adjusts the output level.			
	Knob1	Knob2	Knob3																						
Page01	Time 1-2000	Sense -10-1, 1-10	Mix 0-100																						
Sets the delay time. Adjusts the effect sensitivity. Adjusts the amount of effected sound that is mixed with the original sound.																									
Page02	FB 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	Comp	This compressor in the style of the MXR Dyna Comp.																							
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>Sense 0-10</td> <td>Tone 0-10</td> <td>Level 0-150</td> </tr> <tr> <td colspan="4">Adjusts the compressor sensitivity. Adjusts the tone. Adjusts the output level.</td> </tr> <tr> <td>Page02</td> <td>ATTCK Slow, Fast</td> <td></td> <td></td> </tr> <tr> <td colspan="4">Sets compressor attack speed to Fast or Slow.</td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	Sense 0-10	Tone 0-10	Level 0-150	Adjusts the compressor sensitivity. Adjusts the tone. Adjusts the output level.				Page02	ATTCK Slow, Fast			Sets compressor attack speed to Fast or Slow.			
	Knob1	Knob2	Knob3																						
Page01	Sense 0-10	Tone 0-10	Level 0-150																						
Adjusts the compressor sensitivity. Adjusts the tone. Adjusts the output level.																									
Page02	ATTCK Slow, Fast																								
Sets compressor attack speed to Fast or Slow.																									
002	RackComp	This compressor allows more detailed adjustment than COMP.																							
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>THRSH 0-50</td> <td>Ratio 1-10</td> <td>Level 0-150</td> </tr> <tr> <td colspan="4">Sets the level that activates the compressor. Adjusts the compression ratio. Adjusts the output level.</td> </tr> <tr> <td>Page02</td> <td>ATTCK 1-10</td> <td></td> <td></td> </tr> <tr> <td colspan="4">Adjusts the compressor attack rate.</td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	THRSH 0-50	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.			
	Knob1	Knob2	Knob3																						
Page01	THRSH 0-50	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.																									
003	M Comp	This compressor provides a more natural sound.																							
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>THRSH 0-50</td> <td>Ratio 1-10</td> <td>Level 0-150</td> </tr> <tr> <td colspan="4">Sets the level that activates the compressor. Adjusts the compression ratio. Adjusts the output level.</td> </tr> <tr> <td>Page02</td> <td>ATTCK 1-10</td> <td></td> <td></td> </tr> <tr> <td colspan="4">Adjusts the compressor attack rate.</td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	THRSH 0-50	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.			
	Knob1	Knob2	Knob3																						
Page01	THRSH 0-50	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	SlowATTCK	This effect slows the attack of each note, resulting in a violin-like performance.																							
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>Time 1-50</td> <td>Curve 0-10</td> <td>Level 0-150</td> </tr> <tr> <td colspan="4">Adjusts the attack time. Set the curve of volume change during attack. Adjusts the output level.</td> </tr> <tr> <td>Page02</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	Time 1-50	Curve 0-10	Level 0-150	Adjusts the attack time. Set the curve of volume change during attack. Adjusts the output level.				Page02							
	Knob1	Knob2	Knob3																						
Page01	Time 1-50	Curve 0-10	Level 0-150																						
Adjusts the attack time. Set the curve of volume change during attack. Adjusts the output level.																									
Page02																									
005	ZNR	ZOOM's unique noise reduction cuts noise during pauses in playing without affecting the tone.																							
<table border="1"> <thead> <tr> <th></th> <th>Knob1</th> <th>Knob2</th> <th>Knob3</th> </tr> </thead> <tbody> <tr> <td>Page01</td> <td>THRSH 1-25</td> <td>DETECT GtrIn, EfxIn</td> <td>Level 0-150</td> </tr> <tr> <td colspan="4">Adjusts the effect sensitivity. Sets control signal detection level. Adjusts the output level.</td> </tr> <tr> <td>Page02</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							Knob1	Knob2	Knob3	Page01	THRSH 1-25	DETECT GtrIn, EfxIn	Level 0-150	Adjusts the effect sensitivity. Sets control signal detection level. Adjusts the output level.				Page02							
	Knob1	Knob2	Knob3																						
Page01	THRSH 1-25	DETECT GtrIn, EfxIn	Level 0-150																						
Adjusts the effect sensitivity. Sets control signal detection level. Adjusts the output level.																									
Page02																									









Effect Types and Parameters

006 NoiseGate 	This is a noise gate that cuts the sound during playing pauses.												
		Knob1				Knob2				Knob3			
	Page01	THRSH	1-25		P	Level	0-150						
Page02	Adjusts the effect sensitivity.				Adjusts the output level.								
007 DirtyGate 	This vintage style gate features a characteristic way of closing.												
		Knob1				Knob2				Knob3			
	Page01	THRSH	1-25		P	Level	0-150						
Page02	Adjusts the effect sensitivity.				Adjusts the output level.								
008 GraphicEQ 	This unit has a six band equalizer.												
		Knob1				Knob2				Knob3			
	Page01	160Hz	-12-12			400Hz	-12-12			800Hz	-12-12		
	Page02	Boosts or cuts the low (160 Hz) frequency band.				Boosts or cuts the low-middle (400 Hz) frequency band.				Boosts or cuts the middle (800 Hz) frequency band.			
	Page03	Level				0-150							
009 ParaEQ 	This is a 2-band parametric equalizer.												
		Knob1				Knob2				Knob3			
	Page01	Freq1	20Hz-20kHz			Q1	0.5, 1, 2, 4, 8, 16			Gain1	-12-12		
	Page02	Adjusts center frequency of EQ1.				Adjusts EQ1 Q.				Adjusts EQ1 gain.			
	Page03	Level				0-150							
010 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		
Page02	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.				
011 AutoWah 	This effect varies wah in accordance with picking intensity.												
		Knob1				Knob2				Knob3			
	Page01	Sense	-10-1, 1-10		P	Reso	0-10			Level	0-150		
Page02	Adjusts the sensitivity of the effect.				Adjusts the intensity of the resonance sound.				Adjusts the output level.				
012 Resonance 	This effect varies the resonance filter frequency according to picking intensity.												
		Knob1				Knob2				Knob3			
	Page01	Sense	-10-1, 1-10		P	Reso	0-10			Level	0-150		
Page02	Adjusts the sensitivity of the effect.				Adjusts the intensity of the resonance sound.				Adjusts the output level.				

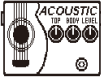
013 Cry 	This effect varies the sound like a talking modulator.						
		Knob1		Knob2		Knob3	
	Page01	Range	1-10	Reso	0-10	Sense	-10-1, 1-10
014 M-Filter 	This envelope filter has the flavor of a MOOG MF-101 low pass filter and can be set in a wide range.						
		Knob1		Knob2		Knob3	
	Page01	Freq	0-100	P	Sense	0-10	Reso
015 Step 	This special effect gives the sound a stepped quality.						
		Knob1		Knob2		Knob3	
	Page01	Depth	0-100	Rate	0-50	P	Reso
016 SeqFLTR 	The sequence filter has the flavor of a Z.Vex Seek-Wah.						
		Knob1		Knob2		Knob3	
	Page01	Step	2-8	PTRN	1-8	Speed	1-50
017 RndmFLTR 	This filter effect changes character randomly.						
		Knob1		Knob2		Knob3	
	Page01	Speed	1-50	P	Range	0-100	Reso
018 Booster 	The booster increases signal gain to make the sound more powerful.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
019 OverDrive 	Simulation of the Boss OD-1, the compact effect box that was the first to take the "overdrive" title.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level







Effect Types and Parameters

020	 T Scream	Simulation of the Ibanez TS808, which is loved by many guitarists as a booster and has inspired numerous clones.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
021	 Governor	Simulation of the Guv'nor distortion effect from Marshall.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
022	 Dist+	Simulation of the MXR distortion+ effect that made distortion popular worldwide.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
023	 Dist 1	Simulation of the Boss DS-1 distortion pedal, which has been a long-seller.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
024	 Squeak	Simulation of the popular Pro Co Rat famous for its edgy distortion sound.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
025	 FuzzSmile	Simulation of the Fuzz Face, which has made rock history with its humorous panel design and smashing sound.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
026	 GreatMuff	Simulation of the Electro-Harmonix Big Muff, which is loved by famous artists around the world for its fat, sweet fuzz sound.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					
027	 MetalWRLD	Simulation of the Boss Metal Zone, which is characterized by long sustain and a powerful lower midrange.												
		Page01	Knob1				Knob2				Knob3			
			Gain	0-100		P	Tone	0-100			Level	0-150		
Page02	Adjusts the gain.				Adjusts the tone.				Adjusts the output level.					

028 HotBox 	Simulation of the compact Matchless Hotbox pre-amplifier with a built-in tube.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
029 Z Clean 	ZOOM original unadorned clean sound.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
030 Z MP1 	An original sound created by merging characteristics of an ADA MP1 and a MARSHALL JCM800.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
031 Z Bottom 	A high gain sound that emphasizes low and middle frequencies.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
032 Z Dream 	A high gain sound for lead playing based on the Mesa Boogie Road King Series II Lead channel.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
033 Z Scream 	An original high gain sound balanced from low to high frequencies.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
034 Z Neos 	A crunch sound modeled on the sound of a modified VOX AC30.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
035 Z Wild 	A high gain sound with even more overdrive boost.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		








Effect Types and Parameters

036 Lead 	Lead a bright and smooth distortion sound.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
037 ExtremeDS 	This distortion effect boasts the highest gain in the world.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tone	0-100	Level
Page02	Adjusts the gain.		Adjusts the tone.		Adjusts the output level.		
038 Aco.Sim 	This effect changes the tone of an electric guitar to make it sound like an acoustic guitar.						
		Knob1		Knob2		Knob3	
	Page01	Top	0-100	P	Body	0-100	Level
Page02	Adjusts the unique string tone of acoustic guitars.		Adjusts the body resonance of acoustic guitars.		Adjusts the output level.		
039 FD COMBO 	Modeled sound of a Fender Twin Reverb ('65), which is loved by guitarists in various genres.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tube	0-100	Level
Page02	Adjusts the gain.		Adjusts tube amp compression.		Adjusts the output level.		
Page03	Trebl	0-100		Middl	0-100	Bass	0-100
Page02	Adjusts volume of high frequencies.		Adjusts volume of middle frequencies.		Adjusts volume of low frequencies.		
Page03	Prese	0-100		CAB	See Table 1		
Page02	Adjusts volume of super-high frequencies.		Selects cabinet.				
040 VX COMBO 	Modeled sound of a VOX AC30 combo amplifier operating in Class A.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tube	0-100	Level
Page02	Adjusts the gain.		Adjusts tube amp compression.		Adjusts the output level.		
Page03	Trebl	0-100		Middl	0-100	Bass	0-100
Page02	Adjusts volume of high frequencies.		Adjusts volume of middle frequencies.		Adjusts volume of low frequencies.		
Page03	Prese	0-100		CAB	See Table 1		
Page02	Adjusts volume of super-high frequencies.		Selects cabinet.				
041 US BLUES 	Crunch sound of a Fender Tweed Bassman.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tube	0-100	Level
Page02	Adjusts the gain.		Adjusts tube amp compression.		Adjusts the output level.		
Page03	Trebl	0-100		Middl	0-100	Bass	0-100
Page02	Adjusts volume of high frequencies.		Adjusts volume of middle frequencies.		Adjusts volume of low frequencies.		
Page03	Prese	0-100		CAB	See Table 1		
Page02	Adjusts volume of super-high frequencies.		Selects cabinet.				
042 BG CRUNCH 	Crunch sound of a Mesa Boogie MkIII combo amp.						
		Knob1		Knob2		Knob3	
	Page01	Gain	0-100	P	Tube	0-100	Level
Page02	Adjusts the gain.		Adjusts tube amp compression.		Adjusts the output level.		
Page03	Trebl	0-100		Middl	0-100	Bass	0-100
Page02	Adjusts volume of high frequencies.		Adjusts volume of middle frequencies.		Adjusts volume of low frequencies.		
Page03	Prese	0-100		CAB	See Table 1		
Page02	Adjusts volume of super-high frequencies.		Selects cabinet.				








043	HW STACK	Modeled sound of the legendary Hiwatt Custom 100 all-tube amplifier from the UK.										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								
044	TANGERINE	This models the Orange Graphic 120 with its unique design and sound.										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								
045	MS CRUNCH	The crunch sound of the Marshall 1959 that has given birth to many legends.										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								
046	MS DRIVE	The high gain sound of a JCM2000 Marshall stack amp.										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								
047	BG DRIVE	The high gain sound of the Mesa Boogie Dual Rectifier red channel (Vintage mode).										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								
048	DZ DRIVE	The 3-channel high gain sound of a Diezel Herbert, which is a handmade German guitar amplifier that allows control of three independent channels.										
		Knob1		Knob2		Knob3						
	Page01	Gain	0-100		P	Tube	0-100		Level	0-150		
		Adjusts the gain.			Adjusts tube amp compression.			Adjusts the output level.				
	Page02	Trebl	0-100			Middl	0-100			Bass	0-100	
		Adjusts volume of high frequencies.			Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.				
	Page03	Prese	0-100			CAB	See Table 1					
	Adjusts volume of super-high frequencies.			Selects cabinet.								








Effect Types and Parameters

049	TW ROCK	This crunch sound uses the drive channel of a Two Rock Emerald 50, an American boutique amplifier.											
		Page01	Knob1				Knob2			Knob3			
			Gain	0-100		P	Tube	0-100		Level	0-150		
			Adjusts the gain.				Adjusts tube amp compression.			Adjusts the output level.			
Page02	Trebl	0-100			Middl	0-100		Bass	0-100				
	Adjusts volume of high frequencies.				Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.					
Page03	Prese	0-100			CAB	See Table 1							
	Adjusts volume of super-high frequencies.				Selects cabinet.								
050	MATCH 30	Modeled sound of a DC-30 (channel 1), the Matchless flagship combo amp.											
		Page01	Knob1				Knob2			Knob3			
			Gain	0-100		P	Tube	0-100		Level	0-150		
			Adjusts the gain.				Adjusts tube amp compression.			Adjusts the output level.			
Page02	Trebl	0-100			Middl	0-100		Bass	0-100				
	Adjusts volume of high frequencies.				Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.					
Page03	Prese	0-100			CAB	See Table 1							
	Adjusts volume of super-high frequencies.				Selects cabinet.								
051	FD VIBRO	Modeled sound of a '63 Fender Vibroverb.											
		Page01	Knob1				Knob2			Knob3			
			Gain	0-100		P	Tube	0-100		Level	0-150		
			Adjusts the gain.				Adjusts tube amp compression.			Adjusts the output level.			
Page02	Trebl	0-100			Middl	0-100		Bass	0-100				
	Adjusts volume of high frequencies.				Adjusts volume of middle frequencies.			Adjusts volume of low frequencies.					
Page03	Prese	0-100			CAB	See Table 1							
	Adjusts volume of super-high frequencies.				Selects cabinet.								
052	Tremolo	This effect varies the volume at a regular rate.											
		Page01	Knob1				Knob2			Knob3			
			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.												
053	Slicer	This effect creates a rhythmic sound by continuously slicing the input.											
		Page01	Knob1				Knob2			Knob3			
			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.								
054	Phaser	This effect adds a phasing variation to the sound.											
		Page01	Knob1				Knob2			Knob3			
			Rate	1-50			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.			
Page02													
055	The Vibe	This vibe sound features unique undulations.											
		Page01	Knob1				Knob2			Knob3			
			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.					








056 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.							
057 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.										
058 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	Tone	0-10			Level	0-150					
	Adjusts the tone.			Adjusts the output level.							
059 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	-25-25			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					
	Adjusts the tone.			Adjusts the output level.							
060 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.										
061 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	Tone	0-10			Level	0-150					
	Adjusts the tone.			Adjusts the output level.							
062 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.							








Effect Types and Parameters

	063 VinFLNGR This analog flanger sound is similar to an MXR M-117R.						
		Knob1		Knob2		Knob3	
	Page01	Depth	0-100	Rate	0-50	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.		
	064 Flanger This is a jet sound like an ADA flanger.						
		Knob1		Knob2		Knob3	
	Page01	Depth	0-100	Rate	0-50	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.		
	065 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	Sense	-10-1, 0, 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.				
	066 Vibrato This effect automatically adds vibrato.						
		Knob1		Knob2		Knob3	
	Page01	Depth	0-100	Rate	0-50	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.				
	067 Octave This effect adds sound one octave and two octaves below the original sound.						
		Knob1		Knob2		Knob3	
	Page01	Oct1	0-100	Oct2	0-100	Dry	0-100
	Adjusts the level of the sound one octave below the effect sound.		Adjusts the level of the sound two octaves below the effect sound.		Adjusts the volume of the unaffected sound.		
Page02	Chara	0-100	Tone	0-10	Level	0-150	
	Adjusts effect character.		Adjusts the tone.		Adjusts the output level.		
	068 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
	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 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
	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.				








070 HPS 	This intelligent pitch shifter outputs the effect sound with the pitch shifted 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
Page02	Tone	0-10	Level	0-150				
		Adjusts the tone.		Adjusts the output level.				
		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.		
071 BendCho 	This effect provides pitch bending that uses the input signal as trigger and processes each note separately.							
		Knob1		Knob2		Knob3		
	Page01	Depth	0-100	Time	0-50	P	Bal	0-100
Page02	Mode	Up, Down	Tone	0-10	Level	0-150		
		Adjusts the effect depth.		Sets time before effect starts.		Adjusts the balance between original and effect sounds.		
		Sets direction of pitch bend.		Adjusts the tone.		Adjusts the output level.		
072 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
Page02	Level	0-150						
		Adjusts the output level.		Adjusts the tone.		Adjusts the balance between original and effect sounds.		
		Sets the frequency of the modulation.		Adjusts the tone.		Adjusts the balance between original and effect sounds.		
073 BitCrush 	This effect creates a lo-fi sound.							
		Knob1		Knob2		Knob3		
	Page01	Bit	4-16	P	SMPL	0-50	Bal	0-100
Page02	Tone	0-10	Level	0-150				
		Adjusts the tone.		Adjusts the output level.		Adjusts the balance between original and effect sounds.		
		Sets bit depth.		Sets sampling rate.		Adjusts the balance between original and effect sounds.		
074 Bomber 	This effect produces an explosive sound when picking.					FS	Trigger	
		Knob1		Knob2		Knob3		
	Page01	PTRN	HndGn, Arm, Bomb, Thndr	Decay	1-100	P	Bal	0-100
Page02	THRSH	0-50	Power	0-30	Tone	0-10		
Page03	Level	0-150						
		Adjusts the output level.		Adjusts strength of explosive sound.		Adjusts the balance between original and effect sounds.		
		Sets type of effect sound.		Sets length of reverberations.		Adjusts the balance between original and effect sounds.		
		Adjusts effect threshold.		Adjusts strength of explosive sound.		Adjusts the tone.		
075 MonoSynth 	This effect produces the sound of a monophonic (single-note playing) guitar synthesizer that detects the pitch of the input signal.							
		Knob1		Knob2		Knob3		
	Page01	Synth	0-100	Dry	0-100	Level	0-150	
Page02	Wave	Sine, Tri, SawUp, SawDn	Tone	0-10	Speed	0-100	P	
		Adjusts synthesizer sound level.		Adjusts level of original sound.		Adjusts the output level.		
		Sets waveform.		Adjusts the tone.		Adjusts smoothness of pitch change.		
076 Z-Organ 	This effect simulates an organ sound.							
		Knob1		Knob2		Knob3		
	Page01	Upper	0-100	P	Lower	0-100	Dry	0-100
Page02	HPF	0-10	LPF	0-10	Level	0-150		
		Adjusts volume of high frequencies.		Adjusts volume of low frequencies.		Adjusts level of original sound.		
		Adjusts high-pass filter cutoff frequency.		Adjusts low-pass filter cutoff frequency.		Adjusts the output level.		









Effect Types and Parameters

077 Delay 	This long delay has a maximum length of 5000 mS.				FS	Hold, InputMute	
		Knob1		Knob2		Knob3	
	Page01	Time	1-5000	FB	0-100	Mix	0-100
Page02	HiDMP	0-10	P-P	MONO, P-P	Level	0-150	
Sets the delay time.		Adjusts the feedback amount.		Adjusts the amount of effected sound that is mixed with the original sound.			
Adjusts the treble attenuation of the delay sound.		Sets delay output to mono or ping-pong.		Adjusts the output level.			
078 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	FB	0-100	Mix	0-100
Page02	HiDMP	0-10	Level	0-150			
Sets the delay time.		Adjusts the feedback amount.		Adjusts the amount of effected sound that is mixed with the original sound.			
Adjusts the treble attenuation of the delay sound.		Adjusts the output level.					
079 ModDelay 	This delay effect allows the use of modulation.				FS	InputMute	
		Knob1		Knob2		Knob3	
	Page01	Time	1-2000	FB	0-100	Mix	0-100
Page02	Rate	1-50	Level	0-150			
Sets the delay time.		Adjusts the feedback amount.		Adjusts the amount of effected sound that is mixed with the original sound.			
Sets the speed of the modulation.		Adjusts the output level.					
080 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	FB	0-100	Mix	0-100
Page02	HiDMP	0-10	P-P	MONO, P-P	Level	0-150	
Sets the delay time.		Adjusts the feedback amount.		Adjusts the amount of effected sound that is mixed with the original sound.			
Adjusts the treble attenuation of the delay sound.		Sets delay output to mono or ping-pong.		Adjusts the output level.			
081 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	FB	0-100	Bal	0-100
Page02	HiDMP	0-10	Level	0-150			
Sets the delay time.		Adjusts the feedback amount.		Adjusts the balance between original and effect sounds.			
Adjusts the treble attenuation of the delay sound.		Adjusts the output level.					
082 MultiTapD 	This effect produces several delay sounds with different delay times.				FS	InputMute	
		Knob1		Knob2		Knob3	
	Page01	Time	1-3000	PTRN	1-8	Mix	0-100
Page02	Tone	0-10	Level	0-150			
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.			
Adjusts the tone.		Adjusts the output level.					
083 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
Page02	FB	0-100	Level	0-150			
Sets the delay time.		Adjusts the effect sensitivity.		Adjusts the amount of effected sound that is mixed with the original sound.			
Adjusts the feedback amount.		Adjusts the output level.					

084	FilterDly	This effect filters a delayed sound.				FS	InputMute
		Knob1		Knob2		Knob3	
	Page01	Time	1-2000	FB	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	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.							
085	PitchDly	This effect applies pitch shift to a delayed sound.				FS	InputMute
		Knob1		Knob2		Knob3	
	Page01	Time	1-2000	Pitch	-12-12	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	FB	0-100	Tone	0-10	Level	0-150
Adjusts the feedback amount.		Adjusts the tone.		Adjusts the output level.			
086	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
		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.					
087	PhaseDly	This effect applies a phaser to a delayed sound.				FS	InputMute
		Knob1		Knob2		Knob3	
	Page01	Time	1-2000	FB	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	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.			
088	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
		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.					
089	HD Reverb	This is a high-definition reverb.				FS	InputMute
		Knob1		Knob2		Knob3	
	Page01	Decay	0-100	Tone	0-10	Mix	0-100
		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.			
090	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
		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.					

Effect Types and Parameters

091 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.					
092 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.					
093 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.					
094 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.					
095 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.					
096 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.					
097 Comp+OD	This effect combines compressor and overdrive.						
	Knob1		Knob2		Knob3		
	Page01	Comp 0-10	Gain 0-100	P Level 0-150			
	Sets compressor strength.		Sets overdrive gain.		Adjusts the output level.		
	Page02	Tone 0-100					
Sets overdrive tone.							

098 Comp+Phsr 	This effect combines compressor and phaser.									
		Knob1			Knob2			Knob3		
	Page01	Comp	0-10		Rate	1-50		P	Level	0-150
099 Comp+AWah 	This effect combines compressor and auto-wah.									
		Knob1			Knob2			Knob3		
	Page01	Comp	0-10		Sense	-10-1, 1-10		P	Level	0-150
100 Cho+Dly 	This effect combines chorus and delay.									
		Knob1			Knob2			Knob3		
	Page01	ChoRt	1-50		ChoMx	0-100		P	DlyTm	1-2000
101 Dly+Rev 	This effect combines delay and reverb.									
		Knob1			Knob2			Knob3		
	Page01	DlyTm	1-2000		DlyMx	0-100		P	RevMx	0-100
102 Cho+Rev 	This effect combines chorus and reverb.									
		Knob1			Knob2			Knob3		
	Page01	ChoRt	1-50		ChoMx	0-100		P	RevMx	0-100
103 FLG+VCho 	This effect combines flanger and vintage chorus.									
		Knob1			Knob2			Knob3		
	Page01	FlgDp	0-100		FlgRt	0-50			ChoMx	0-100
104 PedalVox 	This simulates a vintage Vox wah pedal.									
		Knob1			Knob2			Knob3		
	Page01	Freq	1-50		DryMX	0-100			Level	0-150
105 PedalCry 	This simulates a vintage CRYBABY wah pedal.									
		Knob1			Knob2			Knob3		
	Page01	Freq	1-50		DryMX	0-100			Level	0-150

Effect Types and Parameters



106	PDL Pitch	Use an expression pedal to change the pitch in real time with this effect.								
	Page01	Knob1			Knob2			Knob3		
		Color	1-9 (See Table 3)		Tone	0-10		Bend	0-100	
	Page02	Sets the type of pitch change control with the expression pedal.			Adjusts the tone.			Sets the amount of pitch shift.		
		Mode	Up, Down		Level	0-150				
		Sets the direction of the pitch change to Up or Down.			Adjusts the output level.					
107	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.								
	Page01	Knob1			Knob2			Knob3		
		Color	1-9 (See Table 3)		Tone	0-10		Bend	0-100	
	Page02	Sets the type of pitch change control with the expression pedal.			Adjusts the tone.			Sets the amount of pitch shift.		
		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
FD COMBO 2x12	Fender Twin Reverb ('65) cabinet with 2x12-inch Jensen speakers
VX COMBO 2x12	Vox AC30 cabinet with 2x12-inch Celestion Alnico speakers
US BLUES 4x10	Fender Tweed Bassman cabinet with 4x10-inch Jensen speakers
BG CRUNCH 1x12	Mesa Boogie MkIII cabinet with 1x12-inch Electro Voice speaker
HW STACK 4x12	Hiwatt Custom 100 cabinet with 4x12-inch Fane speakers
TANGERINE 4x12	Orange Graphic 120 cabinet with 4x12-inch Celestion speakers
MS CRUNCH 4x12	Marshall 1959 cabinet with 4x12-inch Celestion speakers
MS DRIVE 4x12	Marshall JCM2000 cabinet with 4x12-inch Celestion speakers
BG DRIVE 4x12	Mesa Boogie Dual Rectifier cabinet with 4x12-inch Celestion speakers
DZ DRIVE 4x12	Diezel Herbert cabinet with 4x12-inch Celestion speakers
TW ROCK 1x12	Two Rock Emerald 50 cabinet with 1x12-inch Fane speaker
MATCH 30 2x12	Matchless DC30 cabinet with 2x12-inch Celestion speakers
FD VIBRO 2x10	Fender Vibroverb ('63) cabinet with 2x10-inch Jensen speakers
OFF	No cabinet used.

Table 2

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

Table 3

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

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 OUTPUT parameter according to the output equipment.
- Set the Active/Passive switch according to the type of guitar pickups or the device connected directly to the **GB**.

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 (→P21).

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.

Specifications

Effect types	107 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 monaural phone jack Rated input level -20dBm Input impedance 1MΩ ACTIVE/PASSIVE (switch selectable)	
Output R	Standard monaural 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	
S/N (equivalent input noise)	120dB	
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	170mm(D) x 234mm(W) x 54mm(H)	
USB	USB Audio	
Weight	1.2kg	
Options	FP01/FP02 expression pedal and FS01 foot switch	

• 0dBm = 0.775Vrms

Rhythm List

#	PatternName	TimSig
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
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

#	PatternName	TimSig
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
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	

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



Declaration of Conformity:

This product complies with the requirements of EMC Directive 2004/108/EC, Low Voltage Directive 2006/95/EC and ErP Directive 2009/125/EC



Disposal of Old Electrical & Electronic Equipment

(Applicable in European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

ZOOM

ZOOM CORPORATION

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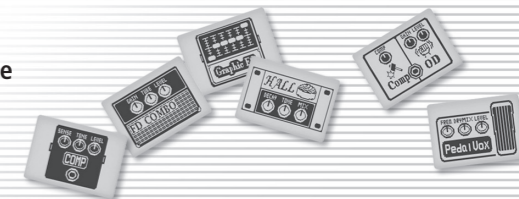
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G3 Guitar Effects & Amp Simulator

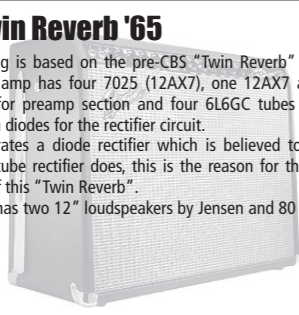
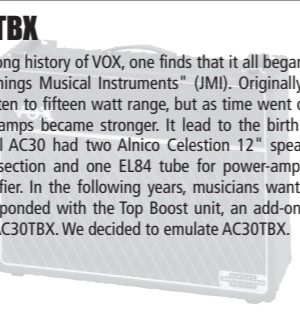
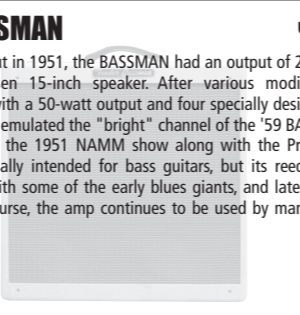
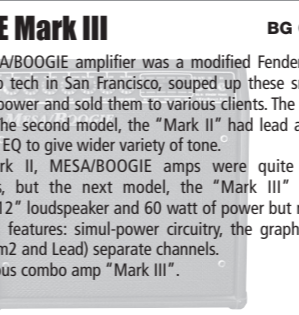
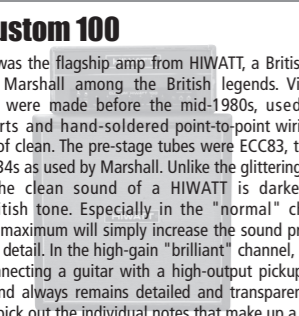
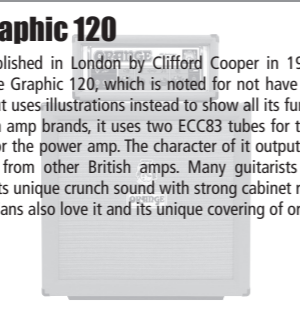
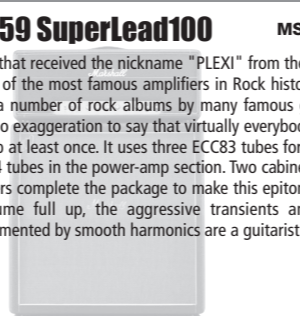
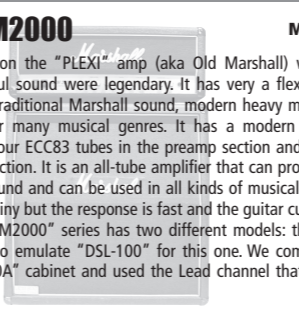
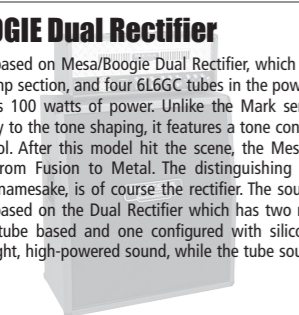
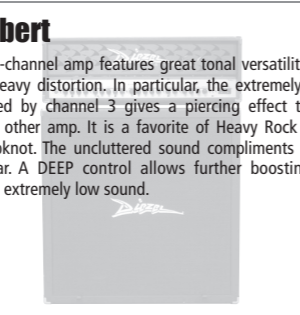
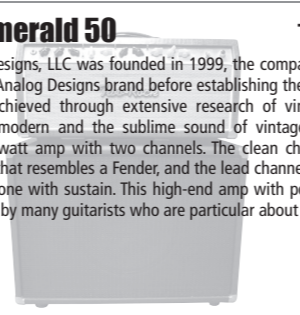
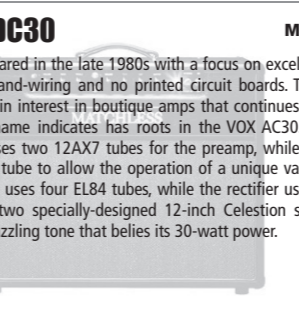
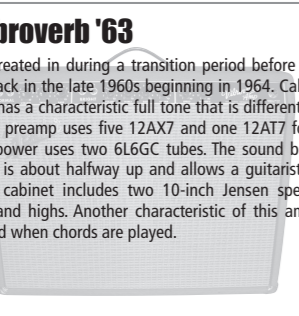
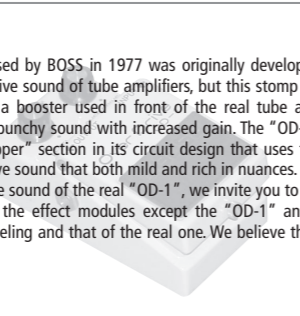
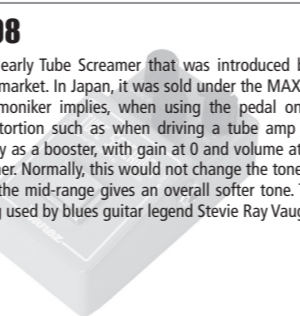
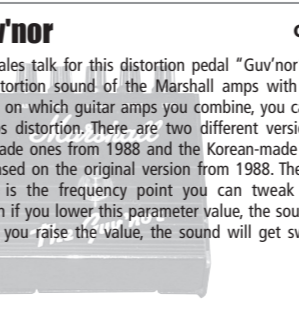
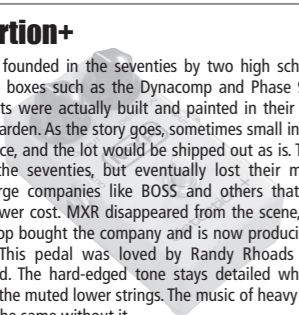
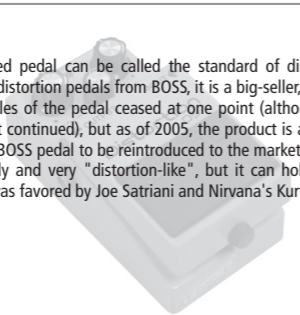
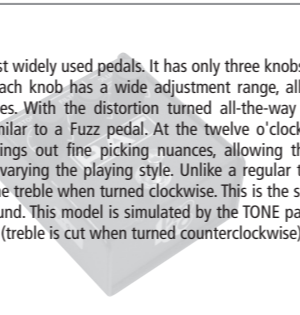
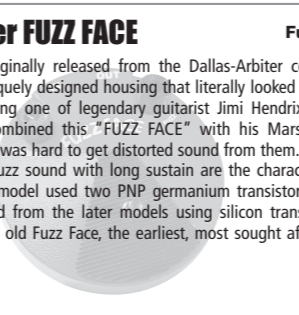

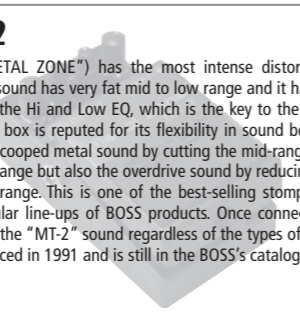
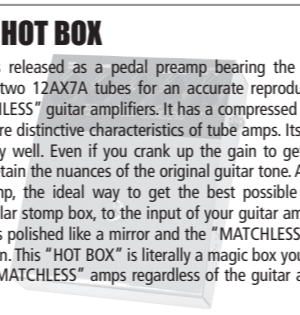

When trying preset patches with a guitar amp, refer to the “Recommended settings for use with typical guitar amps” on the back of this page.

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	Patch Name	Comment	
A	0 TW Crunch	This crunch sound uses modeling of a Two Rock amp. The light distortion is perfect for backing parts. You can also turn OverDrive ON to get a lead tone with sustain.	
	1 Cut Edge	This cutting sound will remind you of 80s new wave. With the sensitivity of the compressor set so that it responds slowly, the attack is emphasized more when picking. This is perfect for guitars with single coil pickups.	
	2 VX DRIVE	This drive sound uses Vox AC30TBX modeling and features high-frequency characteristic typical of alnico speakers.	
	3 JB Talk	This is a re-creation of the talking modulator sound that can be heard on Jeff Beck's rendition of Superstition.	
	4 MS FULLUP	This is a re-creation of the sound of the universally-loved vintage Marshall amp set to full-up. Compared to modern high-gain amps, this sound features a unique saturation.	
	5 Strings	This combination of slow attack and stereo delay effects give guitar chords the beautiful sound of a string section. Play long chords slowly with this one.	
	6 Elegant	Starting with a tone that stands out well, the combination of short and long delays provides an elegant sound for soloing.	
	7 Super Dry	By setting the threshold of the Noise Gate rather high, the sonic waves seem like they are being cut off in this echoless riffing sound.	
	8 HW STACK	This crunch sound uses Hiwatt Custom 100 modeling. This patch is great for use with humbucker pickups.	
B	9 Horizons	A combination of Acoustic, Chorus and Delay+Reverb provides a beautiful acoustic guitar simulation with a warm lush chorus, delay and reverb that smooths out every passage. Great for acoustic rhythm and leads!	
	0 Angra	This drive sound is like the one used by Kiko Loureiro playing lead in Angra. The key is the use of a small amount of delay.	
	1 Percussive	This sound is perfect for percussive 16th-note muted backing parts. The keys are the compressor that brings out the attack and the movement of the phaser.	
	2 JTM45	This sound is based on the Marshall JTM45 and combines modeling of a Bassman preamp and a Marshall 1960 cabinet.	
	3 MetalChor	A combination of Metal World, Graphic EQ and Stereo Chorus to create a very big and wide rock sound. Great for all rhythm and leads for that huge hard rock tone.	
	4 Fat Boost	This fat rhythm tone adds a Booster effect to the Marshall preamp and Bassman cabinet modeling combo.	
	5 Rockabilly	The slap delay is strong in this rockabilly sound, and the tremolo adds a retro feel.	
	6 DoublePick	A punchy aggressive clean sound great for picked chords or palm-muted, percussive picking.	
	7 MachineGun	Inspired by Jimi Hendrix's Machine Gun, this patch uses The Vibe, which is modeled after the Univibe, to generate a unique vibrato.	
C	8 S.R.V.	Fender Bassman modeling is used to get Stevie Ray Vaughan's blues tone.	
	9 10 inch	Ballsy, nasty, heavy sound from all 10 inches.	
	0 Metal	This forceful metal tone brings up the low end. The Delay effect is set to ping-pong to add stereo width.	
	1 Octo Stomp	A combination of Octave, Z MP1 and Arena Reverb provides a great heavy tone with a haunting octave effect that lays underneath and a huge reverb that smooths and follows! Makes everything sound huge!	
	2 Pure Arp	This bright, clear arpeggio tone brings out lovely harmonics in a tube amp sound.	
	3 Fix My Wah	A combination of Metal world, Graphic EQ and Pedal Vox which creates a high-gain rock sound with a wah effect that is fixed to one frequency. Graphic EQ adds some bite on top. Great for rock soloing!	
	4 Dreaming	When playing long chords, this filtered sound is like bubbles that appear and soon fade away, creating a dreamlike comfortable feeling.	
	5 NoseHarp	Percussive and melodic mono synth with a bit of flange to spice it up.	
	6 SHIMMR MAN	Combination of Acoustic, Rack Comp and HD Reverb. Shimmering clean chords ring out with acoustic guitar like qualities.	
D	7 Destroyer	WARNING! WARNING! Explosive sound using Bomber effect. USE AT YOUR OWN RISK!	
	8 STRT SHRED	Combination of OverDrive, Stereo Delay and Tangerine. This tone is designed for fast leads and sweeping arpeggios with a touch of delay.	
	9 Velvet Sky	A combination of Flanger Vintage Chorus, Delay+Reverb and the Rack Comp that produces a very lush, clean flanging effect with reverb, delay and nice compression. Great for spacious type clean passages.	
	0 BROKEN	Combination of Dirty Gate and Z Wild sounds like a failing speaker. Interesting response when playing rhythm guitar parts with chord stabs and continuous eighth note percussive strokes.	
	1 MinimalSeq	This sequencer sound combines Seq Filter, Warp Phaser and Filter Delay effects. All three effects are synced to the tempo, so this patch is very effective when used with a rhythm or the looper.	
	2 Soft Touch	The gentle, enveloping chord sound results from providing a warm clear tone with spatial effects.	
	3 UNDERWORLD	Combination of Parametric EQ, Resonance and LEAD ZOOM 9002. Auto-wah effect with super-low sub-bass tracking. Play a rhythmic pattern or hit one sustaining chord for interesting overtones.	
	4 MoogMe	A warm fuzzy synth sound. Great for single-note low-end growl.	
	5 Welcome	Welcome to Space. Try single note combinations and hear the planets collide.	
E	6 FuzzLead	This fuzz tone provides a strong lead tone whether you are using a guitar with single coil or humbucker pickups.	
	7 FD CLEAN	Fender Twin Reverb modeling is used for this clean sound. Turn the tremolo on to get the vibrato effect of the Twin Reverb.	
	8 Church	Spacious Organ overtones for a wide ambient soundscape.	
	9 Legato	The Air effect contributes to a solo sound that adds a reverberation like that of a wind instrument. This patch is good for legato-style playing.	
	0 U2Edge	This is a dotted eighth note delay sound like that employed by U2's guitarist The Edge. The Stereo Delay effect sends the sound left and right.	
	1 DZ DRIVE	This high-gain sound uses Diezel Herbert amp modeling. By setting the ZNR DETECT parameter to GtrIn, unnecessary noise is shut out.	
	2 MuffDrive	Great Muff for monstrous riffs with monstrous loads of gain and sustain. Adjust the Room Reverb for a more spacious beast.	
	3 NiceMiddle	By adding the distortion of the T Scream amp model, a dense mid-range tone suitable for soloing is produced.	
	4 FD TWANG	This twangy crunch sound uses Fender Twin Reverb modeling. By putting the Spring Reverb before the amp, the reverberations are also slightly distorted.	
F	5 Heavy	Noisy midrange distortion. Great for getting on top of a mix if you need to get rowdy and obnoxious.	
	6 Tsugaru	By using the pitch shifting of the Bend Chorus effect, a sound reminiscent of the traditional Japanese Tsugaru Shamisen is generated. To maximize this similarity use the rear pickup on a guitar with single coil pickups and pick eighth notes with downward strokes.	
	7 TIME BOMB	Combination of Comp, T Scream and Tangerine. A vintage amp on the verge of exploding. Great for aggressive rhythms or solos.	
	8 Luscious	A combination of the Acoustic, Arena Reverb and Filter Delay creates a beautiful acoustic sound with a great luscious reverb that swallows you whole and a Filter Delay to give some depth to the sound.	
	9 Glam-Rock	This patch uses Orange Graphic 120 modeling to capture a glam rock sound. Two Booster effects jack the mid range up hard.	
	G	0 Automatic	This patch uses the Slicer to generate an automatic backing rhythm. This is a great sound for playing guitar along to electro-style dance music.
		1 RETRO LEAD	Combination of BG Crunch, OverDrive and Air. Clear lead tone with all the sustain and none of the fuzz.
		2 ZZ	This crunch sound was inspired by ZZ Top's Doubleback. Try it with a guitar that has humbucker pickups.
		3 Nash.UK	This is a country sound that uses the modeled sound of the British Vox AC30TBX amp. Perfect with a Telecaster.
4 YngDrive		This shred tone is inspired by Yngwie. Run up a harmonic minor scale on a Strat with this one!	
5 RECT DRIVE		This high-gain sound uses Mesa Boogie Dual Rectifier modeling. An optimal gain setting and the Hall Reverb produce a sound that is excellent for riffing.	
6 TnSpank		The sound is good for country soloing when you need clear attack.	
7 VX COMBO		This crunch sound uses Vox AC30TBX modeling. Turn the Stereo Chorus effect on for a wide arpeggio tone.	
8 SonicFilta		A combination of HW Stack and Filter Delay to create a biting Edge type sound but with a great filter effect and lush delay to follow! Great for rhythm and chordal soloing!	
H	9 TANGERINE	This crunch sound uses Orange Graphic 120 modeling. The combination of the HD Reverb adds dense reverberations.	
	0 CmpCutting	This clean cutting sound combines Comp and Phaser effects. Turn the Auto Wah on to add accents to your playing.	
	1 MATCH DRV	This drive sound uses Matchless DC30 modeling. Turn the Booster ON to crank up the gain even more.	
	2 Standard	This Patch combines chorus, tape echo and spring reverb effects. Add your own favorite drive effect for a setup that is suitable for all kinds of genres.	
	3 Juice	This natural crunch sound adds a detune effect to thicken the sound. This patch is perfect for backing parts with power chords.	
	4 Chalk	This slightly distorted crunch sound has a characteristic mid-range. This patch stands out for its unique atmosphere and feeling of space.	
	5 Start	Inspired by Kiko Loureiro, the guitarist of Angra, this lead tone has a great playing feel.	
	6 HeadCrush	This drive sound was inspired by Megadeth's Endgame album.	
	7 LstRythm	This patch re-creates the rhythm guitar sound on Megadeth's My Last Words.	
I	8 Surf	This is a surf guitar sound with plenty of reverb. The Rack Comp effect gives it a strong attack.	
	9 US BLUES	This light blues sound uses Fender Bassman modeling. The combination of Air and Room reverb effects yields a three-dimensional sound.	
	0 DeepArpe	The combination of Chorus and Stereo Chorus effects creates a sound that is great for arpeggios.	
	1 DoubleOD	The T Scream is used to make a bedrock sound for backing parts. Turn on the OverDrive, which is set to provide a boost, to get the sustain necessary for a lead part. Use the analog delay as you like.	
	2 Guv Boost	This crunch sound uses the Governor effect. The Z Clean is ready to be used to provide a full range boost. You can turn the volume up without changing the gain.	
	3 HotBoxFaze	A combination of the Phaser, Hot Box and Noise Gate creates a rockin' overdriven tone with a great swelling phaser and noise gate to quiet it up. Classic in your face Eruption type of solo sound!	
	4 Open Wah	Combination of Comb Filter, OverDrive and FD Combo. Using the comb filter creates the sound of an open wah through a vintage tube combo. Try this when overdubbing secondary rhythm guitar tracks.	
	5 RabbitHole	Trippy Pitch Delay. Great for dark creepy melody lines.	
	6 Sliders	A combination of the Bend Chorus, Metal World and Noise Gate creates an amazingly different effect of recreating sliding into a note or chord just by striking one note or chord without hand movement.	
J	7 SoDumbize	Infectious filtered grooves.	
	8 TapGuns	These added rhythm effects can bring percussive overtones to any idea.	
	9 ToneAge	For all your stoner rock needs.	
	0 Echo Run	A combination of the MATCH 30, Stereo Delay & Graphic EQ creates a clean dual time delay effect with some edge from the Graphic EQ. Great for staccato single note rhythm patterns.	
	1 GetWet	Rich and wet. Adjust the Time settings for a wide range of lush tones.	
	2 TW LEAD	This lead tone uses Two Rock modeling. The combination of analog delay and hall reverb harmonizes perfectly.	
	3 Guitar!&2	Who needs another guitar player? This patch will fatten things up nicely.	
	4 Crw.Solo	This patch uses T Scream to add a boost to Diezel Herbert modeling. Analog delay is added for a solo sound.	
	5 Aphex	In your face stutter effect for percussive attack. Try hitting harmonics or single notes to create a digital glitch effect.	
K	6 JAZZ BED	A combination of Delay + Reverb and Comp for complex jazz chord voicings that ring out clear and sustain long.	
	7 Minor SWG	This patch uses the Acoustic effect to simulate a Maccaferri-type guitar popular in gypsy jazz. Use the front humbucker with this one.	
	8 Translator	A combination of Cry, Step and Air. Try playing a continuous funk guitar line. The step filter adds an interesting effect when combined with the Auto Wah.	
	9 Funk JZ	Starting with a slightly crunchy drive sound, chorus is added for flavor to get a sonic character used frequently in funky jazz.	
	0 MetaFlange	A combination of Extreme Distortion, Flanger and Noise Gate provides a brutal high-gain distortion with a flanger effect and gate to keep it quiet. All around great Hard Rock tone!	
	1 UNDER WATR	A combination of Chorus + Reverb and Comp + Auto Wah for an interesting clean sound for extended chord voicings.	
	2 Police	This delay sound was inspired by Walking On The Moon by The Police.	
	3 Nirvana	This distortion sound was modeled after the guitar sound of Nirvana's Kurt Cobain. The combination of Dist 1 and Chorus represent typical effect settings that he used.	
	4 TriDelay	This set up includes tape echo, filter delay and mod delay effects. You can turn these delay effects on and off as needed, or use all three at once if you like.	
L	5 PurpleRain	This patch is inspired by Prince's Purple Rain. The width of the sound that you feel when you play an arpeggio with this patch is from heavy use of the Stereo Delay effect.	
	6 2000 DRIVE	This drive sound uses Marshall JCM2000 modeling. This is great for guitars with rear humbucker pickups.	
	7 FlyReverse	Stereo chorus and reverse delay are combined for a clean sound.	
	8 30 CLEAN	This clean tone uses Matchless DC30 modeling. The bright tone and cabinet resonance are its features.	
	9 DreamSeq	This is a spacey sound realized by combining Z Dream, Seq Filter and Stereo Delay effects. All you have to do to make music with this patch is turn the volume up on your guitar!	

G3 Modeling Description Reference for drive effect types and its original models.

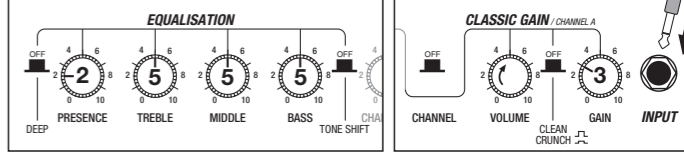
<p>Fender Twin Reverb '65 FD COMBO</p> <p>This amp modeling is based on the pre-CBS "Twin Reverb" from 1965 aka "Blackface". This amp has four 7025 (12AX7), one 12AX7 and two 12AT7 total of 7 tubes for preamp section and four 6L6GC tubes for power-amp section and silicon diodes for the rectifier circuit. The amp incorporates a diode rectifier which is believed to give a tighter sound to than a tube rectifier does, this is the reason for this characteristic glittering sound of this "Twin Reverb". The original amp has two 12" loudspeakers by Jensen and 80 watts of output power.</p> 	<p>VOX AC30TBX VX COMBO</p> <p>Tracing back the long history of VOX, one finds that it all began in 1958 under the moniker "Jennings Musical Instruments" (JMI). Originally, this company built amps in the ten to fifteen watt range, but as time went on, the demand for higher-power amps became stronger. It led to the birth of the famous AC30. The original AC30 had two Alnico Celestion 12" speakers, one EF86 tube for preamp section and one EL84 tube for power-amp section, along with a GZ34 rectifier. In the following years, musicians wanted even higher gain, and VOX responded with the Top Boost unit, an add-on that was later integrated in the AC30TBX. We decided to emulate AC30TBX.</p> 	<p>Fender BASSMAN US BLUES</p> <p>When it first came out in 1951, the BASSMAN had an output of 26 watts and used a single Jensen 15-inch speaker. After various modifications, it reemerged in 1959 with a 50-watt output and four specially designed Jensen 10-inch speakers. We emulated the "bright" channel of the '59 BASSMAN. It was introduced at the 1951 NAMM show along with the Precision Bass. This amp was originally intended for bass guitars, but its reedy distortion made it a favorite with some of the early blues giants, and later with many rock guitarists. Of course, the amp continues to be used by many musicians today.</p> 	<p>MESA/BOOGIE Mark III BG CRUNCH</p> <p>The origin of the MESA/BOOGIE amplifier was a modified Fender Princeton. Randall Smith, an amp tech in San Francisco, souped up these small guitar amps to 100 watts of power and sold them to various clients. The first model was called "Mark I". The second model, the "Mark II" had lead and rhythm channels and a 4-band EQ to give wider variety of tone. Until the model Mark II, MESA/BOOGIE amps were quite expensive, hand-made amplifiers, but the next model, the "Mark III" was more affordable. It had one 12" loudspeaker and 60 watt of power but retained all of the classic BOOGIE features: simal-power circuitry, the graphic EQ, and three (Rhythm1, Rhythm2 and Lead) separate channels. We emulated this famous combo amp "Mark III".</p> 
<p>HIWATT Custom 100 HW STACK</p> <p>The Custom 100 was the flagship amp from HIWATT, a British manufacturer that ranks with Marshall among the British legends. Vintage HIWATT amplifiers, which were made before the mid-1980s, used high-graded military-spec parts and hand-soldered point-to-point wiring. Their sound was the epitome of clean. The pre-stage tubes were ECC83, the power tubes were the same EL34s as used by Marshall. Unlike the glittering clean sound of a Fender amp, the clean sound of a HIWATT is darker, having that characteristic British tone. Especially in the "normal" channel, turning up the volume to maximum will simply increase the sound pressure, without breakup or loss of detail. In the high-gain "brilliant" channel, slight distortion is possible by connecting a guitar with a high-output pickup such as a Les Paul. But the sound always remains detailed and transparent, allowing the listener to clearly pick out the individual notes that make up a chord.</p> 	<p>Orange Graphic 120 TANGERINE</p> <p>Orange was established in London by Clifford Cooper in 1968. Their most famous amp is the Graphic 120, which is noted for not have any writing on the front panel, but uses illustrations instead to show all its functions. As with many other British amp brands, it uses two ECC83 tubes for the preamp and four EL34 tubes for the power amp. The character of it output tone, however, is quite different from other British amps. Many guitarists of memorable bands have used its unique crunch sound with strong cabinet resonance. Even now, young musicians also love it and its unique covering of orange Tolex.</p> 	<p>Marshall 1959 SuperLead100 MS CRUNCH</p> <p>This 1959 stack amp that received the nickname "PLEXI" from the material of its front panel is one of the most famous amplifiers in Rock history. Its iconic sound was used on a number of rock albums by many famous guitarists all over the world. It is no exaggeration to say that virtually everybody has heard the sound of this amp at least once. It uses three ECC83 tubes for the preamp section and four EL34 tubes in the power-amp section. Two cabinets with four Celestion 12" speakers complete the package to make this epitome of British Rock. With the volume full up, the aggressive transients and resulting distortion are complemented by smooth harmonics are a guitarist dream.</p> 	<p>Marshall JCM2000 MS DRIVE</p> <p>"JCM2000" is based on the "PLEXI" amp (aka Old Marshall) whose rich overtones and powerful sound were legendary. It has vary a flexible sound and can produce the traditional Marshall sound, modern heavy metal sound or sounds suitable for many musical genres. It has a modern Marshall's standard circuit with four ECC83 tubes in the preamp section and four EL34 tubes for the power section. It is an all-tube amplifier that can produce clean or heavily distorted sound and can be used in all kinds of musical situations. The sound is rather grainy but the response is fast and the guitar cuts through the mix very well. "JCM2000" series has two different models: the TSL and the DSL. We decided to emulate "DSL-100" for this one. We combined this amplifier with a "1960A" cabinet and used the Lead channel that has more distortion.</p> 
<p>MESA/BOOGIE Dual Rectifier BG DRIVE</p> <p>This modeling is based on Mesa/Boogie Dual Rectifier, which has five 12AX7 tubes in the preamp section, and four 6L6GC tubes in the power-amp section, the amp produces 100 watts of power. Unlike the Mark series, this model gives more priority to the tone shaping, it features a tone control circuit after the volume control. After this model hit the scene, the Mesa/Boogie brand image changed from Fusion to Metal. The distinguishing feature of this amplifier, and its namesake, is of course the rectifier. The sound provided by this modeling is based on the Dual Rectifier which has two rectifier circuits, one of which is tube based and one configured with silicone diodes. The diodes create a tight, high-powered sound, while the tube sound is more soft and warm.</p> 	<p>Diesel Herbert DZ DRIVE</p> <p>This modern three-channel amp features great tonal versatility, ranging from a clean tone to heavy distortion. In particular, the extremely dry and gritty distortion produced by channel 3 gives a piercing effect that is hard to produce with any other amp. It is a favorite of Heavy Rock bands such as Metallica and Slipknot. The uncluttered sound compliments the tones of a tuned-down guitar. A DEEP control allows further boosting of the bass frequencies, for an extremely low sound.</p> 	<p>Two Rock Emerald 50 TW ROCK</p> <p>After K&M Analog Designs, LLC was founded in 1999, the company built ten amps with the K&M Analog Designs brand before establishing the TWO ROCK brand. Their tone, achieved through extensive research of vintage amps, combines both the modern and the sublime sound of vintage amps. The Emerald 50 is a 50-watt amp with two channels. The clean channel has a beautiful clean tone that resembles a Fender, and the lead channel allows you to get an extended tone with sustain. This high-end amp with point-to-point wiring is appreciated by many guitarists who are particular about their sound.</p> 	<p>MATCHLESS DC30 MATCH30</p> <p>Matchless, which appeared in the late 1980s with a focus on excellence, uses Class A circuits and hand-wiring and no printed circuit boards. They lit the fuse for the explosion in interest in boutique amps that continues today. The DC-30, as its model name indicates has roots in the VOX AC30. With two channels, channel 1 uses two 12AX7 tubes for the preamp, while channel 2 uses an EF86 pentode tube to allow the operation of a unique variable tone circuit. The power amp uses four EL84 tubes, while the rectifier uses a 5AR4. The cabinet contains two specially-designed 12-inch Celestion speakers. It features a powerful, dazzling tone that belies its 30-watt power.</p> 
<p>Fender Vibroverb '63 FD VIBRO</p> <p>This model was created in during a transition period before all Fender amp panels became black in the late 1960s beginning in 1964. Called the "Brown face," this model has a characteristic full tone that is different from the black panel models. The preamp uses five 12AX7 and one 12AT7 for a total of six tubes, while the power uses two 6L6GC tubes. The sound begins to distort when the volume is about halfway up and allows a guitarist to get a great crunch tone. The cabinet includes two 10-inch Jensen speakers that can output full lows and highs. Another characteristic of this amp is the sharp clarity of the sound when chords are played.</p> 	<p>BOSS OD-1 OverDrive</p> <p>The "OD-1" released by BOSS in 1977 was originally developed to simulate the natural overdrive sound of tube amplifiers, but this stomp box turned out to be popular as a booster used in front of the real tube amplifier to get tighter and more punchy sound with increased gain. The "OD-1" employs an asymmetrical "clipper" section in its circuit design that uses three diodes to create the overdrive sound that both mild and rich in nuances. If you are lucky enough to hear the sound of the real "OD-1", we invite you to try a blind test: to turn off all of the effect modules except the "OD-1" and compare the sound of this modeling and that of the real one. We believe that you will not hear a difference.</p> 	<p>Ibanez TS808 T Scream</p> <p>This modeled is the early Tube Screamer that was introduced by Ibanez in 1979 for the non-US market. In Japan, it was sold under the MAXON name as the OD808. As the moniker implies, when using the pedal on its own, it produces natural distortion such as when driving a tube amp hard. But it often was used simply as a booster, with gain at 0 and volume at 10, to drive an amp up even further. Normally, this would not change the tone of the amp, but a slight peak in the mid-range gives an overall softer tone. This pedal is also famous for being used by blues guitar legend Stevie Ray Vaughan.</p> 	<p>Marshall Guv'nor Governor</p> <p>The Marshall official sales talk for this distortion pedal "Guv'nor" was that you could get the distortion sound of the Marshall amps with this small stomp box. Depending on which guitar amps you combine, you can actually get the Marshall amps distortion. There are two different versions of the Guv'nor: the Britain-made ones from 1988 and the Korean-made ones from 1998. This model is based on the original version from 1988. The Guv'nor's characteristic feature is the frequency point you can tweak using the "TREBLE" control. Even if you lower this parameter value, the sound will get fat instead of dull. As you raise the value, the sound will get sweeter and clearer.</p> 
<p>MXR Distortion+ Dist +</p> <p>MXR, a company founded in the seventies by two high school students, is famous for stomp boxes such as the Dynacomp and Phase 90. In the early days, their products were actually built and painted in their garage and set out to dry in the garden. As the story goes, sometimes small insects would get stuck on the surface, and the lot would be shipped out as is. The pedals soon gained fame in the seventies, but eventually lost their market share to products from large companies like BOSS and others that provided high performance at lower cost. MXR disappeared from the scene, but in the late eighties, Jim Dunlop bought the company and is now producing a number of re-issue models. This pedal was loved by Randy Rhoads who made its "distortion" sound. The hard-edged tone stays detailed when playing fast solos or riffs with the muted lower strings. The music of heavy metal and hard rock wouldn't be the same without it.</p> 	<p>BOSS DS-1 Dist 1</p> <p>This orange-colored pedal can be called the standard of distortion sound. Among the many distortion pedals from BOSS, it is a big-seller, along with the SD-1. In Japan, sales of the pedal ceased at one point (although production for the U.S. market continued), but as of 2005, the product is available again. This was the only BOSS pedal to be reintroduced to the market in this fashion. The sound is trebly and very "distortion-like", but it can hold its own in a band. This pedal was favored by Joe Satriani and Nirvana's Kurt Cobain.</p> 	<p>PROCO RAT Squeak</p> <p>This is one of the most widely used pedals. It has only three knobs (Distortion, Filter, Volume), but each knob has a wide adjustment range, allowing for a variety of sound types. With the distortion turned all-the-way up, the fat, up-front sound is similar to a Fuzz pedal. At the twelve o'clock position, it gets crunchy and brings out fine picking nuances, allowing the player to tweak the sound by varying the playing style. Unlike a regular tone control, the filter knob cuts the treble when turned clockwise. This is the secret behind the typical "RAT" sound. This model is simulated by the TONE parameter, but operation is reversed (treble is cut when turned counterclockwise).</p> 	<p>Dallas-Arbitr FUZZ FACE FuzzSmile</p> <p>"FUZZ FACE" was originally released from the Dallas-Arbitr company in 1966 encased in a uniquely designed housing that literally looked like a face. It was famous for being one of legendary guitarist Jimi Hendrix's favorite pieces of gear. He combined this "FUZZ FACE" with his Marshall amps because at the time, it was hard to get distorted sound from them. The heavy, fat low end and the fuzz sound with long sustain are the characteristics of this unit. The earliest model used two PNP germanium transistors and was very different in sound from the later models using silicon transistors. The model is based on the old Fuzz Face, the earliest, most sought after version that was released.</p> 
<p>Electro-Harmonix BIG MUFF GreatMuff</p> <p>There are several versions of this pedal. This model is based on the so-called "Ram's Head" from the early seventies, characterized by very long sustain and rich distortion canvas. Players from the 70's associated with this sound are Carlos Santana and Robert Fripp of King Crimson. From the late eighties into the nineties, the grunge movement took over, with Nirvana's Cobain and J. Mascis of Dinosaur Jr. using the pedal to do their thing. Compared to an ordinary fuzz pedal, the BIG MUFF offers rich mid-range and detailed distortion that maintains presence, even when playing chords. The result is a wholly unique sound somewhere between distortion and fuzz.</p> 	<p>BOSS MT-2 MetalWRLD</p> <p>The "MT-2" ("METAL ZONE") has the most intense distortion of lot. Its unique distortion sound has very fat mid to low range and it has a parametric EQ in addition to the Hi and Low EQ, which is the key to the scooped metal sound. This stomp box is reputed for its flexibility in sound because you can not only get that scooped metal sound by cutting the mid-range and boosting the high and low range but also the overdrive sound by reducing the gain and boosting the mid-range. This is one of the best-selling stomp boxes among many of the popular line-ups of BOSS products. Once connected, a Strat or Les Paul will have the "MT-2" sound regardless of the types of guitar pickups. It was first introduced in 1991 and is still in the BOSS's catalog today!</p> 	<p>MATCHLESS HOT BOX HotBox</p> <p>The "HOT BOX" was released as a pedal preamp bearing the MATCHLESS brand name. It uses two 12AX7A tubes for an accurate reproduction of the sound of the "MATCHLESS" guitar amplifiers. It has a compressed sound and a quick response that are distinctive characteristics of tube amps. Its sound is fat and cuts through very well. Even if you crank up the gain to get a distorted sound, you will still retain the nuances of the original guitar tone. Although it is categorized as preamp, the ideal way to get the best possible sound is to connect it, like a regular stomp box, to the input of your guitar amp. Its design features a case that is polished like a mirror and the "MATCHLESS" logo lights up when you turn it on. This "HOT BOX" is literally a magic box you can get the signature sound of "MATCHLESS" amps regardless of the guitar amplifier you connect it to.</p> 	

Recommended settings for use with typical guitar amps

When using G3 amp modeling with a guitar amp, you should set the OUTPUT item (GLOBAL settings) appropriately for that amp. Some examples along with suitable settings for the guitar amps follow.

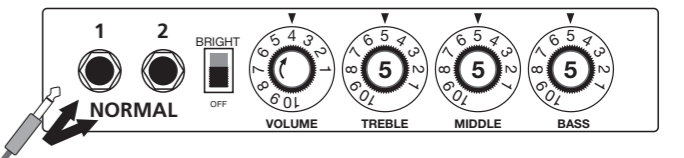
OUTPUT : STACK FRONT

Marshall JCM-2000



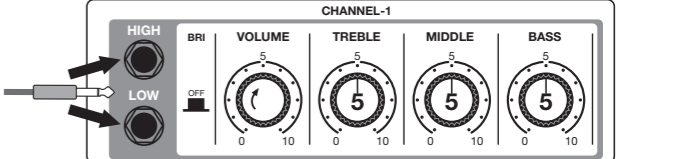
OUTPUT : COMBO FRONT

Fender Twin Reverb



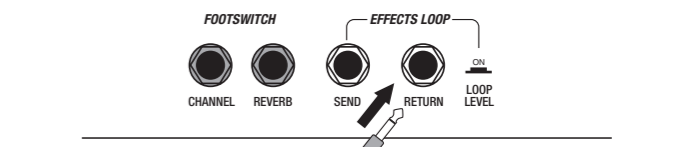
OUTPUT : COMBO FRONT

Roland JC-120



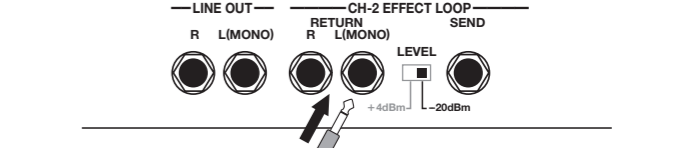
OUTPUT : STACK POWER AMP

Marshall JCM-2000 : RETURN (POWER AMP)



OUTPUT : COMBO POWER AMP

Roland JC-120 : RETURN (POWER AMP)



- When the G3 is connected to an amp's RETURN jack (G3 OUTPUT set to a POWER AMP option), the guitar amp's volume control will not effect the level of the sound from the G3. Use the G3's MASTER LEVEL (GLOBAL settings) to adjust its output volume.
- When using headphones or monitor speakers, set OUTPUT to DIRECT.

This USB/Sequel LE Startup Guide explains how to install Sequel LE on a computer, make connections and settings for this unit, and perform recording.

Sequel LE installation

Connections and preparation

Use Sequel LE to record

Sequel LE installation

Connections and preparation

Use Sequel LE to record

Windows

To connect this unit to a computer running Windows 7 (or Windows Vista, XP) and to enable audio input/output, proceed as follows. The installation description uses Windows 7 as an example.

1 Download the latest ASIO driver from the web site of ZOOM Corporation (<http://www.zoom.co.jp>) and install the driver.

The ASIO driver software is required to enable use of Sequel LE for audio input and output with a computer. Refer to the read_me file included in the download package for instructions on how to install the driver correctly.

NOTE

If the system software is an older version, the product may not be recognized properly by the computer. It is therefore recommended to always keep the system software updated to the latest version. The system software can be downloaded from our web site.

2 Insert the supplied "Sequel LE" CD-ROM into the CD drive of the computer, and perform the installation steps.

Insert the CD-ROM. When the contents of the CD-ROM are shown, double-click "Sequel LE2 for Windows" and then select "Setup.exe". When the language selection screen appears, choose the language to use. After making the selection, follow the instructions on the screen.



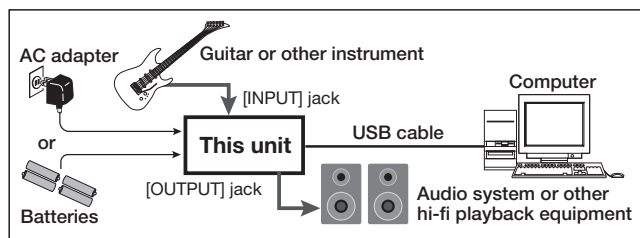
HINT

If nothing happens when you insert the CD-ROM, open the Start menu and select "Computer" ("My Computer" in Windows XP). Then double-click the "Sequel LE 2 for windows" CD-ROM icon to display the contents of the CD-ROM, and double-click the executable file "Setup" ("Setup.exe").

NOTE

During the installation of Sequel LE, a screen asking about installation of activation (software license authentication) management software appears. Install this software, because it is required for registering Sequel LE.

3 Connect this unit to the computer using a USB cable.



NOTE

- If you monitor the audio signal during recording via the audio output of the computer, there will be an audible delay. Be sure to use the [OUTPUT] jack of this unit to monitor the signal.
- When this unit is operated on USB bus power via the USB cable, insufficient power may result in unstable operation or error indications appearing on the computer screen or unit display. In such a case, power the device from an AC adapter.
- Use a high-quality USB cable and keep the connection as short as possible. If USB bus power is supplied to this unit via a USB cable that is more than 3 meters in length, the low voltage warning indication may appear.

HINT

- No special steps are necessary for canceling the USB connection. Simply disconnect the USB cable from the computer.
- When you connect this unit for the first time to a computer running Windows 7, a message saying "New Hardware Found" will appear. Before proceeding, wait a while until this message disappears.

4 Bring up the "Sound" window from the Control Panel and make the input device setting for the computer.

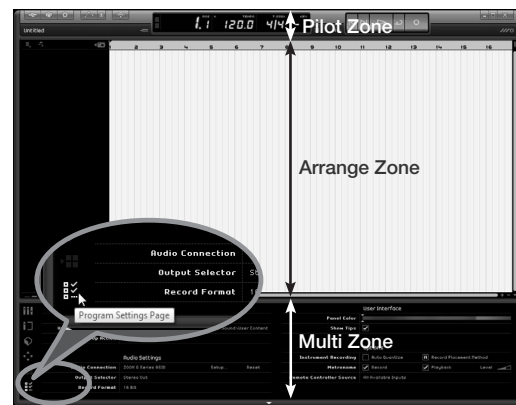
To bring up the "Sound" window, select "Control Panel" from the Start menu and click "Hardware and Sound", then click "Sound".



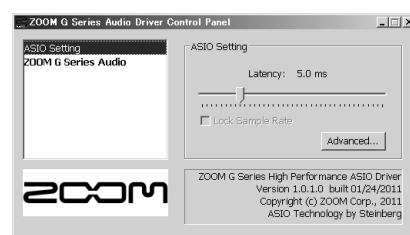
In the "Sound" window, verify that "ZOOM G Series Audio" is listed under the Play and Record devices and that the device is checked. (To switch between Play and Record, click the tabs at the top of the window.) If the device is not checked, right-click on the icon for the device and click "Set as Default Device" so that a check mark appears.

5 Launch Sequel LE and select "ZOOM G Series ASIO" as the ASIO driver.

To start Sequel LE, double-click the Sequel LE shortcut icon that was created on the desktop. After Sequel LE starts, click the button in the bottom left corner of the Multi Zone area of the Sequel window to open the settings page. Click the Audio Connection item and select "ZOOM G series ASIO" from the pop-up menu. When you change the ASIO driver, a confirmation window will appear. Click the "Switch" button.



Next, click the "Setup..." button to open a window where you can set the latency of the ASIO driver. Set the latency as low as possible without causing the sound to drop out during recording and playback.



Continued overleaf

Sequel LE installation

Connections and preparation

Use Sequel LE to record

MacOS X

To connect this unit to a computer running MacOS X and enable audio input/output, proceed as follows. The installation description uses Mac OS X v10.6 as an example.

1 Insert the supplied "Sequel LE" CD-ROM into the CD drive of the Macintosh.

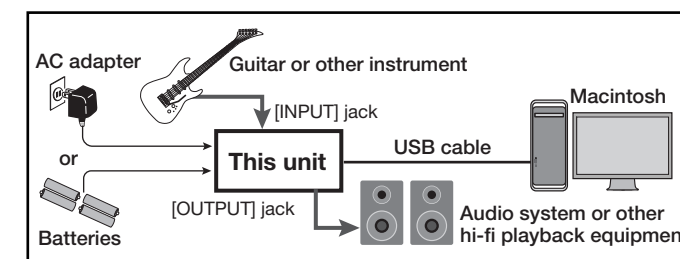
The contents of the CD-ROM appear automatically. If nothing happens when you insert the CD-ROM, double-click the "Sequel LE2 for Mac OS X" icon shown on the desktop.

2 Install Sequel LE on the Macintosh.

When the contents of the CD-ROM are shown, double-click "Sequel LE 2.mpkg" to install the software.



3 Connect this unit to the computer using a USB cable.



NOTE

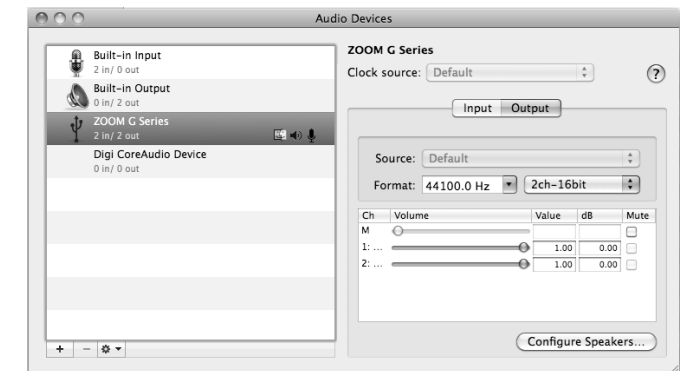
- If you monitor the audio signal during recording via the audio output of the computer, there will be an audible delay. Be sure to use the [OUTPUT] jack of this unit to monitor the signal.
- When this unit is operated on USB bus power via the USB cable, insufficient power may result in unstable operation or error indications appearing on the computer screen or unit display. In such a case, power the device from an AC adapter.
- Use a high-quality USB cable and keep the connection as short as possible. If USB bus power is supplied to this unit via a USB cable that is more than 3 meters in length, the low voltage warning indication may appear.

HINT

No special steps are necessary for canceling the USB connection. Simply disconnect the USB cable from the computer.

4 Open the "Applications" folder and then the "Utilities" folder, and double-click "Audio MIDI Setup".

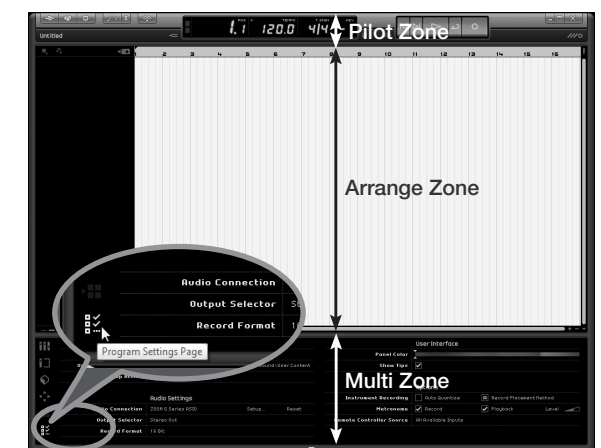
The Audio MIDI Setup screen appears. Click "Audio Devices" and check whether "USB Audio CODEC" is selected as default input/default output.



If another item is selected, select the "ZOOM G Series" After confirming the setting, quit Audio MIDI Setup.

5 Launch Sequel LE and set "ZOOM G Series" as the Audio Connection.

To launch Sequel LE, click Sequel LE icon in the Applications folder. After Sequel LE starts, click the button in the bottom left corner of the Multi Zone area of the Sequel window to open the settings page. Click the Audio Connection item and select "ZOOM G series" from the pop-up menu. When you change the driver, a confirmation window will appear. Click the "Switch" button.



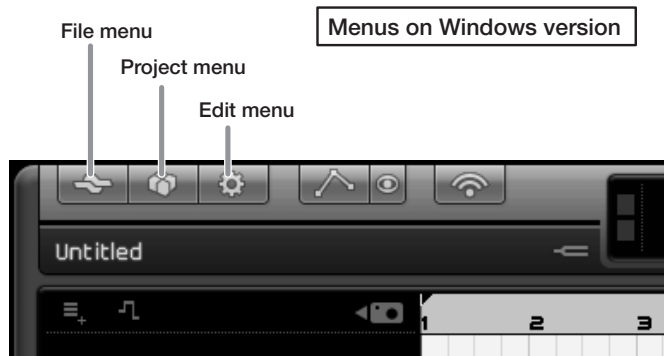
Next, click the "Setup..." button to open a window where you can set the latency (buffer size) of the driver. Set the latency as low as possible without causing the sound to drop out during recording and playback.



Continued overleaf

6 Select "New Project" from the "Project" menu.

This will close the currently open project and create a new empty project file. If the currently open file has been changed, a message appears asking if you want to save it or not.



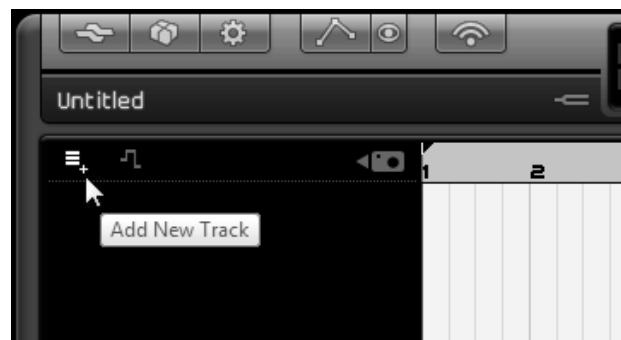
In the Mac OS X version, the "File", "Project" and "Edit" menus appear at the upper left corner of the screen.

**NOTE**

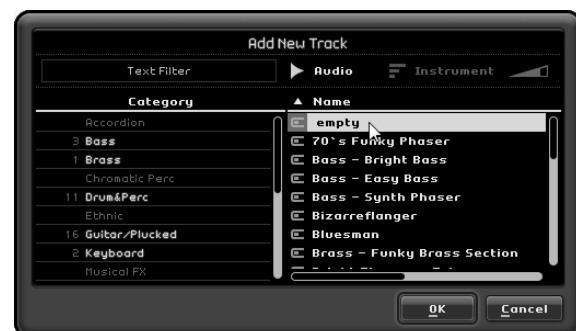
After installing Sequel LE, the first time you launch it, a demo project is automatically opened. Even after creating a new project, you can open this demo project again any time by using "Open Project..." from the "Project" menu.

7 Add an audio track.

1. Click the "Add New Track" button at the top of the track list.



2. Click the "Audio" button at the top of the dialog shown.
3. Select "empty" at the top of the Name list and click the "OK" button to add an audio track to the project.

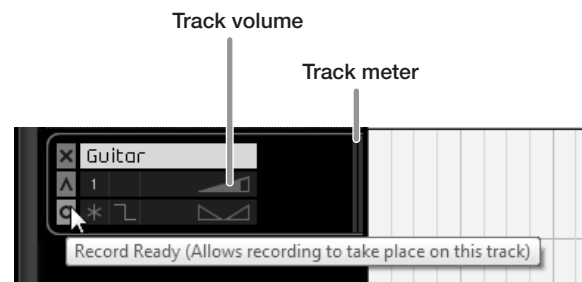


4. Double-click the track name if you want to edit it. Input "Guitar" here for this example.

8 Set the recording level.

Use the track "Volume" slider to adjust the input volume of the track so that distortion does not occur during recording.

Turn the "Record Ready" button on for the added track so that you can hear the sound of the instrument input on that track. The level meter to the right of the track setting area moves in response to the input.


**HINT**

In order to record with better sound quality, adjust the volume so that it is as loud as possible without the signal distorting.

NOTE

- While a track is record ready, the signal input to this audio interface is output directly and the same signal is also output after it passes through the computer once, resulting in a flanger-like sound. To avoid this, set the USB level of the interface all the way to DAW.
- The meter above shows the signal level after processing with Sequel LE. For this reason, after playing the guitar or other instrument, a slight delay might occur before the level meter moves.

9 Record to a track.

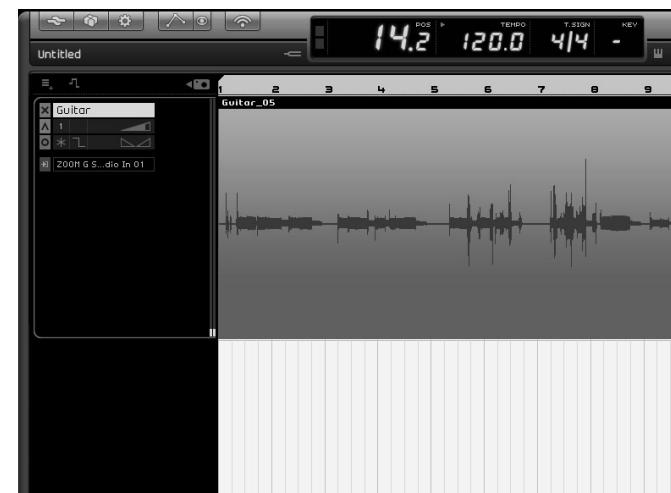
1. Press  to return to the beginning of the track before starting recording.



2. At the right side of the Pilot Zone are several buttons used for recording, playback and other controls. Among these, the second one from the right is the "Cycle" button. Confirm that this button is OFF (same color as other buttons).



3. Click the "Record" button to start recording. Recording will start after a two-bar pre-count



4. After you are done performing, press the space key on the computer keyboard to stop recording.

10 Check the recording.**Start playback**

You can start playback in Sequel using one of the following methods.

- Click the "Play" button.
- Press the space key on the computer keyboard. The space key can be used alternately to start and stop playback.
- Press the "Enter" key on the computer keyboard (numerical keypad).
- Double-click the bottom half of the ruler at the top of the Arrange Zone.

Stop playback

You can stop playback using one of the following methods.

- Click the "Play" button during playback.
- Press the space key on the computer keyboard.
- Press the "0" key on the computer keyboard (numerical keypad).

For optimum enjoyment

While using Sequel LE, other applications may slow down drastically or a message such as "Cannot synchronize with USB audio interface" may appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Sequel LE.

- (1) Shut down other applications besides Sequel LE. In particular, check for resident software and other utilities
- (2) Reduce plug-ins (effects, instruments) used by Sequel LE. When there is a high number of plug-ins, the computer's processing power may not be able to keep up. Reducing the number of tracks for simultaneous playback can also be helpful.
- (3) Power the unit from an AC adapter. When a device designed to use USB power is powered via the USB port, the current supply may sometimes fluctuate, leading to problems. See if using an AC adapter improves operation.

If applications still run very slowly or the computer itself does not function properly, disconnect this unit from the computer and shut down Sequel LE. Then reconnect the USB cable and start Sequel LE again.