# GEM BoX

Guitar Multi-Effects Processor

# Owner's Manual

# Contents

# Precautions

## * PLEASE READ CAREFULLY BEFORE PROCEEDING *

### Power Supply
Please connect the designated AC adapter to an AC outlet of the correct voltage.
Please be sure to use only an AC adapter which supplies 9V DC, 300 mA, center minus.
Unplug the AC power adapter when not using or during electrical storms.

### Connections
Always turn off the power of this and all other equipments before connecting or disconnecting, this will help prevent malfunction and / or damage to other devices. Also make sure to disconnect all connection cables and the power cord before moving this unit.

### Location
To avoid deformation, discoloration, or other serious damage, do not expose this unit to the following conditions:

● Direct sunlight
● Heat sources
● Magnetic fields
● Extreme temperature or humidity
● Excessive dusty or dirty location
● High humidity or moisture
● Strong vibration or shock

### Interference with other electrical devices
Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

### Cleaning
Clean only with a soft, dry cloth. If necessary, slightly moisten the cloth.
Do not use abrasive cleanser, cleaning alcohol, paint thinners, wax, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

### Handling
Do not apply excessive force to the switches or controls.
Do not let paper, metallic, or other objects into this unit.
Take care not to drop the unit, and do not subject it to shock or excessive pressure.

# Items Explanation

Patch
A patch is comprised of information about the on/off status and effect
parameter settings used in each module.

Bank
A bank is a group of ten patches. GEM Box has 8 banks, labelled with
numbers 0 to 3 (unchangeable preset banks) and letters A to d
(editable user banks).

Effect module
A patch can be thought of as a combination of up to 8 single effects.
Each such effect is referred to as an effect module.

Effect type
Some effect modules have several different effects which are referred
to as effect types. Only one of these can be selected at a time.

Effect parameter
All effect modules have various parameters that can be adjusted.
These are called effect parameters or simply parameters. When
thinking of an effect module as a compact effect, the parameters
change the tone and effect intensity similar to the knobs on the device.

Mode
Mode is the status of different function keys and controls, GEM Box
has Play Mode for selecting and playing patches, Rhythm Mode for
editing a drum rhythm, Edit Mode for modifying effects, and Store
Mode for saving patches.

# Main Features

- 8 Effect Modules
- 60 Effect Types
- 40 Preset Patches
- 40 User Patches
- 40 Drum Rhythms
- Assignable Expression Pedal
- Precise Tuning function
- Patch Pre-Select Recall function
- Compact operation interface
- Lightweight and tiny for easy transportation
- AC adapter 9V DC power supply
- AA battery (x4) power supply

# Battery Operation

1. Turn off the GEM Box and open the battery holder on the bottom.
2. Insert 4 AA batteries and close the battery holder.

Press latch to release and then lift cover.

OPEN

Latch
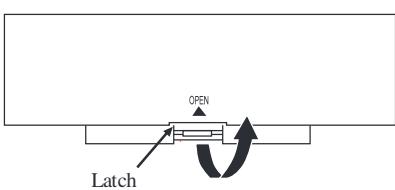
Four batteries (size AA)

Note: W□□□□□□□ĵ □□□□□□□ĵ □□□□□ □□□□□□□□□□□□□ □□□□□□ □LB□□□□□□ □□□□□□□□□□□□□
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# Panel Instruction



NR/CAB
EQ     MODULATION
GAIN     RATE
DRIVE     DELAY
COMP/WAH     D.TIME
PEDAL     REVERB
PATCH LEVEL     DECAY
RHYTHM    PLAY    STORE

VALUE

EXP. PEDAL

Press

**GEM BoX**
Guitar Multi-Effects Processor

BANK    PATCH

A.0.

#    EDIT

PLAY / STOP      ▼   PATCH   ▲      MODULE BYPASS

BYPASS / TUNER

HOLD FOR MUTE TUNING

DC9V    INPUT      OUTPUT

300mA              (PHONES)
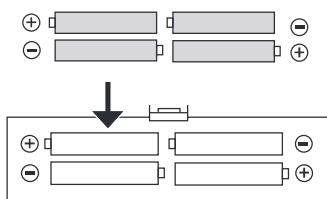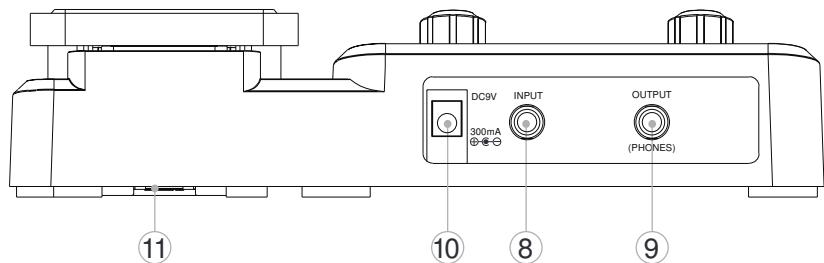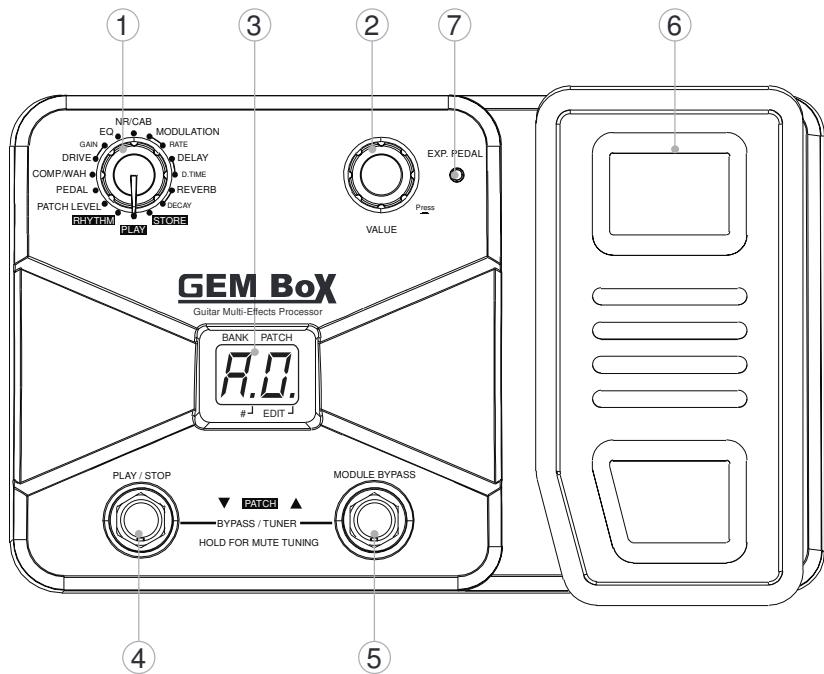
01 Module Selector: Switches between every function module. In patch edit mode, this knob selects the module/parameter for operation.

02 VALUE Knob with Enter Button: Dial the knob for setting master level, or changing parameter values. Press the button to switch effect type, ensure storing, etc.

03 LED Display: Shows bank and patch numbers, setting values, and other information for operating.

04 PATCH – [PLAY/STOP] Footswitch: Selects patches (backwards), controls the tuner, start/stop drum rhythm, and other functions.

05 PATCH + [MODULE BYPASS] Footswitch: Selects patches (forwards), controls the tuner, bypass effect module, and other functions.

06 Expression Pedal: Adjusts volume or some effect parameters.

07 EXP. PEDAL LED: Indicates the status of the expression pedal.

08 INPUT Jack: 1/4" mono audio jack, for connecting guitar. When operating GEM Box on batteries, plugging guitar cable into this jack will turn on the unit.

09 OUTPUT [PHONES] Jack: 1/4" stereo audio jack, for connecting headphone or guitar amplifier. Using a mono cable can output the signal to an amplifier, or use a Y cable to output the signal to two amplifiers. Also can plug a stereo headphone into this jack.

10 DC 9V Jack: For power supply, use a 9-volt DC regulated by AC adapter, 300mA (plug polarity is positive on the barrel and negative in the center).

11 Battery Holder: For installing batteries (AA x 4).

# Connections

AC adapter

Guitar amplifier

Guitar amplifier

DC9V
300mA
⊕—◉—⊖

INPUT

OUTPUT
(PHONES)

Guitar

Headphones
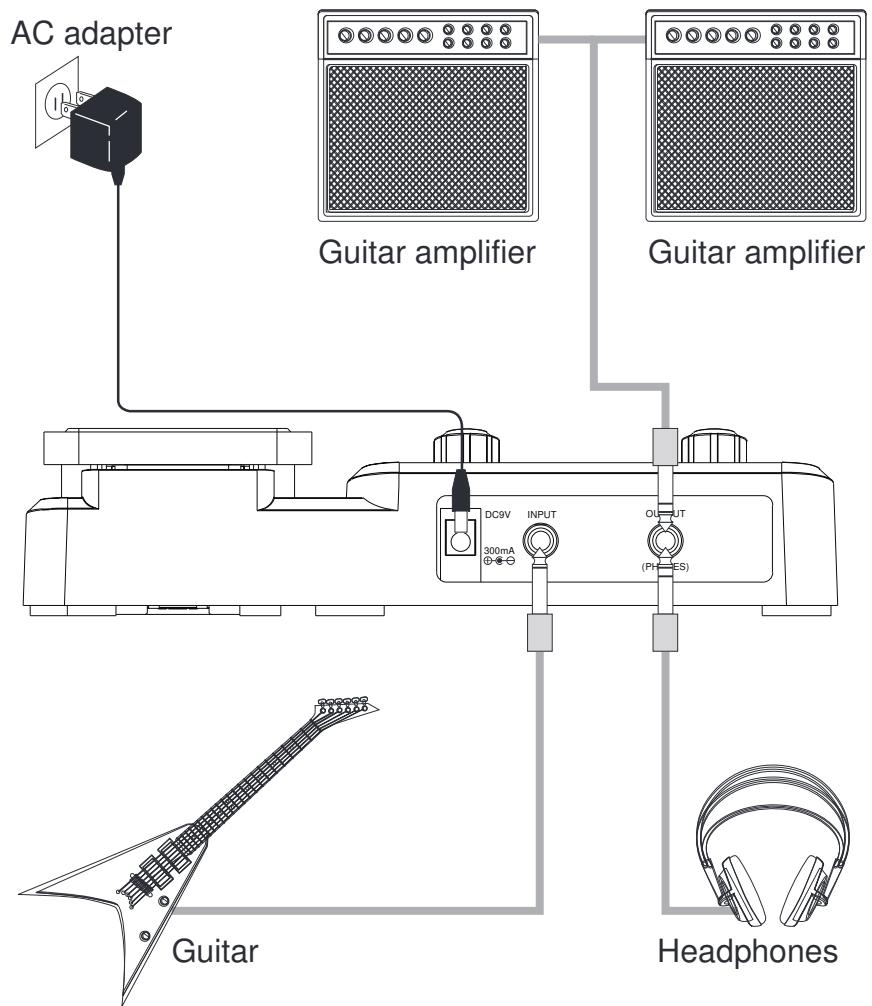
# Operation

## Patch Selecting

**01** Power On
Plug the cable of AC Adapter (9V, 300mA, center minus) into the [DC 9V] Jack, when using batteries, plug the guitar cable into this jack will turn the device on.





Bank name — BANK PATCH — Patch name

# ⌐ EDIT ⌐
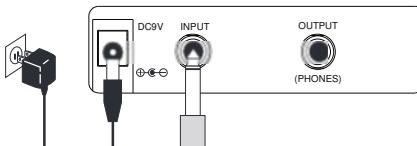
**02** Selecting Patches
Set the Module Selector to [PLAY], the LED display will show the information of bank and patch number, step on [PATCH +/-] footswitch to change patches (Hold one footswitch to switch patches quickly).

Pressing [PATCH +] footswitch time and again (or holding [PATCH +] footswitch) cycles through patches in the order A0 ~ A9 ... d0 ~ d9, 00 ~ 09... 30 ~ 39 , A0 . Pressing or holding [PATCH –] footswitch will switch patches in the opposite order.

**03** Adjusting the master volume
Set the Module Selector to [PLAY], rotate [VALUE] knob to adjust the master volume of GEM Box (when setting up the master volume, LED display will show the current level). The range of master volume is 00 ~ 99, 70 is the default value.

BANK PATCH

70

# ⌐ EDIT ⌐

# Drum Rhythm

**01** Selecting Drum Rhythm Type
Set the Module Selector to [RHYTHM],
LED display will show the rhythm type
firstly, and then rotate the [VALUE]
knob to select the rhythm type (⌐⌐~⌐⌐).

BANK  PATCH ———— Drum Rhythm Type
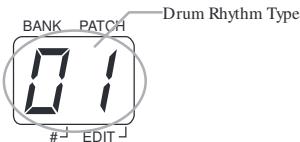
**02** Adjusting Drum Rhythm Volume
Set the Module Selector to [RHYTHM],
LED display will show the rhythm type
firstly, and then press [VALUE] button
once, at that time, LED displays the
drum rhythm volume, then rotate the
[VALUE] knob to change the rhythm
volume (⌐⌐~⌐⌐, the default value is ⌐⌐).

BANK  PATCH ———— Drum Rhythm Volume
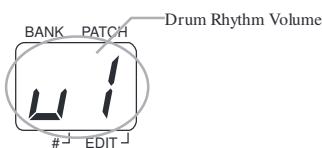
**03** Changing Drum Rhythm Tempo
Set the Module Selector to
[RHYTHM], LED display will show the
rhythm type firstly, and then press
[VALUE] button twice, at that time, the
number displayed in LED indicates the
tempo of drum rhythm, then rotate the
[VALUE] knob to change tempo.

BANK  PATCH ———— Drum Rhythm Tempo
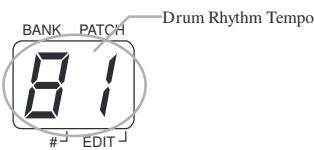
The range of the displaying tempo value is ⌐⌐~⌐⌐, indicate the real
tempo 60~270 BPM, each rhythm has its own default tempo value.

**04** Start/Stop Drum Rhythm
When in RHYTHM mode or EDIT mode (Except PLAY/STORE
mode), press [PATCH –] footswitch will start the drum rhythm. When
the rhythm is playing, press [PATCH –] footswitch again to stop.

Note: You can't stop the drum rhythm in PLAY/STORE mode.

# Tuner

**01** Entering Bypass Tuning Mode
When in PLAY mode, press both [PATCH –]
and [PATCH +] footswitches together to
enter bypass tuning mode. LED will display
*bP* for 1 second, then begin to show tuning
indication.

BANK    PATCH

*bP*

# ⌐    ⌐ EDIT ⌐

**02** Entering Mute Tuning Mode
When in PLAY mode, hold both [PATCH –]
and [PATCH +] footswitches together longer
than 2 seconds to enter mute tuning mode. In
course of this operation, LED will display *bP*
for 1 second then turn to display *nt* , when
releasing the footswitch, LED begin to show
tuning indication.

BANK    PATCH

*bP* → *nt*

# ⌐    ⌐ EDIT ⌐           # ⌐    ⌐ EDIT ⌐
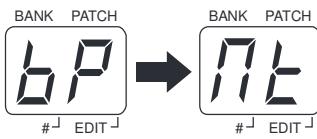
Note: In mute tuning mode, no sound will phonate through the output of
GEM Box.

**03** Tuning
Play one guitar string at a time, and adjust the guitar pitch as
LED's instruction.

The left side shows the current pitch.
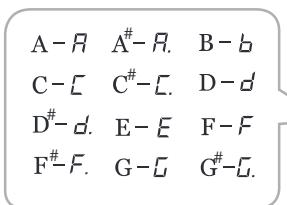
The right side indicates how much the tuning
is off.

| | | |
|---|---|---|
| A – *A* | A# – *A.* | B – *b* |
| C – *C* | C# – *C.* | D – *d* |
| D# – *d.* | E – *E* | F – *F* |
| F# – *F.* | G – *G* | G# – *G.* |

BANK    PATCH

*F8*

# ⌐    EDIT ⌐

Flat          Correct          Sharp

The indication rolls faster, the more the
pitch is off.
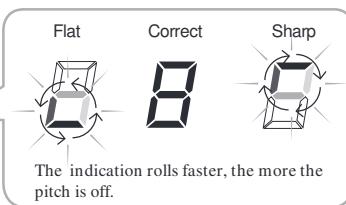
**03** Quit Tuner
When in tuning mode, press both [PATCH –] and [PATCH +]
footswitches together or anyone of these 2 footswitches to quit
tuning state. GEM Box will return to PLAY mode.

# Expression Pedal

**01  Volume Control**

If the [EXP. PEDAL] LED is not lighted up, the expression pedal
will be a volume pedal for controlling the master level of GEM Box.

**02  Effect Control**

If the [EXP. PEDAL] LED is lighted up, the expression pedal will be
an expression pedal for controlling the effect's parameter which
was set up in PEDAL setting.

**03  Control Assign**

Set the Module Selector to [PEDAL], the LED display will show the
controlling object of the expression pedal.
There are 7 kinds of parameter can be controlled by the pedal,
LED will show the type of parameter in control:

| Control Target | LED Display | Control Parameter |
|---|---|---|
| Wah | _UR_ | Central Frequency |
| Drive Gain | _dG_ | Gain |
| Modulation Rate | _Mr_ | Rate/Pitch/Frequency |
| Modulation Depth | _Md_ | Depth |
| Delay Time | _dt_ | Time |
| Delay Feedback | _dF_ | Feedback |
| Reverb Level | _rL_ | Reverb Level |

Rotate [VALUE] knob to choose one kind of controlling target, then
the expression pedal will work with the corresponding parameter.

Note: T░░░░░░░░░░░░░░░░ ░░░░$ff$░░░░░░░ ░░░░░░░░░░░░░░░░░░░
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04 Switch Control Mode (Volume-Effect)

Push down the expression pedal at full tilt to switch the control mode from volume control to effect control, and [EXP.PEDAL] LED will shift from extinguish to light. It also can switch the control mode from effect control to volume control,[EXP.PEDAL] LED will shift from light to extinguish.
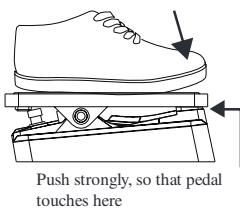


Push strongly, so that pedal touches here

05 Pedal Reset

The responsivity of the expression pedal on GEM Box can be reset as necessary. If the effect change seems insufficient when pushing the pedal down, or if the volume or tone changes excessively even when the pedal is only lightly pushed, or if it's hard to switch the pedal mode, adjust the pedal as follows:

a. Set the Module Selector to [PEDAL] and hold down [VALUE] button while power on, the indication $UP$ will appear on the LED display, and then release the [VALUE] button.

b. Fully raise the expression pedal and press [VALUE] button once, the indication $dn$ will appear on the LED display.

c. Push the expression pedal fully down and press [VALUE] button again, the indication $Pr$ will appear on the LED display.

d. Push strongly down the expression pedal at full tilt and press [VALUE] button once more. The Pedal Reset adjustment is completed, and GEM Box will return to the play mode. If the indication $Er$ is shown, press [VALUE] button and repeat the procedure from step b.



Fully raise      Fully down      Push strongly, so that pedal touches here
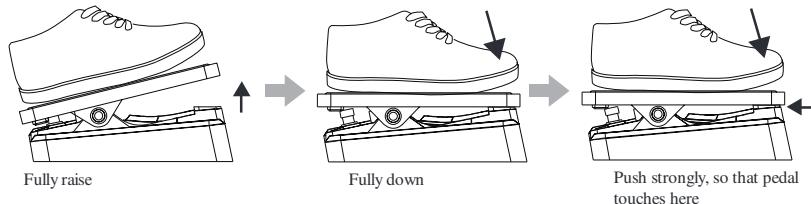
# Patch Editing

## 01 Select Effect Module

Set the Module Selector to the effect module which you want to edit, the available setting options are listed below:

01.PATCH LEVEL (Para)
02.PEDAL (Para)
03.COMP/WAH (Type & Para)
04.DRIVE (Type)
05.GAIN (Para)
06.EQ (Type & Para)
07.NR/CAB (Type & Para)
08.MODULATION (Type & Para)
09.RATE (Para)
10.DELAY (Type & Para)
11.D.TIME (Para)
12.REVERB (Type & Para)
13.DECAY (Para)

**Type & Para**: The effect type (left side of the display) and parameter's value (right side of the display) are adjusted simultaneously.
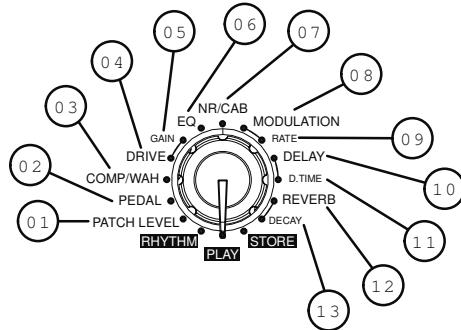
**Type**: Only select the effect type.

**Para**: Only adjust the parameter's value.
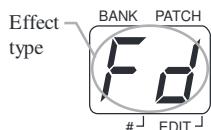
In fact, the GAIN module is a part of DRIVE module, the RATE module is a part of MODULATION module, the D.TIME module is a part of DELAY module, and the DECAY module is a part of REVERB module. They are all parameter's value setting module which belongs to the previous effect module.

13

## 02 Change Setting

Press [VALUE] knob to change effect/parameter type ahead, hold and rotate [VALUE] knob to change effect/parameter type ahead (clockwise) or backwards (anticlockwise), rotate [VALUE] knob to set a new value of the effect type or parameter. As long as the selected item's value changes, a dot (.) will appear in the bottom right of the display. This indicates that a setting has been changed from the currently stored value.

Dot indicates that setting has been changed

VALUE
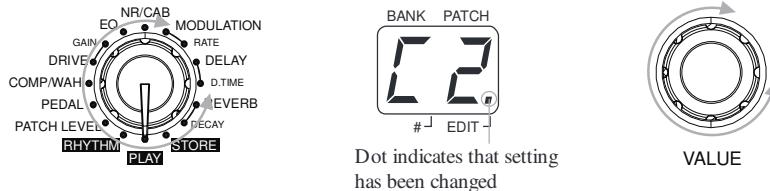
## 03 Bypass an Effect Module

When adjusting an effect in EDIT mode, press [MODULE BYPASS] / [PATCH +] footswitch to bypass this effect module, the indication ⌐F will appears on the display and the module will be turned off. Pressing [MODULE BYPASS] / [PATCH +] switches once more will return the setting to the previous condition.
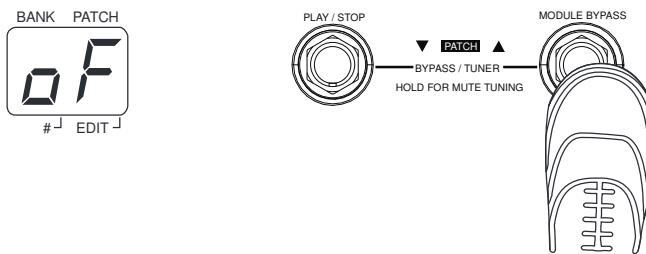
## 04 Adjusting the Patch Level

Set the Module Selector to [PATCH LEVEL], rotate [VALUE] knob to adjust the volume of a patch, LED display will show the current level.

The range of patch level is ⌐⌐ ~ ⌐⌐ .

Note: If you return to [PLAY] module and select another patch, the changes you have made in edit mode will be lost unless you store the

# Patch Storing/Copying

**01** Enter Storing Mode
Set the Module Selector to [STORE] to enter storing mode, the display will show the current editing patch's number.
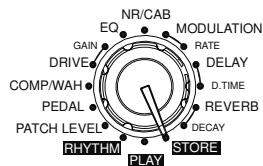
**02** Storing/Copying Patch
When in [STORE] mode, press [VALUE] button once to do the storing, the patch's number on the display will begin to flash, at that time, rotate [VALUE] knob or press [PATCH -] / [PATCH +] footswitch to change patch number, when you got the expectant position, press [VALUE] button again to confirm the patch storing, the patch's number on the display will stop flashing.

Note: To cancel the store process, rotate the Module Selector to another position, well then the patch will not be saved.
Note: An edited patch can be stored in a user bank ($A{\sim}d$), it can not be stored in a preset patch ($0{\sim}3$).
Note: Storing an existing patch in another location can create a copy.

# Patch Pre-Select
# Recall Function

Patch Pre-Select function can let you select the patch first but not to activate it, and then perform an additional step to activate the patch. To use this function, conform to the following instructions:

1. Before power on, hold down the [PATCH +] footswitch, and then power to the GEM Box, $PS$ will appear on the display and last flashing for 3 seconds, it indicates setting up to Patch Pre-Select function successfully.
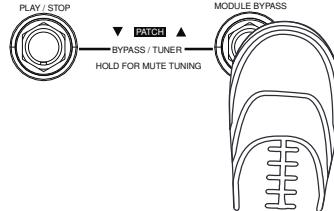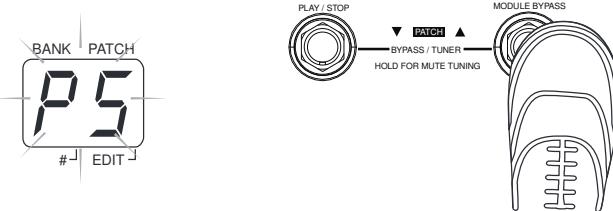
2. In play mode, select the patch to use next. The selected new bank and patch's number flash on the display, but the sound does not change yet.

3. Press both [PATCH -] and [PATCH +] footswitches together, the selected patch will be activated, the sound changes, and the display will stop flashing.
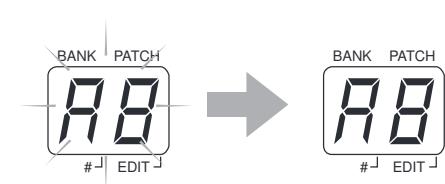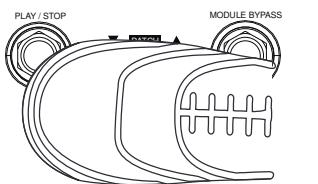
4. To return the normal patch selecting method, turn the power off and then on again. The Patch Pre-Select function will not preserve when power on again.

# Factory Reset

Factory Reset function will initialize all setting of GEM Box. All the user patches will be erased and overwritten by the preset patches.
To do the factory reset, conform to the following instructions:

Before power on, set the Module Selector to [PLAY], hold down the [PATCH -] and [PATCH +] footswitch and the [VALUE] button simultaneously, and then power to the GEM Box, r5 will appear on the display and last flashing.
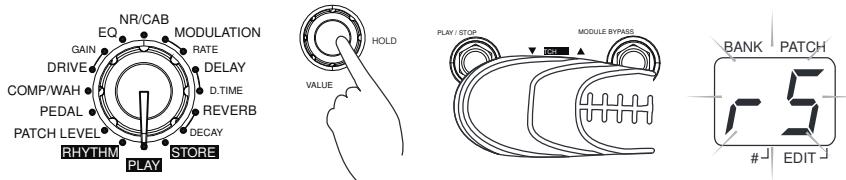


At that time, press [VALUE] button to confirm, r5 will be flashing in a faster speed for 2 seconds, then turn to display r5 at a steady status for 3 second, then back to the normal state, the factory reset operation have been done.
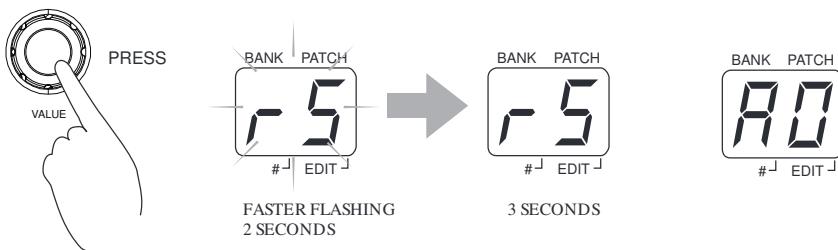


Note: If you want to quit Factory Reset halfway, move the Module Selector to another location, then the Factory Reset will be canceled.

# Effects Explanation

General Instruction

## Effect Chain
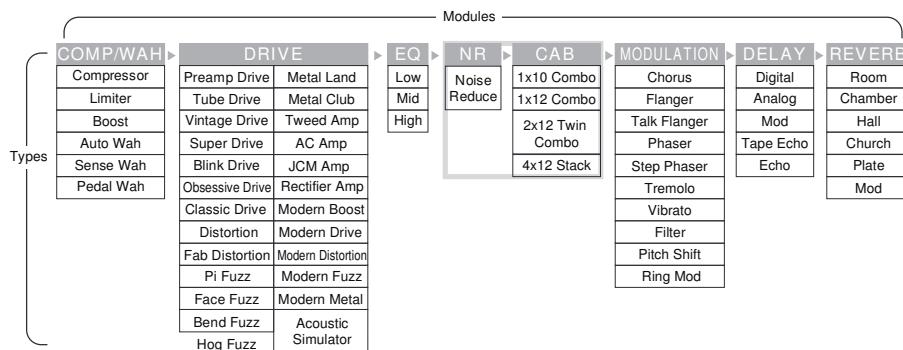


GEM Box has 8 effect modules, 60 types of effect in total, can offer up to 8 simultaneous effects (NR/CAB module can offer 2 effects at a time).

Each effect module has several different effect types, only one type can be selected at a time. All effect types have various parameters that can be adjusted, the parameters change the tone and effect intensity similar to the knobs on the device.

02 Explain the Effects Modules/Types/Parameters

### COMP/WAH Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Compressor | $C1 \leftrightarrow C9$ | This effect is used for controlling dynamics of the signal, it limits high-level signals and boosts low-level signals.<br>The parameter's value controls the Depth. |
| Limiter | $L1 \leftrightarrow L9$ | This effect limits high-level signals to avoid overload.<br>The parameter's value controls the Depth. |
| Boost | $b1 \leftrightarrow b9$ | This effect can enhance the gain and dynamic of the signal.<br>The parameter's value controls the Gain. |
| Auto Wah | $A1 \leftrightarrow A9$ | This effect creates a recurrent wah-wah sound.<br>The parameter's value controls the Rate. |

| Sense Wah | $5 1 \leftrightarrow 5 9$ | This effect varies wah sound according to picking intensity. The parameter's value controls the Sensitivity. |
|---|---|---|
| Pedal Wah ➤ | $P 1 \leftrightarrow P 9$ | This effect varies wah sound by controlling the expression pedal. The parameter's value controls the Central Frequency |

➤ This mark means the parameter can be controlled by the expression pedal if corresponding type was chosen in PEDAL module.

## DRIVE Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Preamp Drive | Pd | Based on a DOD® Overdrive Preamp/250   * |
| Tube Drive | td | Based on an Ibanez® TS9 (TUBE SCREAMER®)   * |
| Vintage Drive | ud | Based on a BOSS® OD-1 (Over Drive)   * |
| Super Drive | Sd | Based on a BOSS® SD-1 (SUPER OverDrive)   * |
| Blink Drive | bd | Based on a Voodoo Lab® Sparkle Drive   * |
| Obsessive Drive | Od | Based on a Fulltone® OCD® (Obsessive Compulsive Drive™)   * |
| Classic Drive | Cd | Based on a ProCo™ The Rat™   * |
| Distortion | d5 | Based on a BOSS® DS-1 (Distortion)   * |
| Fab Distortion | Fd | Based on a Danelectro® DD1 Fab Tone™   * |
| Pi Fuzz | PF | Based on an Electro-Harmonix® Big Muff Pi®   * |
| Face Fuzz | FF | Based on a Dallas-Arbiter FUZZFACE™   * |
| Bend Fuzz | bF | Based on a Colorsound Tonebender   * |
| Hog Fuzz | HF | Based on an Electro-Harmonix® Hog's Foot   * |
| Metal Land | ML | Based on a BOSS® MT-2 (Metal Zone)   * |
| Metal Club | MC | Based on an Ibanez ® SM-7 (Smash Box)   * |
| Tweed Amp | tA | Based on a Fender ® Tweed Bassman® amp   * |
| AC Amp | AC | Based on a Vox ® AC30 amp   * |
| JCM Amp | JC | Based on a Marshall® JCM800 amp   * |
| Rectifier Amp | rA | Based on a Mesa Boogie® Dual Rectifier® amp   * |
| Modern Boost | Mb | Factory Design |
| Modern Drive | Md | Factory Design |
| Modern Distortion | M5 | Factory Design |
| Modern Fuzz | MF | Factory Design |
| Modern Metal | MM | Factory Design |
| Acoustic Simulator | A5 | Factory Design |
| Gain ➤ | $0 1 \leftrightarrow 5 0$ | Control the Gain of distortion effects and the Tone of Acoustic Simulator effect. |

Manufacturer names and product names mentioned in this list are trademarks or registered trademarks of their respective owners.They are trademarks of other manufacturers and were used merely to identify whose sounds were reviewed in the creation of this product.

## EQ Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Low | $L1 \leftrightarrow L9$ | This controls the bottom band of the equalizer, the central frequency is 160Hz. The parameter's value controls the Gain. |
| Mid | $\Pi 1 \leftrightarrow \Pi 9$ | This controls the middle band of the equalizer, the central frequency is 800Hz. The parameter's value controls the Gain. |
| High | $H1 \leftrightarrow H9$ | This controls the high band of the equalizer, the central frequency is 3.2KHz. The parameter's value controls the Gain. |

EQ Gain-Display Comparison:

| Para-Display | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Gain | -12dB | -9dB | -6dB | -3dB | 0dB | 3dB | 6dB | 9dB | 12dB |

## NR/CAB Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Noise Reduction | $n1 \leftrightarrow n9$ | Noise Reduction function only, it will reduce the noise of input signal. The parameter's value controls the NR's Intensity. |
| Noise Reduction + 1x10 Combo | $c1 \leftrightarrow c9$ | NR function + 1x10 Combo guitar amp cabinet simulator. The parameter's value controls the NR's Intensity. |
| Noise Reduction + 1x12 Combo | $C1 \leftrightarrow C9$ | NR function + 1x12 Combo guitar amp cabinet simulator. The parameter's value controls the NR's Intensity. |
| Noise Reduction + 2x12 Twin Combo | $t1 \leftrightarrow t9$ | NR function + 2x12 Twin Combo guitar amp cabinet simulator. The parameter's value controls the NR's Intensity. |
| Noise Reduction + 4x12 Stack | $51 \leftrightarrow 59$ | NR function + 4x12 Stack guitar amp cabinet simulator. The parameter's value controls the NR's Intensity. |

## MODULATION Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Chorus | $C1 \leftrightarrow C9$ | This effect creates a shining dimensional sound. The parameter's value controls the Depth. |
| Flanger | $F1 \leftrightarrow F9$ | This effect produces an undulating and floating feeling sound. The parameter's value controls the Depth. |
| Talk Flanger | $A1 \leftrightarrow A9$ | This effect produces another kind of flanger sound. The parameter's value controls the Depth. |
| Phaser | $P1 \leftrightarrow P9$ | This effect creates a pulsing-like sound. The parameter's value controls the Depth. |
| Step Phaser | $E1 \leftrightarrow E9$ | This effect produces a phaser sound with morepulsing feeling. The parameter's value controls the Depth. |
| Tremolo | $t1 \leftrightarrow t9$ | This effect periodically influences the volume of the signal. The parameter's value controls the Depth. |
| Vibrato | $u1 \leftrightarrow u9$ | This effect periodically influences the pitch of the signal. The parameter's value controls the Depth. |

| Filter ⇒ | $L1 \leftrightarrow L9$ | This effect produces a sweeping filter sound. The parameter's value controls the Depth. |
|---|---|---|
| Pitch Shift ⇒ | $H1 \leftrightarrow H9$ | Transfer the pitch and blend with the original note. The parameter's value controls the Mix. |
| Ring Mod ⇒ | $r1 \leftrightarrow r9$ | Produces sounds like ring bell. The parameter's value controls the effect's Level. |
| Rate ⇒ | $01 \leftrightarrow 50$ | Control the speed of effects, except Pitch Shift, Ring Mod |
| Pitch ⇒ | $-12 \leftrightarrow 12$ | Control the pitch range when use Pitch Shift |
| Frequency ⇒ | $01 \leftrightarrow 50$ | Control the frequency when use Ring Mod |
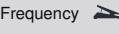
## DELAY Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Digital ⇒ | $d1 \leftrightarrow d9$ | Repeat the signal with no special processing, creates the most clean delay sound. The parameter's value controls the Feedback. |
| Analog ⇒ | $A1 \leftrightarrow A9$ | Simulates an analog delay equipment, produces a warm and vintage delay sound. The parameter's value controls the Feedback. |
| Mod ⇒ | $\Pi1 \leftrightarrow \Pi9$ | Adds chorus effect to the delay sound, has more extensive spacy feeling. The parameter's value controls the Feedback. |
| Tape Echo ⇒ | $t1 \leftrightarrow t9$ | Simulates an Tape Echo machine, creates a tape-like delay sound The parameter's value controls the Feedback. |
| Echo ⇒ | $E1 \leftrightarrow E9$ | Simulates the real Echo, authentic and natural delay sound. The parameter's value controls the Feedback. |
| Delay Time ⇒ | $01 \leftrightarrow 1.5$ | The value indicates the delay time from 10ms~1500ms. |
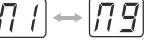
## REVERB Module

| Type Name | Display | Effect Explanation |
|---|---|---|
| Room ⇒ | $r1 \leftrightarrow r9$ | Simulates the acoustics of a Room. The parameter's value controls the Reverb's Level. |
| Chamber ⇒ | $c1 \leftrightarrow c9$ | Simulates the acoustics of a Chamber. The parameter's value controls the Reverb's Level. |
| Hall ⇒ | $H1 \leftrightarrow H9$ | Simulates the acoustics of a concert Hall. The parameter's value controls the Reverb's Level. |
| Church ⇒ | $C1 \leftrightarrow C9$ | Simulates the acoustics of a big church. The parameter's value controls the Reverb's Level. |
| Plate ⇒ | $P1 \leftrightarrow P9$ | Simulates a Plate reverberation. The parameter's value controls the Reverb's Level. |
| Mod ⇒ | $\Pi1 \leftrightarrow \Pi9$ | Add Chorus effect to a Hall reverb. The parameter's value controls the Reverb's Level. |
| Decay | $01 \leftrightarrow 30$ | Control the Decay of Reverb effect |
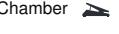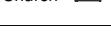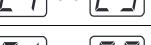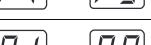
# Specification

| | |
|---|---|
| No. of Effect Modules: | Max. 8 simultaneous modules |
| No. of Effect Types: | 60 |
| Preset Patch Memory: | 40 Patches (4 Banks, each bank has 10 patches) |
| User Patch Memory: | 40 Patches (4 Banks, each bank has 10 patches) |
| Sampling Frequency: | 48 kHz |
| A/D converter: | 16 bit, 384 times over sampling |
| D/A converter: | 16 bit, 384 times over sampling |
| Guitar Input: | 1/4" monaural jack, input impedance 470 k Ohms |
| Output: | 1/4" stereo jack (doubles as line/headphone jack) |
| Power requirements: | AC adapter 9V DC, 300 mA (center minus plug) |
| | or 4 IEC R6 (size AA) batteries |
| Dimensions: | 158 mm (D) x 237mm (W) x 63 mm (H) |
| Weight: | 730 g (without batteries) |
| Accessories: | Owner's Manual, AC adapter 9V DC |

# Troubleshooting

Can not power on

Check power connection.

------ Make sure the power is connected correctly.

Check the adapter.

------ Make sure the adapter's type is DC9V/300mA/center minus.

When using battery, check whether the cable is inserted entirely to the INPUT jack.

When using battery, check the battery, is the battery low or dead?

------ Make sure the battery is at work and the INPUT jack is connected with an audio cable.

No sound or low volume

Check connection of cables.

------ Make sure all the cables are connected firmly.

Check the volume of guitar and amplifier.

------ Make sure each equipment's volume is set to an appropriate level.

High noise

Check the adapter.

------ Make sure the adapter's type is DC9V/300mA/center minus.

Check the cables.

------ Make sure the cables are connected firmly and have no quality problem.

# Appendix

## Patch List

| Patch | Patch Name | Pedal Assign | Patch | Patch Name | Pedal Assign |
|-------|-----------|--------------|-------|-----------|--------------|
| A0/00 | Super Lead | Volume | C0/20 | Wet Clean | Reverb Level |
| A1/01 | Pure Land | Volume | C1/21 | California Riff | Volume |
| A2/02 | Vintage Tremolo | Tremolo Rate | C2/22 | Rough Whip | Volume |
| A3/03 | Obsessive Drive | Volume | C3/23 | Preamp Drive | Drive Gain |
| A4/04 | Slap Blues | Volume | C4/24 | Acoustic Clean | Volume |
| A5/05 | Peaceful Plain | Delay Time | C5/25 | Rolling Wheel | Tremolo Depth |
| A6/06 | Jimi's Vib | Vibrato Rate | C6/26 | Mad Wing | Phaser Depth |
| A7/07 | Funky Phaser | Phaser Rate | C7/27 | Modern Metal | Volume |
| A8/08 | Traditional Metal | Volume | C8/28 | Whirly Room | Flanger Rate |
| A9/09 | Power Solo | Drive Gain | C9/29 | Spacy Drive | Delay Time |
| b0/10 | Texas Rhythm | Volume | d0/30 | Bounce Recorder | Phaser Rate |
| b1/11 | Blues Solo | Volume | d1/31 | Brit Melon | Drive Gain |
| b2/12 | Wah Wah | Filter Rate | d2/32 | Pink Wall | Delay Level |
| b3/13 | Lite Flanger | Flanger Rate | d3/33 | Confused Room | Reverb Level |
| b4/14 | Misty Coast | Flanger Depth | d4/34 | Jumping Squirrel | Phaser Depth |
| b5/15 | Randy Lead | Volume | d5/35 | Broken TV | Filter Depth |
| b6/16 | Fuzzy Echo | Delay Level | d6/36 | Pop Dist | Volume |
| b7/17 | Wall Shadow | Delay Time | d7/37 | Punch Back | Delay Time |
| b8/18 | Mystic River | Reverb Level | d8/38 | Vintage Drive | Volume |
| b9/19 | Infinite Mirror | Delay Time | d9/39 | Tele Ring | Ring Frequency |

## Drum Rhythm List

| No. | Type | Time Signature | Default Tempo |
|---|---|---|---|
| 01 | 8Beat1 | 4/4 | 120 BPM |
| 02 | 8Beat2 | 4/4 | 120 BPM |
| 03 | 8Beat3 | 4/4 | 120 BPM |
| 04 | 8Beat4 | 4/4 | 120 BPM |
| 05 | 8Beat5 | 4/4 | 120 BPM |
| 06 | 16Beat1 | 4/4 | 120 BPM |
| 07 | 16Beat2 | 4/4 | 120 BPM |
| 08 | 16Beat3 | 4/4 | 120 BPM |
| 09 | 16Beat4 | 4/4 | 120 BPM |
| 10 | 16Beat5 | 4/4 | 120 BPM |
| 11 | 3/4Beat | 3/4 | 120 BPM |
| 12 | 6/8Beat | 6/8 | 120 BPM |
| 13 | Pop | 4/4 | 120 BPM |
| 14 | Funk | 4/4 | 108 BPM |
| 15 | Hard Rock | 4/4 | 135 BPM |
| 16 | Metal | 4/4 | 120 BPM |
| 17 | Punk | 4/4 | 162 BPM |
| 18 | Hip Hop | 4/4 | 96 BPM |
| 19 | Trip Hop | 4/4 | 84 BPM |
| 20 | Dance | 4/4 | 120 BPM |
| 21 | Break Beat | 4/4 | 156 BPM |
| 22 | Drum n' Bass | 4/4 | 180 BPM |
| 23 | Blues | 4/4 | 108 BPM |
| 24 | Jazz | 4/4 | 120 BPM |
| 25 | Swing | 4/4 | 144 BPM |
| 26 | Fusion | 4/4 | 120 BPM |
| 27 | Reggae | 4/4 | 90 BPM |
| 28 | Latin | 4/4 | 135 BPM |
| 29 | Country | 4/4 | 114 BPM |
| 30 | Bossanova | 4/4 | 120 BPM |
| 31 | Rumba | 4/4 | 135 BPM |
| 32 | Tango | 4/4 | 120 BPM |
| 33 | Polka | 4/4 | 120 BPM |
| 34 | World | 4/4 | 108 BPM |
| 35 | Metro 2/4 | 2/4 | 120 BPM |
| 36 | Metro 3/4 | 3/4 | 120 BPM |
| 37 | Metro 4/4 | 4/4 | 120 BPM |
| 38 | Metro 5/4 | 5/4 | 120 BPM |
| 39 | Metro 6/8 | 6/8 | 120 BPM |
| 40 | Metro | None | 120 BPM |