MG-100

Modelling Guitar Processor

NUX

OWNER'S MANUAL

www.nuxefx.com

INTRODUCTION

Thank you for selecting the NUX MG-100 guitar modeling processor! With many years of research we're proud to give you great guitar tones for your greatest music experience!

Please take the time to read this manual carefully to get the most out of the unit. We recommend that you keep the manual at hand for future reference.

FEATURES:

- A total of 58 effects; Up to 8 can be used simultaneously.
- 13 classic amp models with True Simulation of Analog Circuit(TSAC)technology.
- Vintage 3-band passive EQ modeling for every amp model.
- 6-band graphic EQ designed specifically for electric guitar. (120Hz,250Hz,750Hz,1.6kHz,3.2kHz,6.4KHz)
- 11 cabinet models.
- Seamless and quick preset switching.
- Built-in drum machine with CD quality PCM sounds.
- Up to 40 seconds phrase loop with sound on sound adds more playability.
- Tap tempo control for time based effects and drum machine.
- Loop sound can be played with drum machine's rhythm beat synchronously.
- The AUX IN jack makes it easy to practice alone with MP3, CDs and other inputs.
- The expression pedal lets you adjust the volume or effect parameters in real time.
- Large color TFT LCD panel (160x128), graphic interface making the overall operation easy and intuitive.
- A total of 72 presets, 36 factory+36 user presets.
- New generation 32-bit DSP, high performance 24Bit 44.1kHz AD/DA converter.
- Runs on batteries and AC adaptor. Six AA/LR6 alkaline batteries can be continuous used for 8 hours.

WARNING!-IMPORTANT SAFETY INSTRUCTIONS BEFORE CONNECTING, READ INSTRUCTIONS

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: To reduce the risk of fire or electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The lightning symbol within a triangle means "electrical caution!" It indicates the presence of information about operating voltage and potential risks of electrical shock.

The exclamation point within a triangle means "caution!" Please read the information next to all caution signs.

1. Use only the supplied power supply or power cord. If you are not sure of the type of power available, consult your dealer or local power company.
2. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat.
3. Guard against objects or liquids entering the enclosure.
4. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
5. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
6. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and at the point where they exit from the apparatus.
8. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice "safe listening".
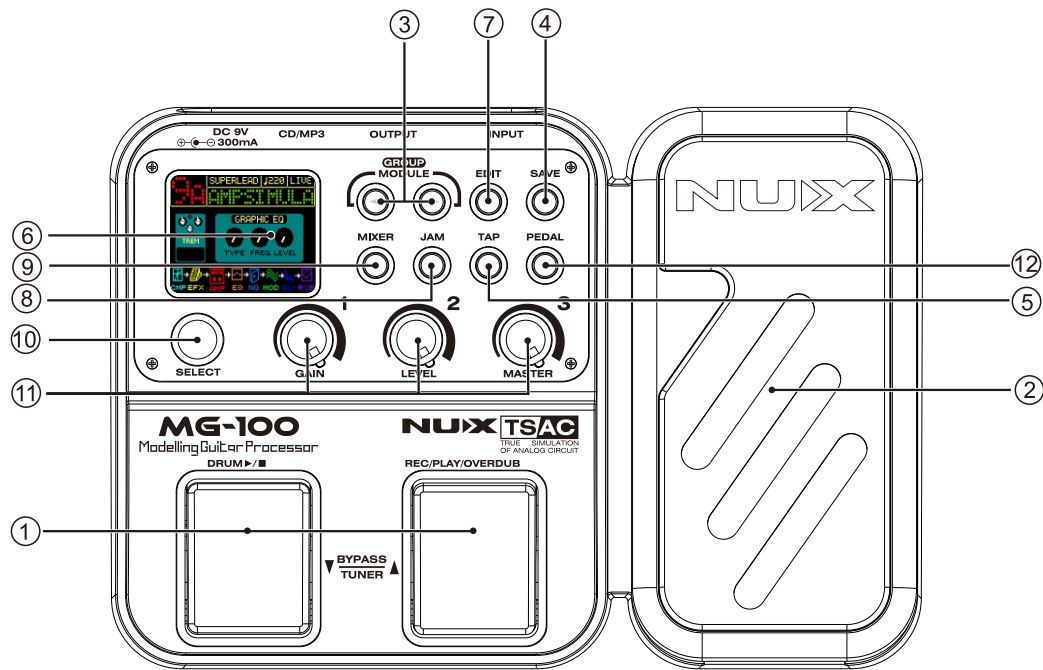
Follow all instructions and heed all warnings
KEEP THESE INSTRUCTIONS!

CONTENTS

Operation and Functions
Front Panel

1. PRESET▲▼foot switches
These two foot switches are used to select presets. The foot switch on the right will select the next preset up, and the foot switch on the left will select the next preset down. Press both foot switches together to enter tuning mode.

2. Expression pedal
The expression pedal provides real-time control of the MG-100's volume, wah, or assigned effect parameter. The expression pedal is equipped with a switch that turns the wah feature on or off when you apply extra pressure to the toe. The expression pedal can adjust the sensitivity when you calibrate the pedal.

3. MODULE buttons
These buttons navigate to the effects module. Press one of these buttons to step through the modules, the display shows the effect sets of the module.

4. SAVE button
By pressing the SAVE button, you can save your tone settings that you created using the panel knobs and pedals. Press SAVE, the first character of

the preset name shows with a red background. Turn the SELECT knob to choose the character you like and press the MODULE knobs to choose the character you want to change. Press PRESET▲ and PRESET▼ to choose the group and preset you want to save. When everything is ok, press SAVE once more.

5. TAP button
Tapping this button sets the overall tempo, which allows you to sync the delay time to the tempo of the song. For modulation effects, it sets the LFO's frequency. Tap tempo is the average of the first two taps up to the last ten. Tap tempo is always shown in beats per minute (tempo).

6. Display
The 160x128 TFT LCD provides information for different functions of the selected mode. In LIVE mode, the display will show the current selected preset number and name. In EDIT mode, the display will show the model name.

7. EDIT
In SAVE mode, press this button to stop the save procedure, and return to the last mode. In LIVE and EDIT mode, press this button to switch between two modes.

8. JAM
The JAM button is used to turn the MG-100's built-in drum and loop machine on and off interface.

9. MIXER
Press the MIXER button and the MG-100 enters the MIXER mode. This is recommended when the MG-100 is directly connected to a recorder, a hi-fi system, headphones or another audio device.

10. SELECT
This Knob allows you to choose effects for each module in LIVE mode. In SAVE mode, it is used to choose characters quickly. In DRUM mode, it is used to enter a tempo.
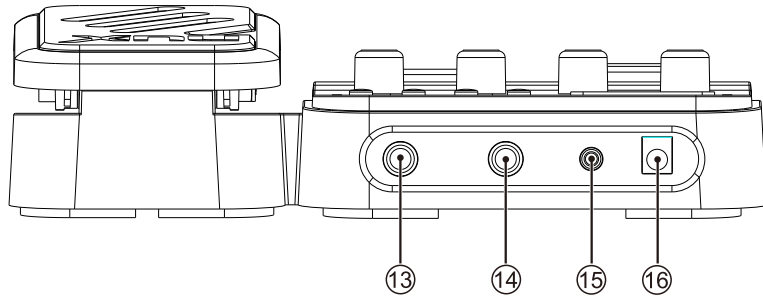
11. KNOBS 1-3
Adjusts the parameters of the effect in the module. In LIVE mode, Knob 3 adjusts the master volume.

12. PEDAL
This button selects the module to assign to the expression pedal.

Rear Panel

⑬　　⑭　　⑮　⑯

13. INPUT
Connect your instrument to this high-impedance input.

14. OUTPUT
Connect the OUTPUT to the input of guitar amplifier (or mixer input) for mono operation. It is also possible to use a Y cable for sending the output to two amplifiers.

15. AUX IN
Connect the headphone output of an MP3 or CD player to this jack. Adjust the output level of your playback device and the MG-100's master level knob for the proper volume balance.

16. DC IN
Connect the included DC9V negative tip power supply to this jack.

Installing Batteries

Insert the batteries as shown in the figure, being careful to orient the batteries correctly.
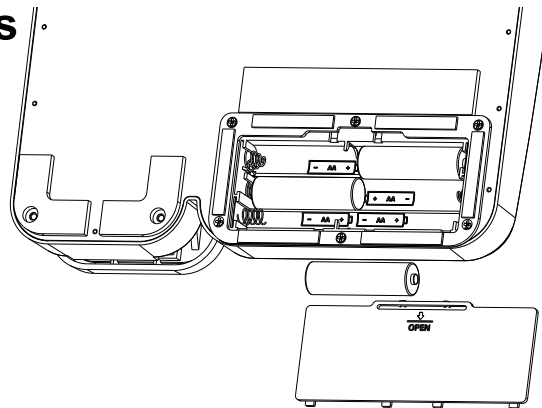
● When the batteries run down, "Low Battery"appears on the display. When operating with batteries, you can check the amount of remaining charge in the top right corner of the display when in edit mode.

● Turn the unit over and open the battery compartment cover on the bottom.

● Make sure the "+" and "-" ends of the batteries are oriented correctly.

● Insert six AA batteries into the battery compartment.

● Avoid using new and used batteries together.

The Things We Need to Do Before Turning On the Power

Connections
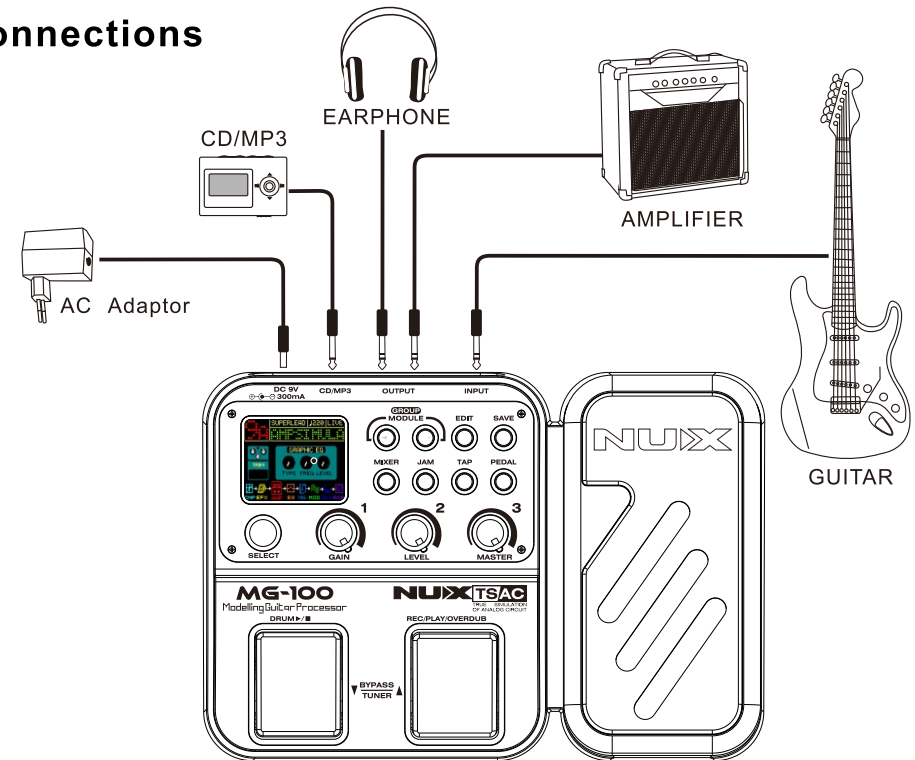
● Please use the included AC adaptor or a DC9V(center minus plug) 300ma , power adapter. Using an adaptor other than the specified type may cause damage.

● The INPUT jack also acts as a power switch. Inserting a plug in the INPUT jack turns on the power. The power is switched off when the plug is disconnected. Be sure to unplug the cable from this jack when the MG-100 is not in use.

● Connect the input of a guitar amp to the OUTPUT jack, or inputs of two guitar amps to the OUTPUT jack with a Y cable. You can also connect stereo headphones to this jack. For proper frequency response, make sure that the MIXER function is enabled when using headphones.

Power ON/OFF

Turning on the power

● Turn down the volume on all devices and connect the external devices.

● Insert the plug into the INPUT jack.

● Turn on the power to the CD or MP3 player or other aux input device.

● Turn on the power to the guitar amp or other output device.

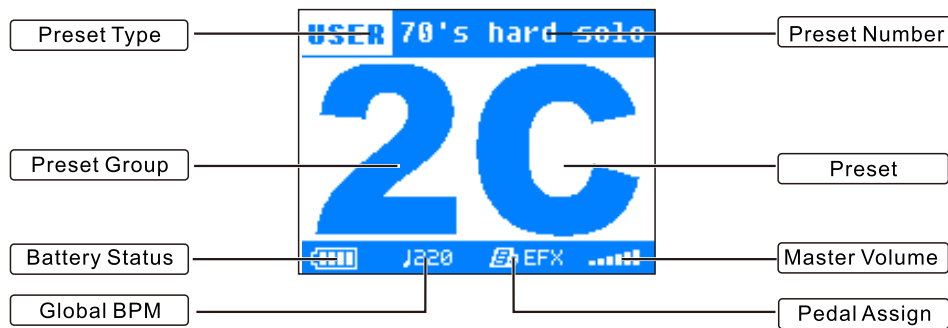● And then, adjust the volume of each device.

> *MG-100 needs a few seconds to self check after power up before the unit will operate normally.*

Turning off the power

● Turn down the volume of all devices.

● Turn off the power to the guitar amp and other output devices.
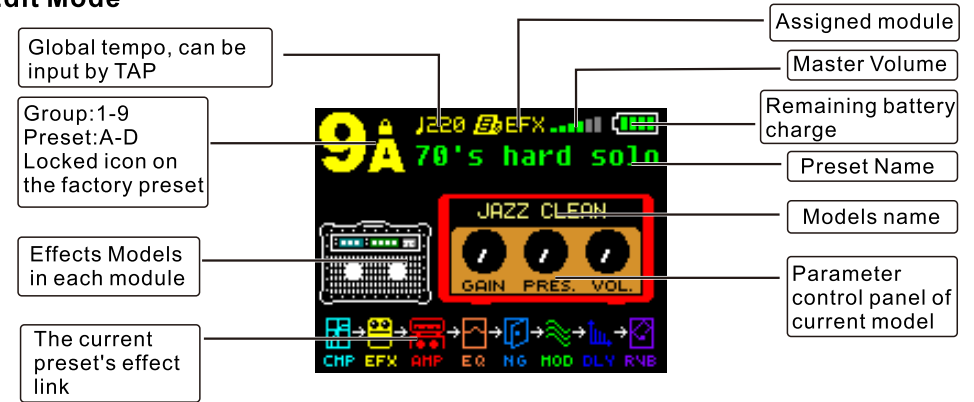
● Pull out the plug from the INPUT jack.

Saving and Calling Up Tones

Live Mode

Preset Type
Preset Group
Battery Status
Global BPM

Preset Number
Preset
Master Volume
Pedal Assign

● When you first apply power to the MG-100, it powers up in LIVE mode. LIVE mode provides access to all of the presets within the MG-100 via the PRESET▲and PRESET▼foot switches.

● When you are in LIVE mode, the LCD displays the current preset name and number. Knobs 1- 3 adjust the current preset's gain, level and master volume.

● The letters on the top left, FCTY are the factory presets.You can't save your own preset in this location. USER is the preset you can modify and save to other USER presets.

● The big Letter and number show the current preset number. 1-9 preset groups, A-D preset numbers. The MG-100 has a total of 72 presets, 36 user presets and 36 factory presets.

● Preset[MODULE] buttons select the preset group. When the buttons are pressed, the preset group number will flash, then press foot switches to change the preset.

● Turn SELECT knob to switch presets quickly.

Edit Mode

Global tempo, can be input by TAP
Group:1-9
Preset:A-D
Locked icon on the factory preset
Effects Models in each module
The current preset's effect link

Assigned module
Master Volume
Remaining battery charge
Preset Name
Models name
Parameter control panel of current model

● EDIT mode enables you to change the various effect parameters. Press [EDIT] to enter EDIT mode, if LIVE mode is current mode.

● To edit or create a preset, first select the preset you wish to edit. The dot matrix field of the LCD displays the current effect model's name. Press the module buttons to choose the effect module you want to edit. Use the effect selector to choose the effect in the current module. Use knobs 1-3 to modify the effect's parameter settings.

● In the EDIT mode you can modify all the parameters, select models and assign pedals. Changing presets, or turning the power off before storing any changes, erases any changes made and the MG-100 will revert to the stored values for the preset.

Switching Between Live Mode and Edit Mode

● Press [EDIT] to switch from LIVE mode to EDIT mode, or return to LIVE mode from EDIT mode.

Saving Your Preset

Once the preset has been modified to your liking, you may save your settings to any of the 36 user preset locations (presets 1A-9D). The following steps outline the procedure for saving changes to a preset or copying a preset to a different location:

1. Press SAVE once. The first character in the display turns red, indicating that you can now name your custom creation.

2. Use the SELECT knob to select the alpha-numeric character and MODULE buttons to select the next or previous character location.

3. Select the User preset location where your new sound will reside using PRESET▼and PRESET▲foot switches.

4. Press SAVE to save the changes.

The procedure for copying one preset to another preset location is the same. Use the foot switches to select the preset that you want to copy, then follow steps 1-4 for saving a preset as described above. Press [EDIT] at any time to cancel the save procedure.

When you adjust the setting under a factory preset, and press save, this setting will be saved into the user's preset rather than the factory one.

Tuning the Guitar

● Press the PRESET▼and PRESET▲foot switches simultaneously to switch to Tuner mode.

● If necessary, you can change the reference pitch. Turn the SELECT knob to change the reference pitch, in one Hertz units, to any value from 435Hz to 445Hz.

● Press the PRESET▲ foot switch to bypass the guitar sound. The tuner mode is set to mute the output as the default setting.

● Play a single note on the string to be tuned; play the string open. The name of the note closest to the pitch of the string played appears in the display.

● Press the PRESET▼foot switch to exit the tuner mode.

Operating Jam Machine

| Time Signature of Drum Pattern |
| Drum Pattern Number and Name |
| Drum Style |
| REC/PLAY/OVER DUB Indicator |

| Tempo of Drum Machine |
| PLAY/STOP Drum Pattern |
| Volume Control of Drum Pattern |
| Volume Control of Loop |
| PLAY/REC Time Indicator |

The JAM button is used to turn the MG-100's built-in drum & loop on and off machine. When the JAM button is pressed, the display shows the drum and loop machine on the LCD. Use **SELECT knob** to change the style. Turn the parameter controls to change the drum pattern and the level of the drum and loop machine. Pressing the **PRESET ▼foot switch** plays the selected drum pattern continuously. Press PRESET▲ to record/play/overdub the sound clip you are playing. Double press this foot switch to stop the loop and clear the sound clip from the memory.

Drum Machine
Press [MODULE] to choose drum beat styles; such as rock, country and jazz. There are seven drum patterns under each drum style, Turn knob 1 to select a drum style. Knob 2 adjusts the volume of the drum pattern.

Each drum pattern has its own time signature and tempo for different music styles.

Although each drum pattern has its own tempo, you can still adjust the tempo of the drum pattern by turning the SELECT knob. The tempo range is 40-240BPM. You also can input the tempo by the TAP button.

Press the PRESET▼foot switch to start the drum pattern. Press again to stop.

Loop Machine
The MG-100 can record a sound clip up to 40 seconds and overdub a phrase.

Press the PRESET▲ foot switch, and play the phrase that you want to record. REC indicator lights on the display and recording starts. To stop recording, Press the PRESET▲foot switch again, and the recorded phrase will play instantly. The PLAY indicator lights.

During loop playback, press the PRESET▲foot switch. The OVERDUB indicator lights on the display and overdubbing starts. When the end of the recorded phrase is reached, playback returns to the loop beginning and overdubbing continues. To end overdubbing, press PRESET▲again.

Turn the parameter knob to adjust the phrase volume.

Double press PRESET▲to stop. The playback and phrase will be erased from memory.

Make a Backing Track
The loop station and drum machine can be used simultaneously! To create a backing track, first select a drum pattern and press play. Then play the phrase that you want to record when pressing PRESET▲.

Be careful to follow the drum beat when you record and playback a phrase, otherwise the phrase may not be in sync with the drum beat.

When using the drum and loop machine, the unit can still operate as an effects processor by pressing JAM to return to live or edit mode.

Using Your Expression Pedal

THE MG-100 provides an expression pedal that you can use to control not only wah or volume, but a wide variety of effect parameters. For each program, you can specify which effect will be controlled.

If you've assigned a parameter to the expression pedal, operating the pedal has the same result as using the knob to tweak the parameter.

In Live Mode
In edit mode, you can use the pedal as a volume or an expressional pedal. Apply extra pressure to the toe of the expression pedal to activate the pedal's switch!

In Edit Mode
In edit mode, its the same as live mode, but you can select which effect to control with the expression pedal.

Here's a very easy and convenient way to set the expression pedal. In edit mode, press [PEDAL] assign the expression pedal to the EFX, AMP, MOD,DELAY and REVERB module. When that module is switched on, apply extra pressure to the toe of the expression pedal to activate the pedal's switch.

Save the setting into a user preset so you can use it in live mode.

TAP Your Beat

The TAP button has two functions; setting the tempo of the drum machine and setting the parameters of some effects; For example: rate of chorus or delay time.

Setting effects parameters
Press TAP two or more times at the desired tempo. The tempo is set automatically according to the interval between key presses.

To link the tempo to the rate or time of the modulation and delay effects, turn the knob of rate or time to the min position, you will see the name change to BPM. You have linked the tempo to the effect.

Setting the tempo of the drum machine
In JAM mode, press TAP to change the drum machine's tempo. The tempo range is 40-240BPM.

Other functions

Returning the MG-100 to its factory settings
This function resets the unit to its original factory settings. This procedure erases all custom user presets.

> **ATTENTION:** Performing this function will erase all user-programmed data. All such data will be lost forever! Be sure you want to erase the memory and start fresh before continuing with this procedure!

1. Press and hold SAVE for three seconds, you will enter the SETUP interface.

2. Follow the instructions on the LCD to restore your MG-100 to factory settings!

Expression Pedal Calibration
MG-100's expression pedal has been set for optimum operation at the factory, Extended use and the operating environment can result in the pedal going out of adjustment.

If you encounter problems such as being unable to switch the PEDAL MODE SW on or off or fully cut off the sound with the volume pedal, you can use the following procedure to readjust the pedal.

1. Press and hold SAVE for three seconds. You will enter the SETUP interface.

2. Follow the instructions on the LCD to recalibrate the expression pedal!

Setting the Battery Type (Alkaline or NiMH)
Set the battery type that you are using in order to display the remaining battery charge accurately.

3. Press and hold SAVE for three seconds. You will enter the SETUP interface.

4. Follow the instructions on the LCD to set the Battery Type you are using!
- ● ALKALINE
  Use this setting for alkaline batteries.
- ● NiMH
  Use this setting for nickel metal hydride batteries that can be recharged and reused.

Practicing along with CD and MP3
When playing CDs or MP3, connect the device to the AUX IN jack. AUX IN is a stereo mini jack, and is mixed with the guitar sounds in the MG-100.

The volume level of the sound input from the AUX IN jack cannot be adjusted via the MG-100. Adjust the volume on the connected equipment.

Modules, Effects and Parameters
The Amp and Effect modules are in an order for optimum performance. The following list shows the order in which they are connected.

Module	Effects
COMP	DYNA COMP （1）
EFX	PEDAL WAH, AUTO WAH, TOUCH WAH , UNIVBE, TREMOLO, PHASER, BOOSTER, OVER DRIVE, DISTORTION, DIST+, MODERN DIST, FUZZ （12）
AMP	JAZZ CLEAN,BLACK FACE,TWEEDY, US BLUES, CLASS 30A, PLEXI FACE, LEAD 100, 80'S 800, MODERN AGE, NEW METAL, CRUNCH IV, SS WEAPON , DEATH ZONE （13）
CAB	DIRECT OUT, JAZZ 2x12, BLACK 1x12, TWEED 1x12, BSMAN 4x10, TWIN 2x12, BLUE 2x12, GREEN 4x12, T75 4x12, V30 4x12, RECT 4x12, CALI 1x12 （11）
EQ	6 BAND GRAPHIC EQ （1）
NG	NOISE GATE （1）
MOD	CHORUS, STEREO CHORUS, FLANGER, VIBRATOR, STEREO TREMOLO, ROTARY SPK, VIBROPAN, PITCH SHIFT, PEDAL BAR, HARMONIST （10）
DLY	ANALOG DELAY, DIGITAL DELAY, TAPE ECHO, STEREO DELAY, PING PONG, REVERSE DELAY （6）
RVB	PLATE, ROOM, HALL （3）

Modules ,Effects and Parameters

As shown in the illustration above, the MG-100 can be thought of as a combination of several single effects. Each effect is referred to as an effect module. Parameters such as effect intensity can be adjusted for each module individually, and modules can be switched on and off as desired.

Each amp and effect mode within the MG-100 can be programmed to suit your personal taste. Understanding how these components alter the sound, and how each parameter alters the effect, will help you achieve the sound you are looking for. The following overview of the MG-100's effects outlines what each effect and parameter does.

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Comp Module

COMPRESSOR

A compressor is used to control the dynamic content of a signal. It can be used both for leveling out the signal's dynamics (thereby letting your guitar sound stand out clearer) and also for more radical, very recognizable effects.

The MG-100 simulates a guitarist's favorite compressor. The attack parameter specifies how fast the attenuation is achieved. Use the gain parameter to compensate for the overall loss of level that might result from compression.

● SENS (Sensitivlty)
The"SENS" parameter sets the sensitivity of the compressor. If this parameter is set to a higher value, lower level sounds will be boosted. With a higher Sensitivity, the overall volume level is higher. To adjust the final volume level, use the "OUT"parameter.
● ATCK(Attack)
The Attack time is the response time of the compressor. The shorter the attack time, the sooner the Compressor will reach the specified Ratio after the signal rises above the Threshold point.
● OUT(Output)
Use the output parameter to compensate for the level changes caused by the applied compression.

EFX Module

All models in EFX module are placed before the Amp module. Use wah-wah, tremolo and phaser to add color to your amp sound, or use overdrive and distortion to add fat bottom or screaming highs!

Model Type	Description
PEDAL WAH	With this effect type, you can create the same effect as with a dedicated wah pedal, which you can control manually. All you need to do is assign the expression pedal to this model.
AUTO WAH	The wah effect occurs when a relatively narrow frequency range is boosted and swept through a frequency range. The sweep is controlled by a low frequency oscillator (LFO).
TOUCH WAH	The wah effect occurs when a relatively narrow frequency area is boosted and swept through a frequency range. The sweep is controlled by the input dynamics. This means: the harder you hit the strings, the higher the boosted frequency will be.
UNIVBE	This resembles a phaser effet. It also provides a unique undulation that you can't get with a regular phaser.
TREMOLO	A Tremolo is basically a change of the signal level controlled by an LFO.
PHASER	A phaser splits the incoming signal into two paths: one path changes the phase of the original signal, the other is the original signal. The continuously out of phase signal is then mixed back in with the original signal. As the phasing changes, different frequencies get canceled resulting in a sort of swirling sound.
BOOSTER	Increases signal gain to boost the sound.
OVER DRIVE	A model of a classic overdrive stomp effect.
DISTORTION	This effect is the most versatile distortion; from subtle crunch to complete roar.
DIST+	This is modeled based on a basic op-amp equipped distortion pedal.
MODERN DIST	This model is based on very high gain distortion boxes. This pedal has been a classic ever since its release in the early 80's.
FUZZ	This effect is based on the fuzz pedal which can be heard on countless early rock songs!

Parameter List

Model Type		Description
PEDAL WAH	Knob1	This knob selects the Wah Type: 1.CRY is a traditional sounding wah. 2.VX is based on wah models. 3.FULL wah sweeps a wider spectrum of audible frequencies than a vintage wah. TALK simulate the human voice.
	Knob2	FREQ
	Knob3	OUT: This knob selects the wah type.
AUTO WAH	Knob1	This knob selects the wah type.
	Knob2	RATE: set the speed of the effect.
	Knob3	WAVE: Six waveforms are available as LFO sources 1.SINE: Sine wave 2.TRI: Triangle wave 3.SQR1: Square wave 4.SQR2: Square wave 5.SAW1: Sawtooth wave 6.SAW2: Sawtooth wave

	Knob1	OUT: compensate for the level changes caused effect.
TOUCH WAH	Knob2	DECY: adjust the length of time the effect is applied.
	Knob3	SENS: adjust the sensitivity according to the level present on the input.
UNIVBE	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
	Knob3	Selects either the chorus or vibrato effect. 1.Vibrato 2.Chorus
TREMOLO	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
	Knob3	WAVE: Six waveforms are available as LFO sources 1.SINE: Sine wave 2.TRI: Triangle wave 3.SQR1: Square wave 4.SQR2: Square wave 5.SAW1: Sawtooth wave 6.SAW2: Sawtooth wave
PHASER	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
	Knob3	FDBK: this parameter controls the amount of feedback of the phased signal that causes the stronger phase effect.
BOOSTER	Knob1	FREQ: set low frequency boost
	Knob2	TONE: adjusts boost or cut of the high frequencies.
	Knob3	OUT: set the output level for the effect.
OVER DRIVE DISTORTION DIST+	Knob1	GAIN: set the amount of distortion applied to the input signal of the effect.
MODERN DIST	Knob2	TONE: adjusts boost or cut of the high frequencies.
FUZZ	Knob3	OUT: set the output level for the effect.

Guitar Amplifier Module

Amp module includes 13 popular modern and vintage guitar amps.

Model Type	Description
AMP OFF	No effect
JAZZ CLEAN	This Amp Model is modeled after the classic Roland JC-120. It'll give you an essentially flat response, providing a balanced tone across the fret board for jazz chord melodies or single-line phrasing.
BLACK FACE	This amp model is modeled on the normal and bright channels of a Fender Deluxe Reverb. With a single coil pickup guitar, black face is capable of producing the classic blues tone.
TWEEDY	This is based on a Tweed deluxe. This 15 Watt,1x12, all-tube combo is the very essence of simplicity. It only had a single tone control named TONE! The amp's tone control affects the high frequencies in a very different way than a "regular" treble control. Tweak it and find what you want to do with it!
US BLUES	This models the sound of a Fender BASSMAN, the classic, vintage tube amp. It has the fat bottom end you'd expect from a bass amp, but also has the Fender twang on the top. It is also very sensitive and responsive to both picking strength and the volume setting on your guitar.

CLASS 30A	This amp model is modeled on the VOX AC 30TB. The unique character of the sound can be attributed to the fact that Class A amps are overdriven in a very different way than Class AB amps.
PLEXI FACE	This model is based on a MARSHALL original design JTM45. The JTM45 is inspired by the early FENDER Bassman. So if you like a Bassman you'll also want to check out PLEXI 45W.
LEAD 100	This is based on channel 1 and 2 of a Marshall Super Lead 100W. This amp has an incredibly rich and warm tone. You can turn the GAIN control all the way up and get an organic overdrive.
80'S 800	This amp model is modeled on the high input of a MARSHALL JCM800 This amp was responsible for the fat, roaring sound that dominated 80's hard rock and heavy metal bands.
MODERN AGE	This is modeled on the lead channel of a SOLDANO SLO100. It's capable of a powerful, heavily saturated sound that combines an open low-end with compressed mids and highs. The result is a tone that remains focused and well defined at even the most extreme gain settings.
NEW METAL	This model is based on the Mesa Boogie Dual Rectifier Solo Head. Ultra high gain and deep low end has made this all tube amp a mainstream for many modern, big metal sounds. It's tone controls have more influence at high gain settings, so you can scoop the mids and increase the bottom end that nu-metal liked.
CRUNCH IV	This is based on a Mesa Boogie Mark IV. It's basically an amp by adding master volumes and more gain stages to amps with Fender-style circuitry. You can hear the Fender style tone but with more "punch" in the mids.
SS WEAPON	This model is based on a modern solid state guitar amplifier. 3-band active tone controls make this monster an aggressive weapon.
DEATH ZONE	Based on no particular model, just tons of gain and deep low end!

MG-100 includes eleven cabinet models

NO CAB	No cabinet model
JAZZ 2*12	Based on a Roland's 2x12 JC-120
BLACK 1*12	Based on a 1x12 Fender Blackface Deluxe Reverb
TWEED 1*12	Based on a 1x12 Fender Tweed Deluxe
BSMAN 4*10	Based on a 4x10 Fender Bassman
TWIN 2*12	Based on a 2x12 Fender Blackface Twin Reverb
BLUE 2*12	Based on a 2x12 Vox AC30 Top Boost
GREEN 4*12	Based on a 4x12 Straight with Celestion Green backs
V30 4*12	Based on a 4x12 Slant with Celestion Vintage 30's
T75 4*12	Based on a 4x12 Slant with Celestion T75s
RECT 4*12	Based on a 4x12 Mesa Boogie Rectifer
CALI 1*12	Based on a 1x12 Mesa Boogie Mark IV

All the amps share the same control panel:

GAIN: controls the amount of distortion of the Amp.

PRES.:adjust the presence of the Amp

VOL.: this parameter adjusts the preset's volume.

BASS : adjusts the low frequency level.

MID: adjusts the midrange level.

HIGH: adjusts the high frequency level.

Graphic EQ Module

The MG-100's graphic EQ helps further modify your tone. There are six band controls, they are 120Hz, 250Hz, 750Hz, 1.6kHz 3.2kHz,6.4kHz. The range is -12dB to +12dB. You can use knob 1-3 to adjust, boost or cut each frequency. Press MODULE▼, to move to the second bank of frequencies.

Noise Gate module

A noise gate is used to attenuate the signal when you are not playing your guitar. This way you can mute all that hiss, hum and other noise.

● THRE (Threshold)

The Threshold point determines at what point the Noise Gate should start dampening the signal.

To set this parameter, turn up the volume using your guitar's volume control, but do not play. Then turn up the Threshold value from 0 to the point when the desired dampening is actually achieved.

If you configure the Noise Gate this way, you will need to set the maximum DAMP parameter (see below) to a value other than MAX.

● DAMP (Damping)

This parameter determines how hard the signal should be attenuated when the signal level falls below the set Threshold.

Now you might think that you should always go for maximum dampening. However, consider the fact that you should also strive for a smooth transition from the "gated/attenuated" stage to the "open" stage. The more signal must be released when opening the Gate, the more obvious the effect becomes. This means that you will have to experiment to fine-tune the Noise Gate to your sounds. There is no one-size-fits-all setting.

Modulation Module

Model Type	Description
CHORUS	Chorus adds a short delay to your signal. The delayed signal is modulated in and out of tune and then mixed back with the original signal to create a thicker sound.
ST CHORUS	Chorus with phase setting of the processed signal reverse in the right and left channel. This gives a very wide stereo effect.
FLANGER	A flanger uses the same principle as a chorus but uses a shorter delay time and adds regeneration(or repeats) to the modulating delay. This results in an exaggerated up and down sweeping motion to the effect.
VIBRATO	The vibrato effect modulates the pitch of the incoming signal. The result is similar to the vibrato technique used by vocalists. In contrast to a Chorus or Flanger effect, no direct signal is combined with the pitch-modulated signal.

ST TREMLO	A stereo tremolo is basically a change of the signal level controlled by an LFO.
ROTARY SPK	The rotary speaker emulates a device that includes a spinning horn and woofer. The rotation of these two speakers produces an interesting combination of the sound panning from side to side. This produces a slight pitch change due to the speed of the sound coming towards, and then going away from the listener.
VIBROPAN	Adjusts the amount of panning incorporated with the vibrato effect. When set at min, this effect is a standard vibrato. As the parameter is turned up, the phase difference of the vibrato signal sent to the two channels is changed until a full stereo image is obtained at max.
PITCH SHIFT	A pitch shifter copies the incoming signal, then shifts the pitch of the copy to a different note. The shifted note is then mixed back with the original signal, sounding as if two guitars were playing different notes.
PEDAL BAR	Pedal bar shift allows you to control the pitch of an added signal with an external expression pedal.
HARMONIST	This intelligent pitch shifter outputs the effect sound with the pitch shifted according to scale and key settings.

Model Type		Description
CHORUS	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
STEREO CHORUS	Knob3	MIX: adjusts the mix amount of the effect sound.
FLANGER	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
	Knob3	RESO: set the resonance of the effect.
VIBRATO	Knob1	RATE: set the speed of the effect.
	Knob2	DPTH: set intensity of the effect.
ST TREMOLO	Knob1	RATE: set the speed of the effect.
	Knob2	WIDE: set the stereo wide of the effect.
	Knob3	WAVE: Six waveforms are available as LFO sources 1.SINE: 2.TRI 3.SQR1 4.SQR2 5.SAW1 6.SAW2
ROTARY	Knob1	RATE: set the speed of the effect.
VIBROPAN	Knob2	DPTH: set intensity of the effect.
PITCH SHIFT	Knob1	SHFT: set the shift pitch from original
	Knob2	MIX: adjusts the mix amount of the effect sound.
PEDAL BAR	Knob2	UP/DOWN: set the pitched sound direction.
HARMONIST	Knob1	KEY: set the song's key from A,A#.....G#
	Knob2	INTERVAL: set the interval from original note.
	Knob3	MIX: adjusts the mix amount of the effect sound.

Delay Module

Delay is an effect that records a portion of the incoming signal, and then plays it back a short time later. The recording can repeat just once or several times.

Model Type	Description
ANALOG DLY	This models an analog delay that used a bucket-brigade device(BBD) instead of a tape mechanism and was known for its compactness and reliability. It is characterized by a warmly distorted sound.
DIGI DELAY	This model is a straight up digital delay
TAPE ECHO	This models a tape-based echo device, gives you classic tape echo warmth. The high end will deteriorate with each repeat.
STEREO DLY	This delay is specifically for stereo output. This allows you to obtain the tap delay effect that divides the delay time, then deliver them to L and R channels.
PING PONG	The Ping Pong delay causes the delay to alternate between the left and right channels, resulting a very nice stereo feel.
REVERSE	The reverse delay is a great effect when a more mysterious, exotic delay style is required.

Note: All delay models share same functions. Knob 1-3 adjust the parameters.

Parameter	Description
TIME	This parameter sets the time between the delay repeats. This is also known as the "length" of the delay. When set to bpm, the MG-100's global tempo is subdivided according to this setting.
REPT	This parameter sets the amount of feedback from the output of the effect back to its input. Use the feedback parameter to set how many repeats of the signal you would like to have.
MIX	Adjusts the mix amount of the delay sound.

Reverb Module

The MG-100 features three different Reverb classics. All types have the same editable parameters, but the reverbs' characteristics vary.

Parameter	Description
PLATE	Travel back before the digital era. Reverberating springs or metal plates were used to create reverb. Plate reverbs sound diffuse and bright. They can be used to make the processed signal "stand out" rather than blend naturally.
ROOM	The living room type simulates a relatively small, well furnished room. In such a room, many reflections are absorbed by soft materials, and the source signal is reflected and sustained mainly from the walls.
HALL	The hall algorithm simulates a rather large hall and preserves the natural characteristics of the source material. Excellent when you strive for a discrete reverb with medium to long Decay times.

These brief introductions should only give you a hint in terms of choosing the right one for a given application. Take some time to listen to the different types, experiment and don't be afraid to be innovative!
All reverb model share same functions, knob1-3 adjust the parameters.

Parameter	Description
PLATE	The Decay parameter determines the length of the Reverb Diffuse Field. The length is defined as the time it takes for the Diffuse Field to decay approximately by 60dB.
DAMP	This parameter defines the reverb coloration from dark to light.
MIX	This parameter sets the relationship between the dry signal and the level of the effect in this Effect.

Troubleshooting

● Battery icon turns red in the display
　1)Batteries are low.
　2)Replace with new batteries.

● The unit can't power on
　1)Is the correct AC adaptor properly connected?
　　Confirm the adaptor is connected.
　　Never use any AC adaptor other than the adaptor specified.
　2)Has the battery run down?
　　Replace with new batteries.
　　To reduce battery consumption, be sure to disconnect the plug connected to INPUT jack whenever the unit is not in use.
　3)Is the plug properly connected to the INPUT jack?
　　Check the connection once again. The power will not turn on without a plug connected to the INPUT jack.

● No sound or volume is low
　1)Are the other devices properly connected?
　　Check the connection once again.
　2)Could the MASTER level knob be turned down?
　　Use the MASTER level nob to raise the output value.
　3)Could the levels for EFX or EQ be too low?
　　Use the parameter knobs to raise the levels.
　4)Is the volume turned down?
　　Check the volume levels on any connected amp or mixer.
　5)Could the level have been lowered with the expression pedal?
　　When the pedal is set to function as a volume pedal, sound is not output when the toe of the expression pedal is in the raised position.
　6)Is it in Tuner mode?
　　In Tuner mode, the sound is muted.

● The Expression Pedal Switch cannot be turned on or off or the Volume Pedal cannot reduce the volume completely
　Could the expression pedal be out of adjustment?
　Although the unit's expression pedal has been set for optimal operation at the factory, extended use and certain operating environments can result in the pedal going out of adjustment.
　Adjust the expression pedal.

Specifications:

Effect types: 58

Effect : Max. 8 simultaneous [MODULE]s

Preset memoryUser setting: 4 Preset (A-D) x 9 (1-9) groups = 36

Factory setting: 4 Preset (A-D) x 9 (F1-F9) groups = 36

Sampling Frequency : 44.1 kHz

A/D/A converter: 24-bit

Signal processing: 32-bit

Frequency response: 20Hz-20000Hz $\pm$1dB

THD+N: -93dBu (<0.003%)

Dynamic Range: 110dB

Display: 160x128 QVGA TFT LCD

INPUT: -20dBV@1Mohm

OUTPUT: -10dBV (Output load impedance of 10k or more)

AUX IN : -10dBV @ 10k or more

PHONES: 20mW+20mW (into 32-ohm load)

POWER requirements : 9V DC, 300mA (pin negative)

Accessory: Owner's Manual, power adaptor

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