

MOOER

GE150 Plus / GE150 Plus Li
Intelligent Multi-Effects

Owner's Manual

CONTENT

PRECAUTIONS.....	2
FEATURES	2
CONTROLS	2
CONNECTIONS.....	4
CONNECTION SCENARIOS	5
Connection to Full-Range equipment	5
Connection to a guitar power amplifier and cabinet	5
Mixed full-range / non-full-range device connection	6
Connection to a guitar amplifier	7
QUICK START	8
Start up	8
Main user interface	8
Preset selection	8
Shut down	9
OPERATION.....	9
Preset editing	9
Effect module selection and switching.....	9
Parameter editing.....	10
Saving presets.....	10
Tap Tempo.....	11
Expression Pedal.....	12
Expression parameter mapping	12
EXP pedal as WAH pedal (mapping example):	12
Calibration	13
EXP pedal as volume pedal.....	13
Tuner	14
Drum Machine.....	15
Looper.....	15
OTG Function.....	17
SYSTEM SETTINGS	17
INPUT LEVEL	17
SCREEN	17
CAB SIM TRHU	18
GLOBAL EQ	18
SPILL-OVER	18
OTG LEVEL	19
LANGUAGE	19
RESET	19

BATTERY	19
MOOER STUDIO SOFTWARE.....	21
Software window	21
GNR file management	22
GIR /IR file management	23
Firmware Update.....	23
Preset backup.....	24
TROUBLESHOOTING	24
SPECIFICATIONS.....	25
ANNEX 1: EFFECT MODULE DESCRIPTIONS.....	26
FX miscellaneous modules	26
DS overdrive / distortion modules	26
AMP Amplifier modules	27
CAB Cabinet modules	28
NS noise gate modules	29
EQ modules	29
MOD Modulation modules.....	29
DELAY modules	30
REVERB modules	30

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

Power supply

- Only use power supplies that have been approved by the relevant authorities and that meet local regulation requirements (such as UL, CSA, VDE or CCC).
- Please only use a power supply adapter that meets the specifications of the manufacturer.
- Unplug the power adapter when not in use or during thunderstorms.

For GE150 Plus Li:

- Prevent a device containing a battery, from overheating (e.g., keep it out of direct sunlight and away from heat sources, etc.).
- Should the battery leak, prevent the liquid from getting into contact with skin or eyes. In case of contact with the liquid, consult a doctor.
- The battery supplied with this product may pose a risk of fire or chemical burns if not handled properly.

Storage and usage locations

To avoid deformation, discoloration or other serious damage, do not expose this device to any of the following conditions:

- | | |
|--|-------------------------------|
| • direct sunlight | • magnetic fields |
| • extreme temperature or humidity | • high humidity or moisture |
| • excessively dusty or dirty locations | • strong vibrations or shocks |

Cleaning

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

Operation

- Please do not use excessive force to operate the control elements of the unit.
- Prevent metal, paper or other objects from getting into the unit.
- Please do not drop the unit, and avoid heavy blows.
- Please do not modify the unit without authorization.
- Should repairs be required, please contact the MOOER Customer Service Center for more information.

Connections

Always turn off / disconnect the power to the GE150 Plus and any other equipment before connecting or disconnecting signal cables. This will help prevent malfunctions and / or damage to other devices. Also make sure to disconnect all connection cables and the power supply before moving the device.

FEATURES

- New member of MOOER GE series, using the new design language for a brand new user experience
- Choice between GE150 Plus (traditional version with power adaptor) and GE150 Plus Li (version with integrated Lithium battery)
- 55 realistically sampled amp simulations using intelligent inverse modeling technology to recreate the sound of real amplifiers
- AMP and CAB modules support loading MNRS sample files or third-party IR cabinet simulation sample files for use
- Including storage space for 198 presets
- SPILL-OVER function enables effect trails delay or reverb modules to decay naturally when switching presets
- On-board EXP pedal can be configured as volume control or expression pedal
- Built-in 80 second stereo phrase LOOPER function
- Built-in drum machine module with 40 drum rhythms and 10 metronomes
- Precise built-in instrument tuner
- Type-C USB port: supports connection to computer-based editing software for preset editing, data management, firmware upgrades, or OTG connections to a mobile device for audio recording and playback
- AUX IN interface for audio input connections to mobile devices or external audio players for practicing

CONTROLS



1. **2.8 inch LCD screen:** Status and information about presets and operating modes.
2. **MASTER knob:** Rotate to adjust the total output volume.
3. **SELECT knob:** Use this to select presets, edit model parameters and adjust function settings in different menus.
 - Rotate the knob to select items on the screen (highlighted).
 - Press the knob to confirm the selection.
 - Rotate the knob to change values.

- Press the knob to confirm the changes and return to selection mode.
4. **MODE knob:** Use this to select (rotate) and activate/deactivate (press) effect modules.
 5. **Effect module indicators:** The LEDs indicate the on/off status of the effect modules in the effect chain and their position in the chain. The individual LEDs will blink to indicate a module that was selected for editing by using the MODE knob.
 6. **PLAY button:** Press to return to the main user interface.
 7. **SAVE button:** Press to save your settings in a Preset.
 8. **EXP button:** Press to open the menu for expression pedal settings.
If this button is lit, the on-board EXP pedal works as an **expression pedal** to control module parameters. If it is not lit, the EXP pedal can work as a **volume pedal**, if so configured in the EXP menu.
 9. **TAP button:** Use this to tap in tempo settings. The LED in the button blinks to indicate the currently selects tempo. (See [Tap Tempo](#))
 10. **RHYTHM button:** Turns the DRUM MACHINE on/off and opens the Drum Machine settings menu.
 11. **SYSTEM button:** Opens the SYSTEM settings menu.
 12. **Footswitch A:**
 - in Preset mode: switches to Preset A in the selected bank
 - in Looper mode: REC / PLAY / DUB (see [Looper](#)).
 13. **Footswitch B:**
 - in Preset mode: switches to Preset B in the selected bank
 - in Looper mode: STOP / CLEAR
 14. **Footswitch C:**
 - in Preset mode: switches to Preset C in the selected bank
 - in Looper mode: Drum Machine PLAY / STOP, hold to exit Looper Mode
 15. **Footswitches A + B simultaneously:**
 - short press A+B: switches down to the previous bank and opens the Bank selection screen
 - long press A+B: activates TUNER mode (see [Tuner](#)).
 16. **Footswitches B + C simultaneously:**
 - short press B+C: switches up to the next bank and opens the Bank selection screen
 - long press B+C: activates the **Looper** mode (see [Looper](#)).
 17. **EXPRESSION pedal:** Can be configured as volume pedal or as an expression pedal to control module parameters (e.g. Wah) (see [Expression Pedal](#)). When properly configured, the pedal function can be switched between **VOLUME** and **EXPRESSION** control by pressing the TOE SWITCH (pressing on the front of the closed pedal.)

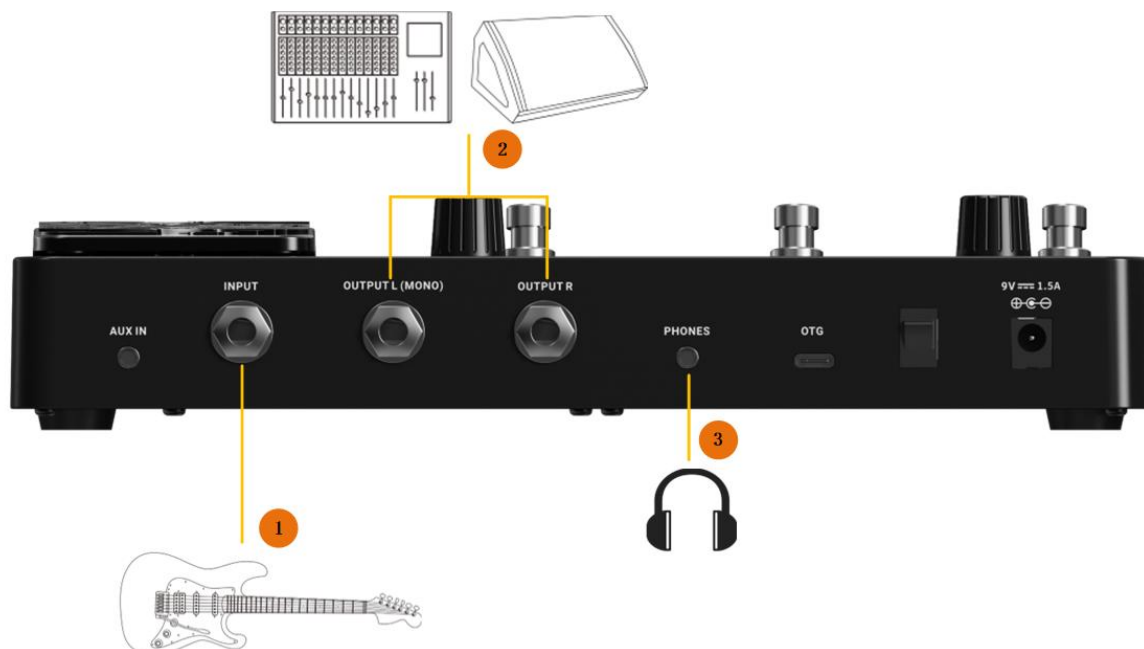
CONNECTIONS



1. **AUX IN:** 1/8" stereo TRS audio input jack for connecting an external audio source (mobile device, audio player) for practicing.
2. **INPUT:** 1/4" mono audio jack, input for your instrument.
3. **OUTPUT (left / right):** 1/4" unbalanced mono audio jacks. Connection to the input of active speakers, other effects, amplifiers or other audio devices.
4. **Phones:** 1/8" stereo headphone output jack.
5. **OTG:** USB Type C interface. Connection to a computer for using supported software for preset editing, data management and firmware upgrades. Connection to a mobile phone or a recording device for OTG audio playback and recording (see [OTG Function](#), see [MOOER STUDIO SOFTWARE](#)).
6. **Power switch:** Use this switch to turn the device ON / OFF
7. **9 VDC power input:** Connect the supplied power supply adaptor.

Connection to Full-Range equipment

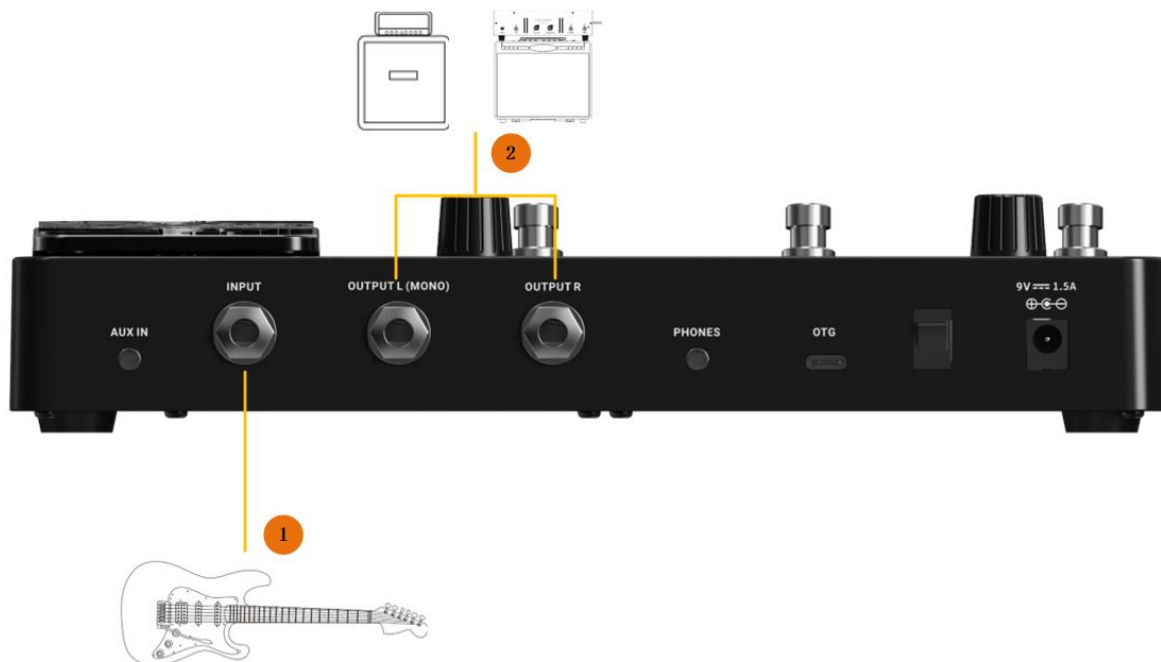
This connection scenario includes full-range equipment such as studio monitors, sound cards, active stage monitors, PA systems (full-range/crossover amplifiers + full-range/crossover speakers), headphones, and other full-range equipment. When you establish connections using this application scenario it is recommended to activate AMP and CAB modules in order to achieve a professional guitar sound (see [Preset editing](#)).



1. Connect an instrument.
2. Connect FR equipment (mixing console, active stage monitor, PA system, sound card, studio monitor).
3. Connect headphones.

Connection to a guitar power amplifier and cabinet

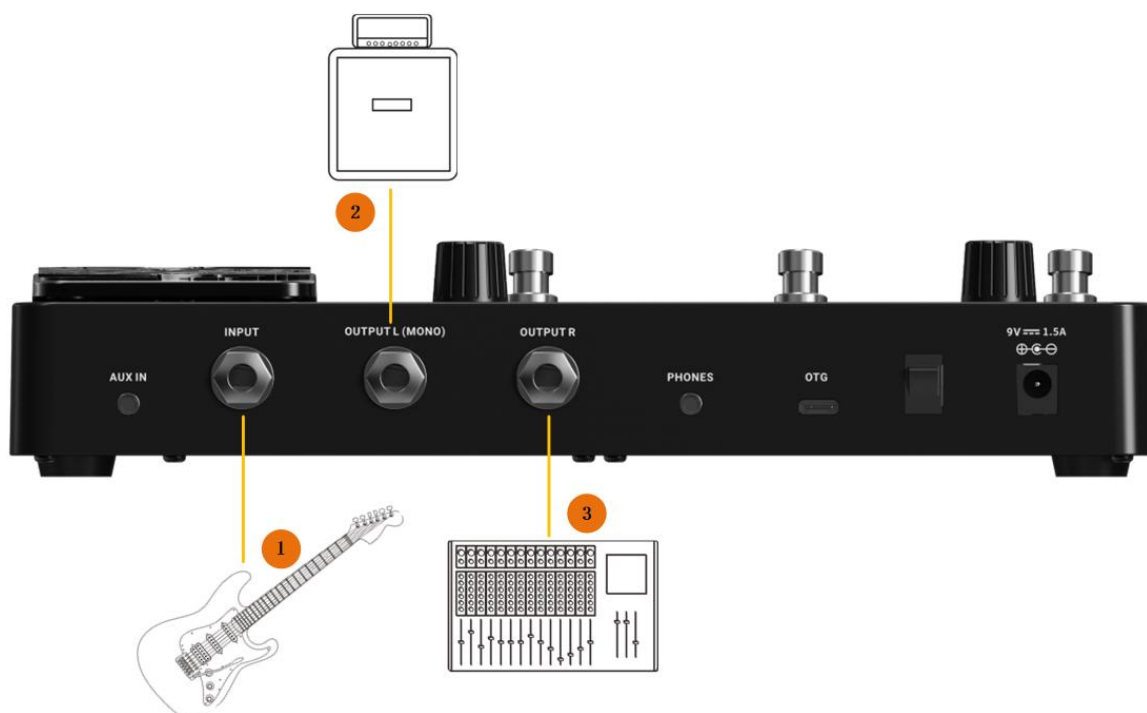
This connection scenario includes a guitar amplifier with FX LOOP or a pure power amp. It is recommended to activate the AMP module when you establish connections using this application scenario. All preamp functions will be performed by the GE150 Plus in this case.



1. Connect an instrument.
2. Connect to the RETURN jack of a guitar amplifier or to the input of a power amp.

Mixed full-range / non-full-range device connection

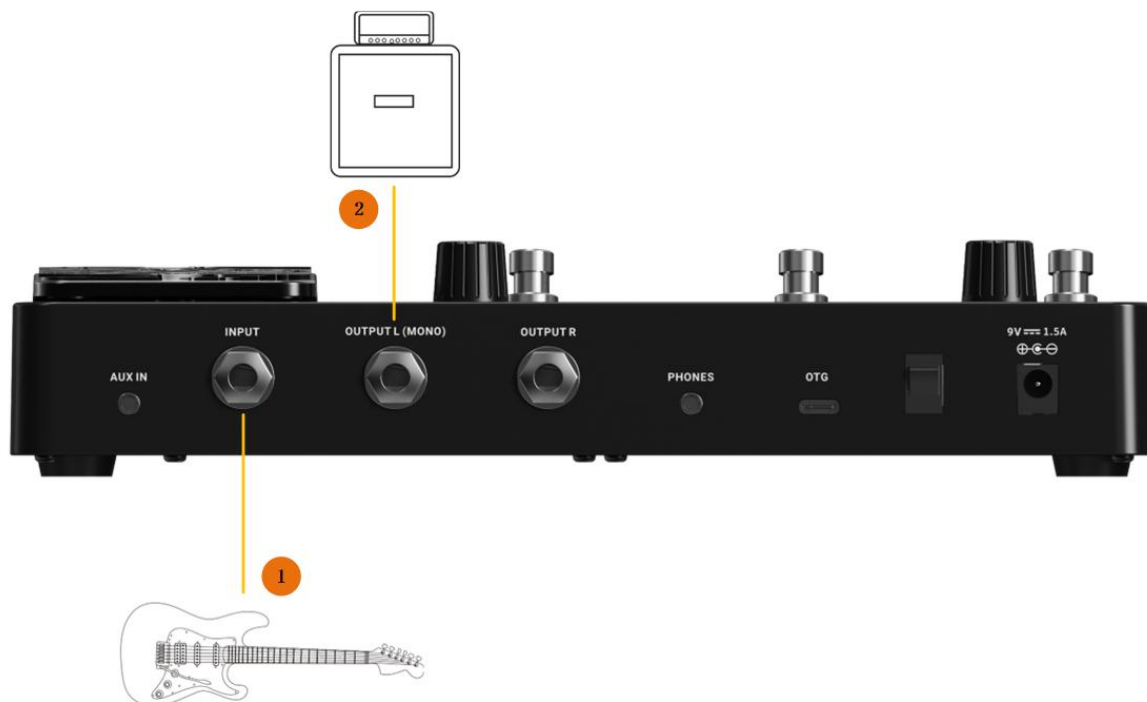
This connection combines the two scenarios above, when you need to use full-range equipment (e.g. mixers) and non-full-range equipment (e.g. guitar amps and cabinets) at the same time. Please refer to the following diagram for connections and activate **CAB SIM THRU** (Bypass) in SYSTEM settings for the left output. Deactivate **CAB SIM THRU** for the right output. (See [SYSTEM SETTINGS](#)).



1. Connect an instrument.
2. Connect your non full-range equipment (CAB module bypassed).
3. Connect you full-range equipment (CAB module active).

Connection to a guitar amplifier

This connection scenario connects the output jack of the GE150 Plus directly to the input of your guitar amplifier. It is recommended to deactivate AMP and CAB modules to avoid unwanted interference with the sound characteristics of the physical amplifier and cabinet.



1. Connect an instrument.
2. Connect the INPUT of your guitar amplifier.

Start up

- Turn the **MASTER volume** knob down to minimize the output volume.
- Connect the **inputs and outputs** of the device as required according to the connection scenarios above.
- Connect the included **power supply** (the GE150 Plus Li can operate on battery power) and turn the device on by switching the **Power switch** to "I".
The display shows a boot-up screen for a few seconds.
- After the boot sequence is completed and the screen shows the **main user interface**, adjust **MASTER volume** to the appropriate volume.

Main user interface



1. **Preset number and name** of the currently active preset.
The GE150 Plus can store 198 presets.
The number indicates the bank (1 - 66) and the letter behind it indicates the preset within the bank (A - C). Presets A - C in each bank can be selected by pressing the A - C footswitches.
The name can be customized during the SAVE process.
2. **Preset effect chain:** Displays status information for the effect chain modules in the current preset.
3. **EXP pedal information:** This indicates the module which is controlled by the on-board expression pedal when this pedal is used in Expression mode (EXP button LED is lit) (see [Expression Pedal](#)).
4. **Battery indicator:** (GE150 Plus Li only) Indicates the current charge status of the integrated Li-Ion battery (see [BATTERY](#)).

Preset selection

The active preset is indicated by the number / name on the screen and by the illuminated LED ring around the corresponding footswitch.

There are two ways to select a preset after the pedal has powered up:

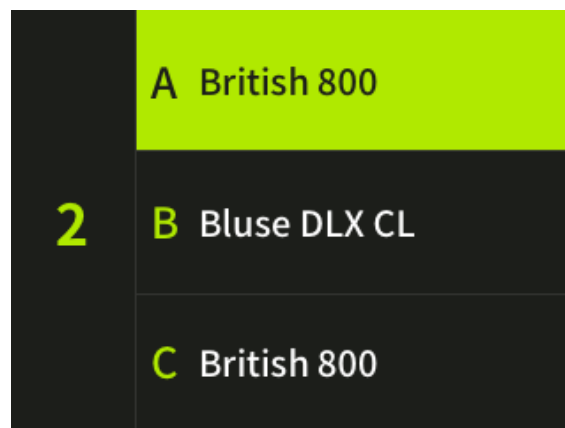
1. Rotate the **SELECT** knob to change presets.

2. Press one of the **A / B / C footswitches** to select one of three presets in the current bank.

Note: You cannot select presets while in LOOPER mode. Exit LOOPER mode first before you change presets.

Bank Switching:

- Press **A+B** simultaneously once or repeatedly to scroll **down** through the banks.
- Press **B+C** simultaneously once or repeatedly times to scroll **up** through the banks.
- The screen will show the **bank number** and the three available presets in this bank.
- Then select one of the **A / B / C footswitches** to select a preset in the selected bank.



Shut down

The GE150 Plus is turned off by switching the **Power** switch on the back to "0".

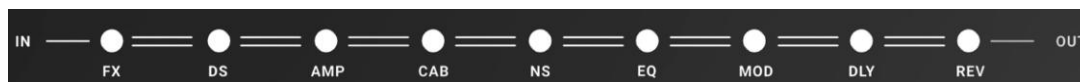
Note for the GE150 Plus Li: If the power cable is still connected after shutdown, the screen will show a graphic to indicate the battery charging status.

OPERATION

Preset editing

Effect module selection and switching

The GE150 Plus has 9 built-in effect modules, including a total of 170 effect types, and supports the simultaneous use of all 9 effect modules. Each module can be configured to use one effect type.



The row of effect module LEDs below the display indicates the ON/Off status of the individual effect modules in the current preset. Illuminated LEDs indicate active modules. The LEDs are labeled with the effect module types used in the effect chain such as AMP (amp models), CAB (cabinet simulation models), REV (reverb models) and so on. The FX module can be used to select one of several different kinds of effect models. See [ANNEX 1: EFFECT MODULE DESCRIPTIONS](#) for more information. The sequence of the LEDs represents the actual sequence of modules in the effect chain.

- Rotate the **MODE** knob to select an effect module. The module LED of the selected module will start blinking and at the same time, the screen will show the effect type used in this module, its ON/OFF status and the available parameters.



- Press the MODE button to turn the module ON/OFF. The status is indicated in the upper right corner of the module menu.
- Press the **PLAY** button to return to the main view.

Parameter editing

Use the MODE knob to select the module you want to edit as described above.

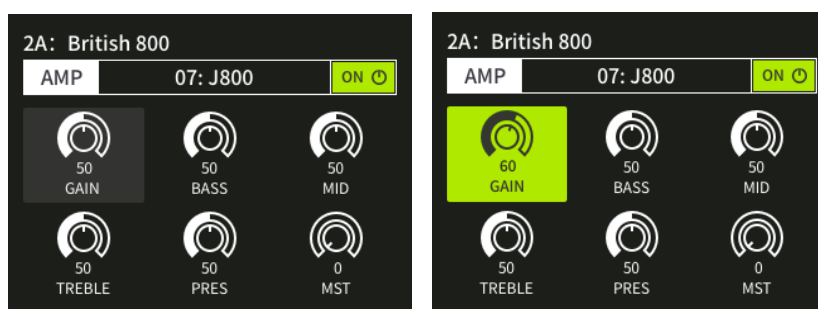
The ON/OFF status of the module is indicated in the upper right corner of the menu. The ON / OFF status can be changed by pressing the MODE button.

Effect type selection:

- Rotate the SELECT knob to select (highlight) the name of the **effect type** (top row of the menu).
- Press SELECT to confirm the selection. The field is displayed with a green background.
- Rotate SELECT to choose from the available effect types for this module.
- Press SELECT to confirm the selection.

Parameter adjustment:

- Rotate the SELECT knob to select (highlight) one of the **parameter dials**.
- Press SELECT to confirm the selection. The dial is displayed with a green background.
- Rotate SELECT to adjust the value of the selected parameter. The available parameters depend on the selected effect type.
- Press SELECT to confirm the setting and return to parameter selection.



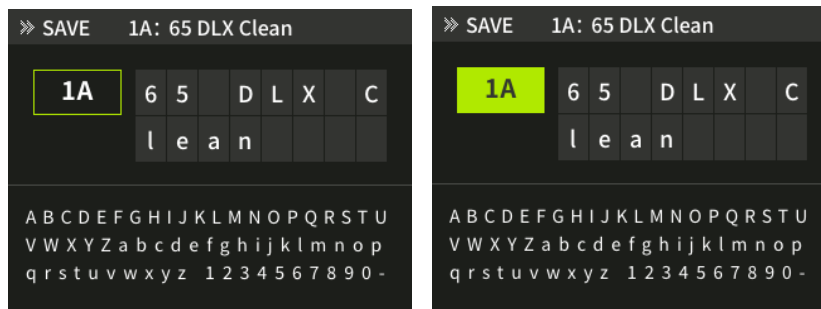
See [ANNEX 1: EFFECT MODULE DESCRIPTIONS](#) for a list of available effect types.

Note: All changes must be stored in the Preset using the **SAVE** button, before you switch presets. Otherwise your changes will be lost.

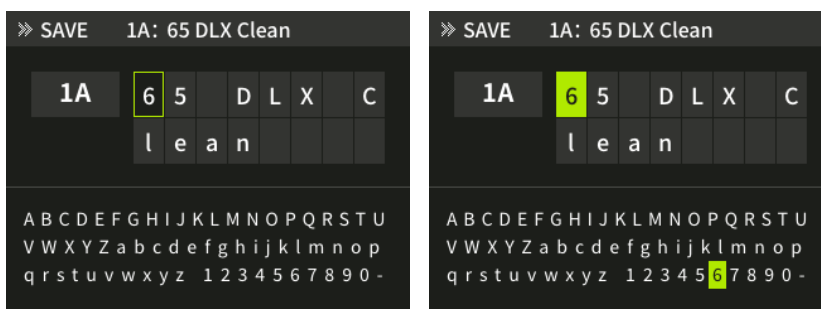
Saving presets

Note: If you switch presets (see [Preset selection](#)) without saving your settings first, **all changes will be lost** and the preset will return to the previously saved settings the next time you select it.

After adjusting all necessary settings, press the **SAVE** button to open the SAVE screen.



- Rotate the SELECT knob to select the Preset storage position field indicated by the preset number. The number indicates the bank (1 - 66) and the letter (A - C) indicates the preset position within the bank. The 3 presets in each bank can be selected with the A, B or C footswitches.
- Press and rotate SELECT to change the position.
- Press SELECT again to confirm.

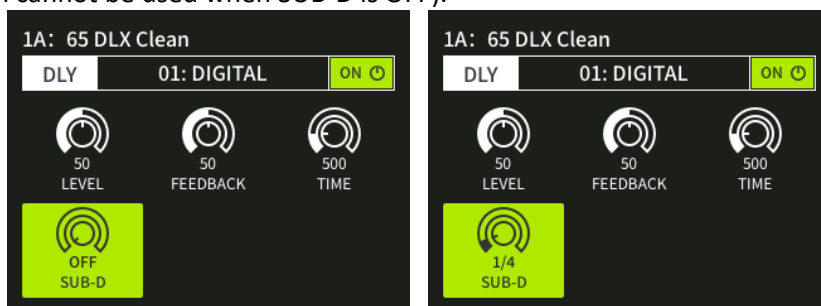


- Rotate the SELECT knob to select a position in the name fields.
- Press SELECT and rotate SELECT to select a character for the field in the character list below.
- Press SELECT again to confirm the selected character.
- Rotate SELECT to the next position in the name fields and repeat the steps until you have written the name you want.
- When editing is complete, press the **SAVE** button to finish saving the preset.
- Rotating the MODE knob or pressing any key other than SAVE or SELECT will cancel the saving process.

Tap Tempo

The GE150 Plus comes with a built-in TAP TEMPO function, which can be used with the Delay module and the Drum Machine.

- Turn the MODE knob to select the DLY (delay) module and turn it on.
- Use SELECT to activate the SUB-D parameter and select the desired beat type (the TAP Tempo function cannot be used when SUB-D is OFF).



- After these settings have been completed, pressing the **TAP button** twice or more in

succession will set the tempo to which the SUB-D setting is applied. The **TIME parameter** of the Delay module will reflect the resulting delay time.

For instructions on using the TAP button with the Drum Machine, please refer to the [Drum Machine](#) section of this document.

Expression Pedal

The GE150 Plus is equipped with an on-board rocker pedal. It can be used as an **Expression pedal** to control one parameter of one of the modules or it can be used as a master **Volume pedal**.

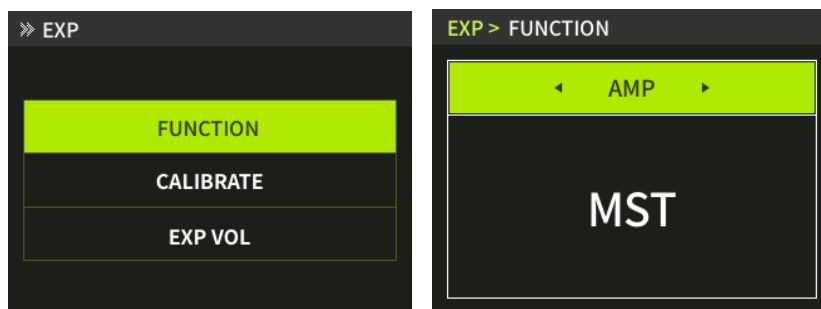
Parameter mappings and volume pedal settings can be different for each preset and must be **saved with the preset**.

The EXP pedal is also equipped with a **Toe Switch** function (pressing firmly on the front of the pedal). This switch can be used to switch between **Expression** and **Volume** mode.

If the EXP pedal is configured as **WAH pedal** (see below), the toe switch also switches the module on/off to simulate the function of a real WAH pedal.

Expression parameter mapping

- Press the **EXP button** on the panel to open the pedal setup menu.
- Rotate and press SELECT to select the **FUNCTION** field in the menu to open the sub-menu for parameter mapping.
- Select the **top field** and rotate SELECT to choose the **module** you want to control with the EXP pedal.
- Select the **bottom field** and rotate SELECT to choose the **parameter** you want to control with the EXP pedal.
- Press PLAY to return to the main view.
- If the LED in the EXP button is not lit, press the front of the pedal down (**toe switch**) to activate the Expression Mode (EXP LED is lit). Should the toe switch fail to work, please calibrate your pedal (see below).



Notes:

- The **module** you have selected to be controlled with the EXP pedal **must be activated** for the EXP pedal to have an effect.
- The selected module will be indicated in the top left corner of the main view.
- The **parameter mapping** for the EXP pedal **must be saved** with the preset and can be different for every preset. Remember to SAVE the preset before you switch presets or your settings will be lost. (See [Saving presets.](#))

EXP pedal as WAH pedal (mapping example):

- Press the **EXP button** and use SELECT to select and open the **FUNCTION** menu.
- Select **FX/COMP** in the top field.
- Select **POSITION** in the bottom field.
- Press the **PLAY button** to exit the menu and complete the selection.
- Use the **MODE knob** to select the **FX module** and open its parameter view.
- Activate the FX module.

- Select **CRY WAH** or **535WAH** as effect type.
- Make sure the EXP pedal is in **expression mode** (EXP LED is lit). If not, press on the front of the pedal (toe switch) to activate the expression mode.

After completing these settings, the FX module will be automatically activated if you engage the Expression mode with the toe switch and you can **use the EXP pedal as WAH control**.

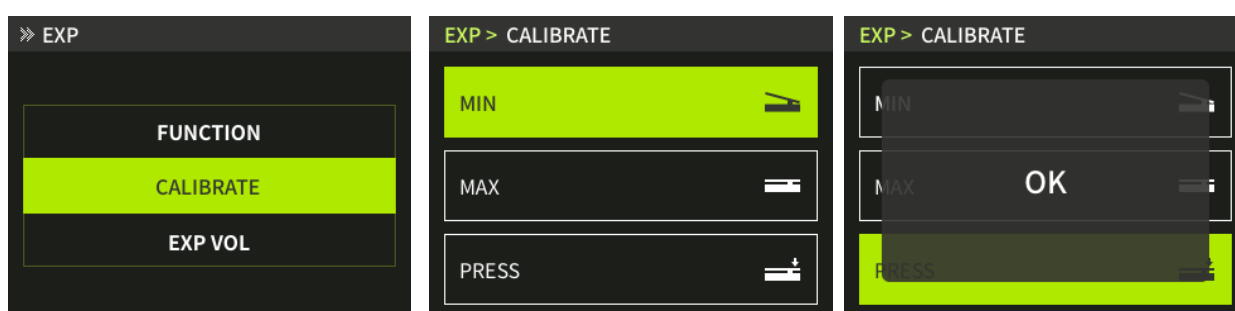
When you switch the Expression mode off with the toe switch, the FX module will be deactivated and the EXP pedal is also deactivated (or works as Volume pedal if you have configured it accordingly - see below).

Calibration

You need to calibrate the GE150 Plus's expression pedal before you use it for the first time or if you experience erratic pedal function.

The **calibration is global** and does not have to be repeated for each preset.

Press the EXP button and rotate SELECT to select the **CALIBRATE** field in the menu.



Follow the on-screen instructions or the following steps:

1. Open the pedal fully and select and press the SELECT knob.
 2. Close the pedal fully and select and press the SELECT knob.
 3. Push down at the tip of the pedal to calibrate the toe switch and press the SELECT knob.
- A successful calibration is indicated by an "OK" pop-up message. Repeat the steps above if you don't get an OK message.

Note: The amount of force used to press the pedal down in step 3 determines the force threshold for the expression pedal's toe switch function. It is recommended that you use your foot and apply the same pressure you would use when playing on stage.

EXP pedal as volume pedal

The GE150 Plus's on-board pedal rocker can be configured as a Volume Pedal.

Note: The on-board pedal can be switched between **Expression Pedal Mode** and **Volume Pedal Mode** by pressing on the front of the closed pedal (**toe switch**).

When the EXP button LED is on, the pedal works in Expression Pedal mode, when it is off, the pedal works Volume Pedal mode.

Should the toe switch not work as expected, please re-calibrate the EXP pedal.

1. Volume pedal within the effect chain

This method uses the pedal to control the **LEVEL parameter** of one of the modules in the effect chain such as LEVEL in the FX module, VOLUME in the DS module or MST (MASTER) in the AMP module. The EXP pedal must be in **Expression Mode** for this to work.

- Assign a level / volume parameter of one of the modules to the EXP pedal (see [Expression parameter mapping](#)).

- Make sure the module you have mapped to the expression pedal is active (module LED is lit).
- Press the EXP pedal forward to activate the toe switch and switch it into Expression Mode (EXP LED is lit).

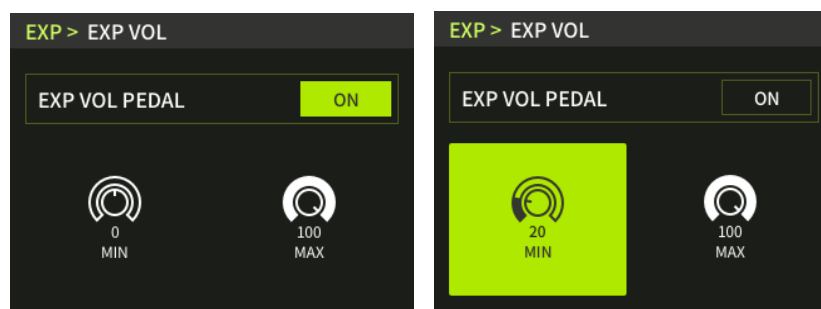
2. Volume pedal at the end of the effect chain (Master volume)

This method is used to control the **overall output volume** of the GE150 Plus.

The EXP pedal must be in **Volume Mode** for this to work and the EXP VOL function must be activated in the EXP menu.

Configuring the Volume Mode:

- Open the EXP menu and select **EXP VOL**.
- Use the SELECT knob to activate the volume control function by setting EXP VOL PEDAL ON/OFF to **ON**.
- Adjust the **MIN** and **MAX** parameters to set the minimum volume when the pedal is in full heel down position and the maximum value when the pedal is in full toe down position.



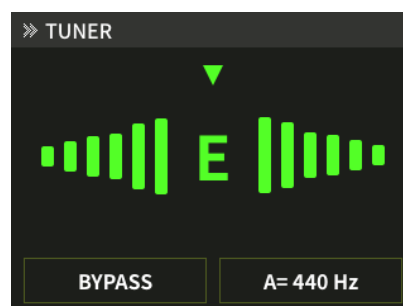
This setting must be saved for each individual preset.

The EXP pedal now works as a Volume pedal when the EXP LED is off.

Tuner

Hold footswitches **A + B** down simultaneously until the TUNER view opens.

- Select **BYPASS** with the SELECT knob to set the tuning mode to **BYPASS** or **MUTE**. **BYPASS** disables the internal effects and sends a **clean signal** to the outputs for as long as the tuning mode is active. **MUTE** mutes the outputs for as long as the tuning mode is active.
- Select **A=440Hz** with the SELECT knob to adjust the tuning reference frequency. You can select a reference frequency from a range between 435 Hz - 445 Hz. The default value is A = 440 Hz.



- Pluck the open strings of your guitar. The screen will display the current note and the pitch.
- Tune your guitar until the pointer on the screen is in the center position.
- You can exit the TUNER mode by pressing any footswitch or button (except TAP).

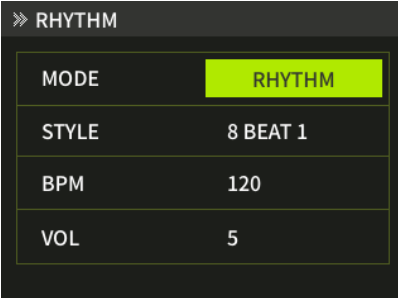
Drum Machine

The GE150 Plus is equipped with a Drum Machine function providing a choice between drum rhythm patterns or metronome clicks.

Press the **RHYTHM** button to start the DRUM Machine and open the RHYTHM menu.

Press RHYTHM again to stop/start the DRUM MACHINE. The LED in the RHYTHM button is lit when the Drum Machine is running.

RHYTHM menu



» RHYTHM	
MODE	RHYTHM
STYLE	8 BEAT 1
BPM	120
VOL	5

Rotate and press the SELECT knob to select and modify settings in this menu.

MODE:

Choose between drum patterns (RHYTHM) or metronome clicks (METRONOME).

STYLE:

Choose a rhythm style or a metronome pattern when in METRONOME mode.

BPM:

Set the tempo of drum machine playback by dialing in a BPM (beats per minute) value between 40 and 260.

Note: When drum machine playback is turned on, you tap the **TAP button** several times to enter the tempo. The LED in the TAP button will flash to indicate the current BPM of the drum machine.

If drum machine playback is stopped, the TAP button will revert to setting the tempo for the DELAY module.

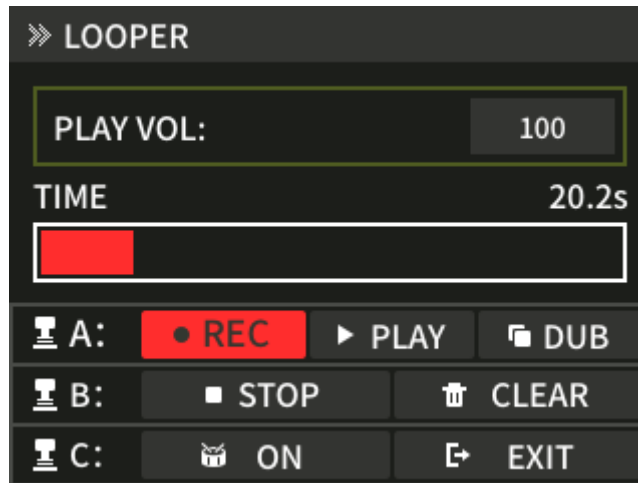
VOL:

Adjust the volume level of drum machine playback.

Looper

The GE150 Plus is equipped with a stereo phrase Looper function providing a recording time of up to 80 seconds.

Press and hold **footswitches B+C** simultaneously to open the Looper menu.



PLAY VOL:

Use the SELECT knob to adjust the **playback volume** for the Looper function. All other Looper functions are controlled by the A and B footswitches:

REC (Recording):

If the track is empty (CLEAR), step on **footswitch A** to start the recording. The REC icon in the screen lights up and the TIME field starts to run a red progress bar. The LED ring around footswitch A is lit **solid red** to indicate an ongoing recording.

Note: If you continue recording until the progress bar is full (80 seconds), the Looper will automatically switch to playback.

PLAY (Playback):

During recording (REC), overdubbing (DUB) or in STOP state, step on **footswitch A** to start the playback of the recorded track. The PLAY icon in the screen lights up, the progress bar runs the loop according to the actual track length, and the LED ring around footswitch A is lit **solid blue** to indicate playback in progress.

DUB (Overlay Recording):

During playback (PLAY), step on **footswitch A** to start recording the next overlay track (DUB). The DUB icon in the screen lights up, the progress bar is displayed in red, and the LED ring around footswitch A is lit **solid red** to indicate an ongoing recording.

STOP:

During PLAY or DUB, step on **footswitch B** to stop track playback, the STOP icon in the screen lights up, the progress bar stops running, and the LED ring around footswitch B is **flashing yellow**.

CLEAR:

In any state, step on **footswitch B** and hold it for more than 1 second to execute **CLEAR** to delete all tracks. The CLEAR icon in the screen will light up and none of the LED rings around the A or B footswitches are lit.

Footswitch C:

Step on C in Looper mode to **start / stop the Drum Machine**. The Drum Machine will play the Rhythm or Metronome pattern you have programmed using the DRUM MACHINE feature (see above). The field in the screen will show "ON" and LED ring around the footswitch will be lit green when the Drum Machine is active. The field in the screen will show "OFF" and LED ring around the footswitch will be off when the Drum Machine is not active.

Exit Loper mode:

Long-step on footswitch C for more than one second to **exit the Looper mode**. You can also press any button except TAP to exit the Looper mode.

Note: If the Looper is playing back when you exit the Looper mode, playback will continue and you will have to re-enter the Looper mode (hold B+C) to stop the playback. A Drum Machine playback that was started in Looper mode can be stopped any time by pressing the RHYTHM button.

OTG Function

The USB-C port on the GE150 Plus can be used to connect a mobile phone or tablet for OTG (On-The-Go) functions to for audio recording and playback.

Device Connection:

Use a USB-C cable to connect the GE150 Plus to your phone or tablet. After the connection is established, you can use third-party apps on your mobile device to play back audio material through your GE150 Plus or to record and process audio signals coming from your GE150 Plus.

Notes:

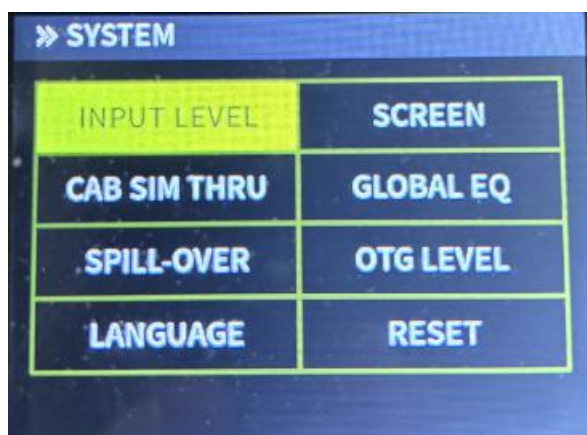
- Please make sure your mobile device supports OTG functions before using this function.
- Depending on the available interface on your mobile device, you may need to acquire a suitable 3rd party USB-C OTG adapter cable.
- If you play back audio from your mobile device through the GE150 Plus, use the volume controls on your mobile device to control the input volume into the GE150 Plus.

OTG output volume

Press the SYSTEM button on the panel to open the SYSTEM settings menu. Select OTG LEVEL and adjusts the output volume level of the OTG function of the USB port.

SYSTEM SETTINGS

The global SYSTEM SETTINGS screen can be accessed by pressing the **SYSTEM** button on the panel. Selections and changes are made with the SELECT knob.



INPUT LEVEL

Use this setting to adjust the input volume of the GE150 Plus according to the output power level of the currently used instrument. The adjustment range is $-\infty$ dB to +6 dB. This setting is global and applies to all presets.

Note: Adjusting the global input level can prevent input distortion caused by exceedingly powerful input signals.

SCREEN

In some situations, you may want to adjust the screen brightness to adapt to different lighting environments, or to extend the battery life of the battery version.

CAB SIM TRHU

If the CAB module is enabled in some presets, you can specify whether cabinet simulation is effective for the left and/or right output channel or if the module is bypassed for one or both of the channels. This setting is effective for all output connections (left/right output, headphone, OTG audio output) and may be necessary for certain connection scenarios where different outputs with or without cabinet simulation (or amp simulation) are used. See section [CONNECTION SCENARIOS](#) for details.

- Select CAB SIM THRU (CAB simulation module bypass) and then set the desired status for the right and left channels.
- If **ON** is selected, the channel will have CAB simulation applied.
- If **THRU** is selected, the CAB simulation will be bypassed for this channel.

Note: When the left and right channels are set to different states, the **CAB module** is placed at the end of the effect chain by default.

GLOBAL EQ

Use this setting to quickly adjust the sound to the requirements of different venues and the frequency response characteristics of different amplification equipment. This is the best way to avoid tedious preset-by-preset adjustments.



SPILL-OVER

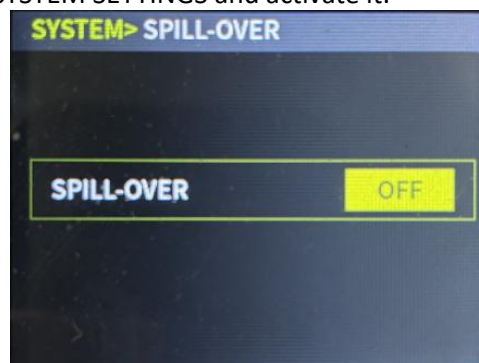
The GE150 Plus supports the trail hold function for delay and reverb effects.

Under some conditions, the natural decay of delay repeats or reverb echoes can be maintained when a corresponding module in is toggled on/off within a preset or when a different preset is activated:

Trails when switching presets:

This type of switching is accomplished by using the A, B or C footswitches to change presets.

- Find SPILL-OVER in the SYSTEM SETTINGS and activate it.



- Copy a target preset and save it to the position you want to switch to.
- In the new preset position, you can change the module switching status, or adjust different parameter settings according to the sound requirements.
- After completing these settings, you can switch between these two presets and maintain the natural decay of the delay and reverb tails.

OTG LEVEL

Adjusts the output volume level of the OTG function of the USB port.

LANGUAGE

The GE150 Plus supports menus in Chinese and in English.

RESET

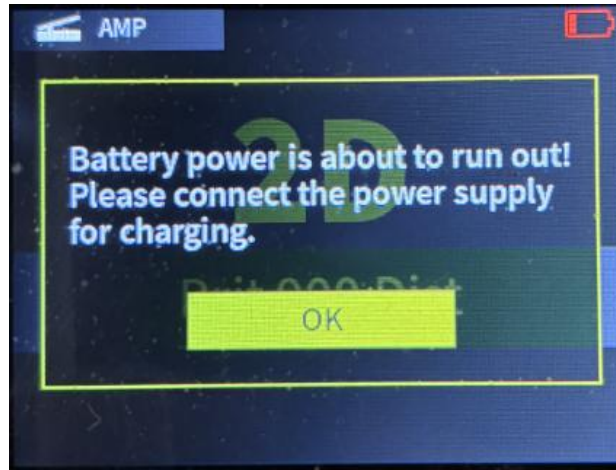
Select RESET to restore your GE150 Plus to factory settings.
Use SELECT to confirm (YES) or cancel (NO).

BATTERY

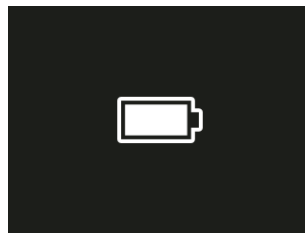
The GE150 Plus Li is a version of the GE150 Plus with built-in lithium battery.
Battery power information is displayed at the top right of the main view when the device is on.



- When the battery level drops to 20%, a pop-up window will appear on the screen to indicate that the battery level is low and you need to plug in the power adapter for charging to prevent the device from shutting down due to battery depletion, which may result in the loss of unsaved settings and parameter data.
-



- The device will automatically shut down when the battery is depleted. The device cannot be turned back on in this state and the power adapter must be plugged in to turn the device on again.
- When charging with the power adapter plugged in while the device is on, the battery icon in the screen will display a green lightning symbol to indicate that it is charging.
- When charging with the power adapter plugged in, but the device turned off, the screen will display battery level information as shown below.



Mooer provides the MOOER STUDIO computer editor software for your GE150 Plus. You can use it to edit effect module parameters, import or export preset files, import 3rd party GNR/GIR/IR sample files and perform data backups.

Setting changes are transmitted between the GE150 Plus device and the software in real time. This way you can use the software to directly control your settings while you are practicing.

Software download

Visit the official MOOER AUDIO website (www.mooeraudio.com) and navigate to the SUPPORT - DOWNLOAD area. Find the "GE150 Plus" page, download the appropriate installation program for your operating system (Windows or Mac) and install it.

System requirements:

- Windows-Win10 or above
- Mac OS-10.11 or above

Establishing the connection

After the installation is complete, please use the supplied USB-C cable to connect your GE150 Plus to the computer and open the GE150 Plus software. To ensure a good connection, avoid connecting through USB hubs and connect your USB cable directly to a port on your computer. The software will automatically connect to your device.

Software window



1. Preset save area

This area shows the currently active preset.

You can type directly into the field to change the name and click on the SAVE icon to save all changes you have made to the preset.

You can also use the left/right arrows to switch presets.

2. Preset list

This area shows all the presets stored in your GE150 Plus. You can select and activate a preset by clicking on it. You can also use the right mouse button to copy, paste, clear and rename a selected preset.

3. Local folder area

This area displays the list of preset files in the local folder of your computer.

You can save presets from your GE150 Plus on your computer by dragging a preset from the area above into this area.

You can load presets from your computer into your GE150 Plus by dragging a preset from this area into the area above.

You can use the right mouse button to add preset files stored in other places on your computer to the list, delete preset files, refresh the list and open the local preset file folder.

4. Functions and system setup area

This area allows you to view Drum Machine information, switch CAB SIM bypass settings, view and edit expression pedal mappings and open the SYSTEM settings. The submenus for EXP and SYSTEM provide the same options as the respective menus on the GE150 Plus. (See [Expression Pedal](#) and [SYSTEM SETTINGS](#).)

5. Effect module area

This area displays the ON/OFF status of the effect modules for the current preset. Use the mouse to select a module for parameter editing in the area below and to turn modules ON/OFF.

6. Effect model list

This area displays a list of the effect types that can be used with the selected module. Select a model from the list by clicking on it list. The switch above the list turns the module ON/OFF.

7. Parameter Adjustment Area

This area shows the available parameters for the selected model. You can adjust them by clicking the arrow buttons below the parameter names or by dragging the dials with your mouse. You will hear all changes in real time.

Note about saving:

If you have made changes in the software window and try to switch presets in the software, you will be prompted to save your setting changes.

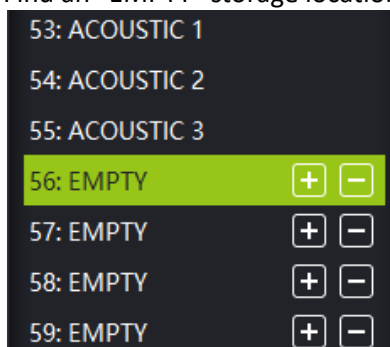
However, if you switch presets by using the footswitches on the GE150 Plus, you will not be prompted and unsaved changes will be lost!

GNR file management

The GE150 Plus supports the import of third-party GNR/GIR/IR files for amp and cabinet simulations.

GNR is the amp sample file based on the MNRS technology, which captures actual amplifier sound samples via the "GE LABS" app. MOOER devices supporting MNRS files can use the files downloaded from www.mooerstudio.com. Users can download the MNRS files to their computer, and then load them into the device for use.

- Obtain a 3rd party GNR file and store it on your computer.
- Select the AMP module in the GE150 Plus software screen.
- Find an "EMPTY" storage location in the model list.

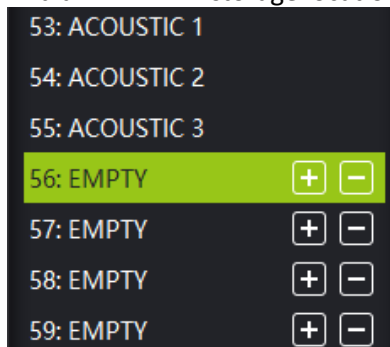


- Click on the "+" icon and a Windows Explorer prompt will be opened. Find your stored GNR file and click "Open". Your file will be imported into your GE150 Plus and can now be used in the AMP module in your presets.
- Click the "-" icon behind an imported file to delete it. A prompt will ask you to click "Yes" for confirmation.

GIR /IR file management

GIR and IR files are sample files for cabinet simulations based on the Impuls Reponse Technology. The standard IR file format is .wav. A GIR file results from sampling data from a real amplifier system using "GE LABS". Both can be imported and used in the CAB module by following these steps:

- Obtain a 3rd party GIR/IR file and store it on your computer.
- Select the CAB module in the GE150 Plus software screen.
- Find an "EMPTY" storage location in the model list.



- Click on the "+" icon and a Windows Explorer prompt will be opened. Find your stored GIR or IR file and click "Open". Your file will be imported into your GE150 Plus and can now be used in the CAB module in your presets.
- Click the "-" icon behind an imported file to delete it. A prompt will ask you to click "Yes" for confirmation.

Firmware Update

When a new official firmware is released, you can download the new version of the software from the official website to update the firmware of GE150 Plus. Please follow these steps:

1. Before installing the new version of software, it is recommended to use the current version of the computer software to perform a preset backup.
Click the System Settings icon on the upper right corner, click "Backup" in the following menu and then click Save to complete the backup after selecting a file path for the backup file in the pop-up window.
2. Browse the official MOOER website to download the latest version of the editor software.
3. Unzip the file and install it. Make sure to keep the same installation path.
4. After the installation is completed, use the included USB cable to connect your GE150 Plus to the computer. Connect the USB cable directly to a port in your computer - do not use a USB HUB!
5. Simultaneously press the A + B footswitches of the GE150 Plus and turn on the power switch at the same time. The device will now boot up in update mode and the screen will display "Updating".
6. Open the newly installed software on your computer and click "Start" in the pop-up dialog box.
7. Wait for the update progress bar to complete.
8. When the update is complete, click "Finish" in the dialog box and the GE150 Plus will reboot automatically.
9. After the reboot is complete, open the new version of the computer software again, click "Restore" in the System Settings and select the previously exported backup file in pop-up window for importing. Wait for the import progress bar to reach 100%. The GE150 Plus will then reboot automatically and the recovery of your previously saved data is complete.



Notes:

- To avoid unexpected issues, please do not disconnect the USB connection and power supply during the update process. Always connect directly to a USB port on the computer, avoid using USB hubs.
- If you find that the version number has not changed after updating, please check whether the new version of the editing software was installed correctly. If you find that it is still the old version, you can uninstall the old program and install the new program again.

Preset backup

To **backup** your favorite presets on your computer, drag them from the PRESET list in the software window to the COMPUTER list.

To **restore** a backup preset, drag it from the COMPUTER list to the PRESET list.

The storage slot where the preset will be stored on your device will be highlighted before you release your mouse button.

Warning: The preset that occupies the place where you drop your restored preset will be overwritten!

TROUBLESHOOTING

The GE150 Plus does not start

- Ensure that the original power adapter is connected.
- GE150 Plus Li (battery-powered version): Make sure the battery still has sufficient charge to meet the power demands during boot-up. Connect the original adapter before trying to start the device.

No sound after startup

- Check that the MASTER volume knob on the panel is turned to the proper position.
- Navigate to INPUT LEVEL in the SYSTEM settings to make sure the input gain slider is in the proper position.
- Check if the EXPRESSION pedal is in volume mode and move the pedal to the "toe down" position.

Noisy signal

- Please use signal cables with good shielding.
- Change the usage environment or the time of usage to determine if the noise is caused by interference from sources in the environment.
- Keep a distance from computers, motors, fans and other electrical appliances to reduce electromagnetic interference.

The GE150 Plus does not work as expected

- Navigate to the SYSTEMS menu and reset your device to factory settings.
- Download the latest version of the MOOER Studio software on your computer, connect your GE150 Plus and perform a firmware update. See section [Firmware Update](#) above.

SPECIFICATIONS

Effects

Number of modules	9
Total number of effect models	170
Preset storage slots	198

Impulse response

Supported formats	WAV
Sampling rate	44.1 kHz
Sampling accuracy	24 bit
Number of sample points	512 points

Input

Interface type	1 x 1/4" unbalanced mono input connector
Input impedance	2.2 MOhm
Maximum input level	5.75 dBu

Audio Analog-to-Digital Converter

Sampling rate	44.1 kHz
Sampling accuracy	24 bit
Dynamic range	5.75 dBu
Frequency response	20 Hz - 20 kHz

Output

Interface type	2 x 1/4" unbalanced mono output jacks
Output impedance	100 Ohm
Maximum output level	11.75 dBu

PHONES jack

Interface type	1 x 1/8" unbalanced stereo output connector
Output impedance	32 Ohm
Maximum output level	11.75 dBu

Audio Digital-to-Analog Converter

Dynamic range	11.75 dBu
Frequency response	20 Hz - 20 kHz
Signal-to-noise ratio	97 dB

USB Interface	TYPE-C connector
----------------------	------------------

Power Supply	GE150 Plus: DC 9 V, 300 mA, negative center GE150 Plus Li: DC 9 V, 1.5 A, negative center
---------------------	--

GE150 Plus Li:

Battery	Li-ion, rechargeable, 2000 mAh, 14.8 Wh, 7.4 V
Battery life	Approx. 9 hours

Operating temperature	0 - 60°C
Dimensions	256 x 145 x 54 mm (LxWxH)
Weight	GE150 Plus: 0.86 kg (1.9 lb) / GE150 Plus Li: 1.02 kg (2.2 lb)
Accessories	Power adapter, USB cable, Quick guide

Disclaimer: Parameter updates will not be notified separately.

ANNEX 1: EFFECT MODULE DESCRIPTIONS

FX miscellaneous modules

Effect Description		
No.	Model name	Description
1	Cry Wah	Modeled after a GCB95
2	535 Wah	Modeled after a modern 535Q
3	Auto Wah	Automatic sweeping Wah
4	Talk Wah Ah	Talking Wah algorithm from the MOOER® Red Kid with "AH" vocal effect
5	Talk Wah Oh	Talking Wah algorithm from the MOOER® Red Kid with "OH" vocal effect
6	Touch Wah	Dynamically responsive auto Wah with envelope filter
7	Yellow comp	Based on MOOER® YELLOW COMP compressor with four parameters
8	Blue comp	Compressor based on MOOER® BLUE COMP with four parameters
9	S comp	Dual-parameter adjustable compressor.
10	Red comp	Dual-parameter compressor.
11	Limiter	Dual-parameter limiter.
12	Noise Attenuator	Unlike conventional noise gates, the principle is to reduce noise while maintaining a naturally decaying trail by separating the conventional signal from the white noise in the signal and eliminating the white noise.

DS overdrive / distortion modules

Effect Description		
No.	Model name	Description
1	Tube DR	Based on B.K. Butler® Tubedrive
2	808	Based on IBANEZ® TS808
3	Pure Boost	Based on MOOER® Pure Boost
4	Flex Boost	Based on MOOER® Flex Boost
5	D-Drive	Based on Barber® Direct Drive
6	Black Rat	Based on ProCo® Rat
7	Grey Faze	Based on MOOER® Grey Faze
8	Muffy	Based on EHX® Big Muff
9	MTL Zone	Based on BOSS® Metal Zone
10	MTL Master	Based on Digitech® Metal Master
11	Obsessive Dist	Based on Fulltone® OCD
12	Jimmy OD	Based on Paul Cochrane® Timmy OD
13	Full Drv	Based on Fulltone® Fulldrive 2
14	Shred	Based on Marshall® Shred Master
15	Beebee Pre	Based on Xotic® BB Preamp
16	Beebee+	Based on Xotic® BB Plus
17	Riet	Based on Suhr® Riot
18	Tight DS	Based on Amptweaker® Tight Rock
19	Full DS	Based on Fulltone® GT-500
20	Gold Clon	Based on Klon® Centaur Gold
21	VX Tube OD	Based on VOX® Tube OD
22	Tight Metal	Based on Amptweaker® Tight Metal
23	The Juicer	Based on MOOER® The Juicer
24	Rumble Drive	Based on MOOER® Rumble Drive
25	Solo	Based on MOOER® Solo
26	Blues Mood	Based on MOOER® Blues Mood

27	Blues Crab	Based on MOOER® Blues Crab
28	Hustle Drive	Based on MOOER® Hustle Drive

AMP Amplifier modules

Effect Description		
No.	Model name	Description
1	65 US DLX	Based on Fender® 65 Deluxe Reverb
2	65 US TW	Based on Fender® 65 Twin Reverb
3	59 US BASS	Based on Fender® 59 Bassman
4	US Sonic	Based on Fender® Super Sonic
5	US BLUES CL	Based on Fender® Blues Deluxe Clean Setting
6	US BLUES OD	Based on Fender® Blues Deluxe Overdrive Setting
7	J800	Based on Marshall® JCM800
8	J900	Based on Marshall® JCM900
9	PLX 100	Based on Marshall® Plexi 100
10	E650 CL	Based on ENGL® E650 Clean Setting
11	E650 DS	Based on Engl® E650 Distortion Setting
12	Powerbell CL	Based on ENGL® Powerball E645 Clean Setting
13	Powerbell DS	Based on ENGL® Powerball E645 Distortion Setting
14	Blacknight CL	Based on ENGL® Blackmore Signature Clean Setting
15	Blacknight DS	Based on ENGL® Blackmore Signature Distortion Setting
16	MARK III CL	Based on MESA Boogie® MARK III Clean Setting
17	MARK III DS	Based on MESA Boogie® MARK III Distortion Setting
18	MARK V CL	Based on MESA Boogie® MARK V Clean Setting
19	MARK V DS	Based on MESA Boogie® MARK V Distortion Setting
20	Tri Rec CL	Based on MESA Boogie® Triple Rectifier Clean Setting
21	Tri Rec DS	Based on MESA Boogie® Triple Rectifier Distortion Setting
22	Rock Verb CL	Based on Orange® Rockerverb Clean Setting
23	Rock Verb DS	Based on Orange® Rockerverb Distortion Setting
24	Citrus 30	Based on Orange® AD30
25	Citrus 50	Based on Orange® OR50
26	Slow 100 CR	Based on Soldano® SLO-100 Crunch Setting
27	Slow 100 DS	Based on Soldano® SLO-100 Distortion Setting
28	DR ZEE 18 JR	Based on DR.Z® Maz18 Jr
29	DR ZEE Reck	Based on DR.Z® Z-Wreck
30	JET 100H CL	Based on Jet City® JCA100H Clean Setting
31	Jet 100H OD	Based on Jet City® JCA100H Overdrive Setting
32	JAZZ 120	Based on Roland® JC-120
33	UK 30 CL	Based on VOX® AC30 Clean Setting
34	UK 30 OD	Based on VOX® AC30 Overdrive Setting
35	HWT 103	Based on Hiwatt® DR-103
36	PV 5050 CL	Based on Peavey® 5150 Clean Setting
37	PV 5050 DS	Based on Peavey® 5150 Distortion Setting
38	Regal Tone CL	Based on Tone King® Falcon Rhythm Setting
39	Regal Tone OD1	Based on Tone King® Falcon Tweed Setting
40	Regal Tone OD2	Based on Tone King® Falcon Lead Setting
41	Carol CL	Based on Two Rock® Coral Clean Setting
42	Carol OD	Based on Two Rock® Coral Overdrive Setting
43	Cardeff	Based on Two Rock® Cardiff
44	EV 5050 CL	Based on EVH® 5150 Clean Setting

45	EV 5050 DS	Based on EVH® 5150 Distortion Setting
46	HT Club CL	Based on Blackstar® HT Stage 100 Clean Setting
47	HT Club DS	Based on Blackstar® HT Stage 100 Distortion Setting
48	Hugen CL	Based on Diezel® Hagen Clean Setting
49	Hugen OD	Based on Diezel® Hagen Overdrive Setting
50	Hugen DS	Based on Diezel® Hagen Distortion Setting
51	Koche OD	Based on Koch® Powertone Overdrive Setting
52	Koche DS	Based on Koch® Powertone Distortion Setting
53	Acoustic 1	Acoustic guitar amp simulation 1
54	Acoustic 2	Acoustic guitar amp simulation 2
55	Acoustic 3	Acoustic guitar amp simulation 3
56-75	EMPTY	Slots can be used for GNR files downloaded via computer-based editing software

CAB Cabinet modules

Effect Description		
No.	Model name	Description
1	US DLX 112	Based on Fender® 65 Deluxe Reverb 112 Cabinet
2	US TWN 212	Based on Fender® 65 Twin Reverb 212 Cabinet
3	US Bass 410	Based on Fender® 59 Bassman 410 Cabinet
4	Sonic 112	Based on Fender® Super Sonic 112 Cabinet
5	Blues 112	Based on Fender® Blues Deluxe 112 Cabinet
6	1960 412	Based on Marshall® 1960A 412 Cabinet
7	Eagle P412	Based on ENGL® Pro XXL 412 Cabinet
8	Eagle S412	Based on ENGL® Vintage XXL 412 Cabinet
9	Mark 112	Based on Mesa Boogie® Mark 112 Cabinet
10	Rec 412	Based on Mesa Boogie® Rectifier Standard 412 Cabinet
11	Citrus 412	Based on Orange® PPC 412 Cabinet
12	Citrus 212	Based on Orange® PPC 212 Cabinet
13	Slow 412	Based on Soldano® Slo 412 Cabinet
14	Dr Zee 112	Based on DR.Z® MAZ 112 Cabinet
15	Dr Zee 112	Based on DR.Z® MAZ 112 Cabinet
16	Jazz 212	Based on Roland® JC120 212 Cabinet
17	UK 212	Based on VOX® AC30 212 Cabinet
18	HWT 412	Based on Hiwatt® AP412 Cabinet
19	PV 5050 412	Based on Peavey® 5150 412 Cabinet
20	Regal Tone 110	Based on Tone King® Falcon 110 Cabinet
21	Two Stones 212	Based on Two Rock® 212 Cabinet
22	Cardeff 112	Based on Two Rock® 112 Cabinet
23	EV 5050 412	Based on EVH® 5150 412 Cabinet
24	HT 412	Based on Blackstar® HTV 412 Cabinet
25	Gas Station 412	Based on Diezel® Hagen 412 Cabinet
26	Accoustic 112	Acoustic guitar cabinet simulation, 1 x 12" speaker
27-46	EMPTY	Slots can be used for GIR or 3 rd party IR files downloaded via computer-based editing software

NS noise gate modules

Effect Description		
No.	Model name	Description
1	Noise Killer	Hard noise gate based on the Mooer® Micro Noise Killer. The effect solves noise issues quickly and efficiently with simple threshold adjustments.
2	Inter Reducer	Unlike conventional noise gates, this works by separating the conventional signal from the white noise in the signal and eliminating the white noise to achieve noise reduction while maintaining natural decay. This module is recommended for use before distortion effects or speaker simulation.
3	Noise Gate	Three parameter studio noise gate. The user can adjust the effective threshold according to the current noise level, then adjust the appropriate Attack and Release times according to their needs, and finally select the appropriate damping.

EQ modules

Effect Description		
No.	Model name	Description
1	Mooer G	5-band EQ for guitar
2	Mooer HM	5-band EQ for heavy guitar
3	Mooer G-6	6-band EQ for guitar
4	Custom EQ	3-band EQ with adjustable frequency bands.

MOD Modulation modules

Effect Description		
No.	Model name	Description
1	Phaser	Based on the MOOER® Ninety Orange, standard sine waves
2	Step Phaser	Square wave phase shifter
3	Fat Phaser	Low frequency phase shifter
4	Flanger	Based on the MOOER® E-Lady, square wave effect
5	Jet Flanger	Based on the MOOER® Jet Flanger
6	Tremolo	Based on the MOOER® Trelicopter
7	Stutter	Square wave tremolo effect
8	Vibrato	Pitch modulation
9	Pitch Shift	Pitch shift effect based on the original sound
10	Detune	Fine-tuned pitch adjustment.
11	Rotary	Simulates a vintage Leslie rotary speaker
12	Ana Chorus	Classic analog chorus
13	Tri Chorus	More pronounced multi-chorus effect
14	Ring Mod	Ring modulator effect
15	Q-Filter	Auto-Wah effect
16	High Pass	Modulation filter that emphasizes high frequencies
17	Low Pass	Modulation filter that emphasizes low frequencies
18	Slow Gear	Auto volume swell effect
19	Lofi	Low sampling rate filter for low fidelity sound
20	Multi Phaser	Analog phase shift effect with multiple stages
21	Modern Phaser	Modern sound phase shifter.
22	Flanger Pro	Professional flanger effect with more parameter controls.
23	Modern Rotary	Modern sound rotary.
24	Optical Tremolo	Simulates a device that reads a pattern printed on a rotating disc and converts it into a volume-modulating “tremolo” sound.

25	Octave	Adds a note one octave lower or higher.
----	--------	---

DELAY modules

Effect Description		
No.	Model name	Description
1	Digital	Crystal-clear repeats
2	Analog	Warm and soft character of analog circuit reproduced by digital technology
3	Real	Realistic and natural echoes
4	Tape	Recreates classic tape delay sounds
5	Mod	Digital Delay with modulated repeats
6	Reverse	Clear reverse playback delay effect
7	Pingpong	Spatialized left/right Ping Pong delay
8	Dynamic	Digital delay which responds to instrument dynamics
9	Dual Delay	2 clear delays with independent time controls

REVERB modules

Effect Description		
No.	Model name	Description
1	Room	Small room reverb
2	Hall	Concert hall reverb with rich diffusion and long decay times
3	Church	Reverb simulating large space with long decay times
4	Plate	Bright metal plate reverb
5	Spring	Vintage spring reverb
6	Mod	Reverb with added chorus effect, adding more detail
7	Cave	Reverb reproducing the diffuse reflection of irregular surfaces in a cave
8	Shimmer	Gorgeous sounding reverb with Shimmer effect.

Note: The names of the manufacturers and products mentioned in this manual are the property of their respective companies and are used here only to illustrate the types of effect sounds simulated in this product.