

NUX

MG-50Li MODELER & PROFILER

Quick Start Guide



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www.nuxaudio.com



TS/AC4K

MULTI-EFFECTS PROCESSOR & PROFILER

V1

Copyright

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Accuracy

Whilst every effort has been made to ensure the accuracy and content of this manual, Cherub Technology Co., Ltd. makes no representations or warranties regarding the contents.

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.

This device complies with part 15 of the 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. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.



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!

Overview

Thanks for choosing the NUX MG-50Li Modeler & Profiler!

The MG-50Li is NUX family's flagship multi-effects processor for guitar and bass, built around two core technologies: TS/AC-4K white-box physical modeling amps and DeepImage profiling amp models. Its L/R Cyber IR engine provides stereo cabinet emulation with adjustable Microphone, Position, and Distance parameters, giving you detailed control over your sound. Combining up to 14 simultaneous effect blocks with ultra-flexible routing options across the dual-chain, the MG-50Li unlocks an enormous range of tonal possibilities.

With the NUX IMAGE app and the DeepImage technology, you can capture your favorite amps or OD/DIST pedals and store the profiles directly inside the MG-50Li, bringing all of your favorite amps everywhere easily. You can also create incredible sounds via the NUX IMAGE app by combining these captures with different EQ models and power amp tube models.

Patches can be edited directly from the front panel or through the NUX Audio app on your phone or computer for customization. Equipped with a high-definition color LCD display that stays readable even in bright daylight, the MG-50Li provides you with everything you need to dial in your sound and perform with confidence.

Features

● TS/AC-4K white-box physical modeling algorithm delivers astonishingly realistic amp sims and FX.
● Supports NUX Image & DeepImage profiling, allowing users to capture any amps & pedals.
● L/R Cyber IR engine delivers stereo cabinet emulations with adjustable Microphone, Position, and Distance parameters.
● 2 effect chains with up to 2 amps & 4 cabs (L/R Cyber IR).
● Combines up to 14 simultaneous effects blocks with ultra-flexible routing options.
● Exceptional sound quality with 24-bit AD/DA, 32-bit floating-point processing, and 48kHz sampling rate.
● 5-inch high-definition color LCD display.
● NUX Audio App control (Mobile, Win/Mac).
● Dual Send/Return loops let you route your favorite pedals.
● Built-in USB audio interface enables straightforward sound customization, patch management, and computer-based recording.
● Built-in rechargeable battery offers convenience for practice and performance.

Control Panel

■ Top panel



1 5" colored LCD display

2 Edit knob

- Press this knob to edit the effect chain.
- Press this knob to enable/disable an effect block.
- Press this knob to switch pages when adjusting the parameters of effects.

3 Master Volume knob

Adjusts the master volume of the MG-50Li.

4 Edit button

- Press this button to adjust the effects.
- Press and hold this button to change the effect category.

5 Back/Home button

- Press this button to quit or go back to previous page.
- Press and hold this button to go back to Home screen.

6 Save button

Press and hold this button briefly to save data and settings.

7 Global setting button

Press this button to enter the global settings.

8 Select, 1, 2, 3, 4 knobs

In edit mode, rotate these knobs to adjust the parameters.

9 Down/Up switches

Press the Down/Up switches to select a bank of patches.

10 A/B/C/CTRL switches

- Press the A/B/C switch to select a patch.
- Press the CTRL switch to turn on/off the function assigned to the CTRL.

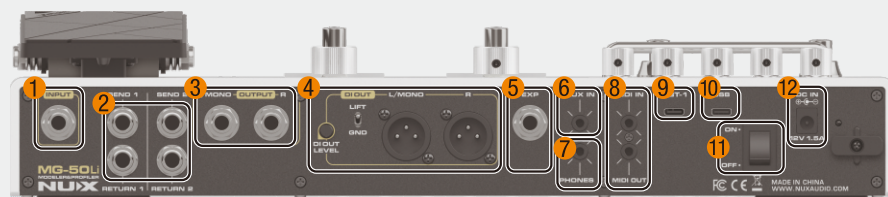
11 Input/Output indicators

- The input indicator shows the input signal level.
- The output indicator shows the output signal level.

12 Pedal

- Use this pedal to control the output volume.
- Press this pedal to turn on/off the expression pedal.

■ I/O jacks



1 Input jack

Connect your guitar or bass through this jack.

2 Send/return jacks (Effect loops)

-Connect an external effect processor here.

-You can place an external effects unit between the SEND and RETURN jacks and use it as part of the MG-50's internal signal chain.

-You can also use the SEND (1, 2)/RETURN (1, 2) jacks as SEND (L, R)/RETURN (L, R) jacks for connecting a stereo effect unit.

3 Output jacks

Connect these to your guitar amp or mixer. For a mono connection, use only the L/MONO jack.

4 DI out jacks and controls

-XLR jacks: Connect these to your PA system, etc.

-[GND LIFT] switch: Normally set to OFF. If a ground loop causes noise when an amp is connected to the XLR outputs, switching to LIFT may eliminate the hum.

-DI OUT LEVEL: Use this knob to adjust the output volume.

5 EXP jack

Connect an expression pedal or footswitch (NMP-2lite, sold separately) to control various parameters.

6 Aux in jack

Connect this jack to your MP3 player.

7 Earphones jack

Connect this jack to your earphones.

8 MIDI IN/MIDI OUT jacks

Connect an external MIDI device here.

9 USB-C for NBT-1 Bluetooth module

Plug the NBT-1 Bluetooth module into this jack to enable Bluetooth audio and app control for the MG-50Li.

10 USB-C

Use a USB cable to connect to a computer, and exchange audio/MIDI data between the MG-50Li and the computer.

11 Power switch

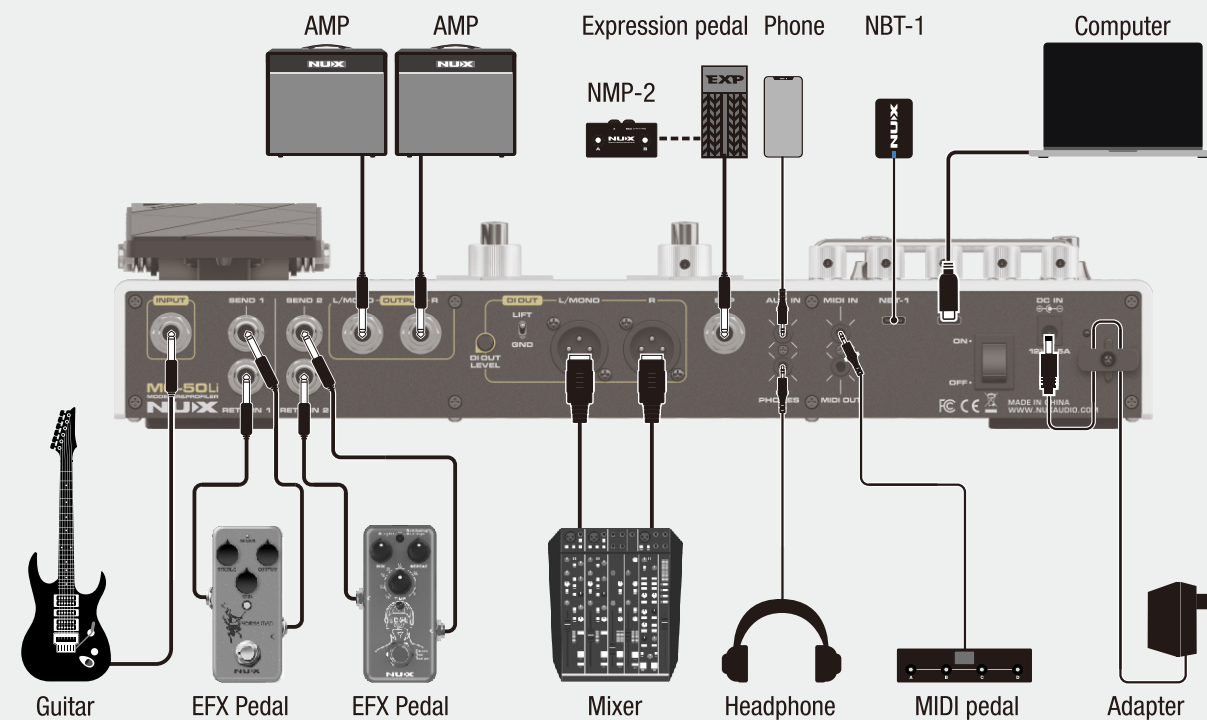
Turn the MG-50Li on/off here.

12 Power jack

Connect the included AC adaptor here.

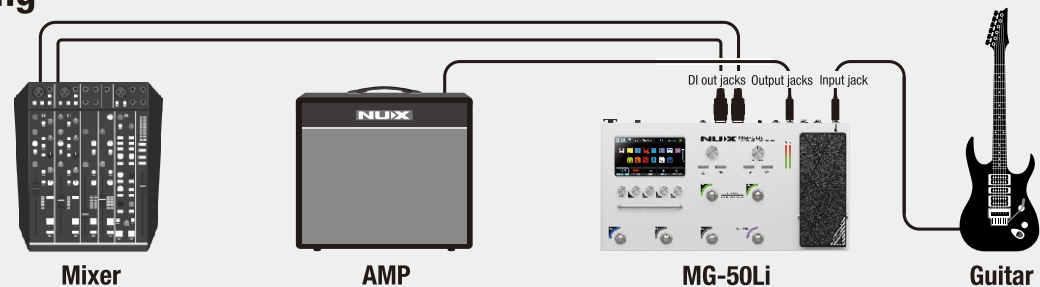
* Use the cord hook to secure the cord of the adaptor as shown in the illustration.

Connection



How to use

■ Playing



1. Connect your guitar to the MG-50Li, then connect the MG-50Li to an amp or a mixer.
2. Turn on the MG-50Li.



3. Press the Down/Up footswitches or rotate the knob on the right of the screen to select a bank of presets. Press the A/B/C foot switches to select a patch.



4. Press the Edit/Parameter knob to adjust the effect-chain.



! Notes:

- Press and rotate the Select knob to choose a chain style (Single, Parallel, or Split).
- Press and rotate Knobs 1 and 2 to quickly change the effect module and model.
- Press and rotate Knob 3 to move an effect block to a new position.
- Press and turn Knob 4 to copy and paste the settings of the current effect block to another one.

5. Press the Edit button to adjust the effect.



6. Press and hold the Edit button to change the effect module and model.



7. STOMP mode

Press the Down and Up switches simultaneously or press the Select button below the screen to enter STOMP mode.



! Notes:

- Follow the on-screen instructions to set up the footswitches for controlling the effect blocks in the effect chain.
- Use a footswitch to control two or more effect blocks at once.

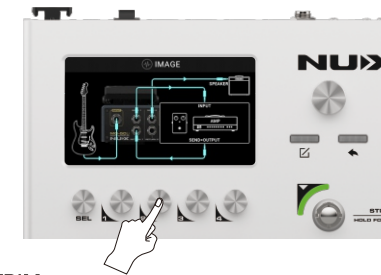
8. CTRL/EXP setup

Press Knob 1 to configure the CTRL/EXP settings for the current patch.



9. IMAGE

Connect the MG-50Li to your computer, launch the NUX IMAGE app, then press Knob 2 to enable or disable profiling. See the following pages for details.



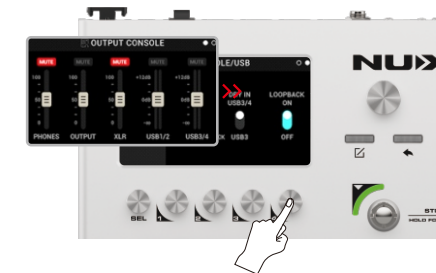
10. INPUT TRIM

Press Knob 3 to set the input trim for your instrument. You can save up to 6 input trim settings for different instruments.



11. CONSOLE

Press Knob 4 to adjust volumes and USB stream settings in the OUTPUT CONSOLE.



! Notes:

- Press the corresponding knob to mute any output in the console.
- Press the EDIT/PARA knob on the right side of the screen to configure the USB stream.
- Use USB NORMAL to record your playing, or USB REAMP for reamping.

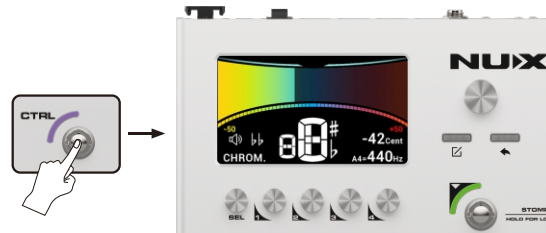
12.Looper

Press and hold the Down and Up footswitches simultaneously to enter Looper mode.

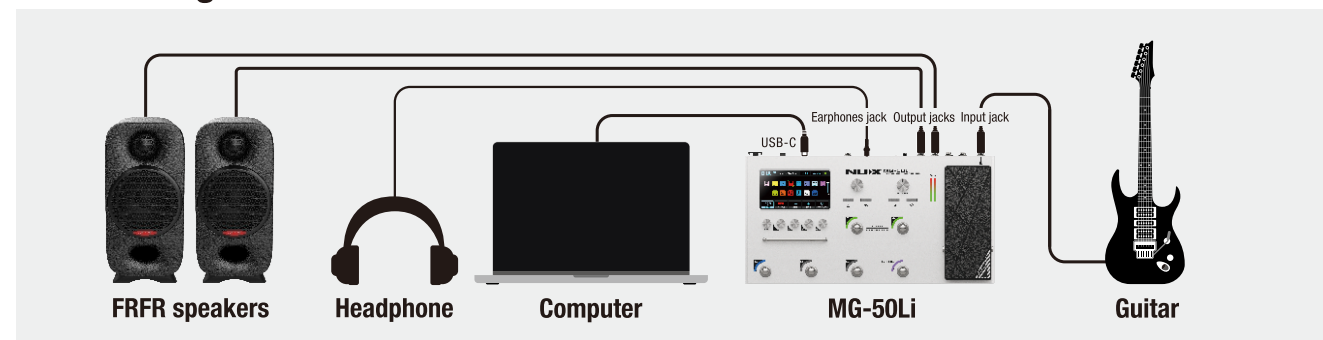


13.Tuner

Press and hold the CTRL footswitch to enter Tuner mode.



■Recording and USB audio stream



You can record the MG-50Li's sound on your computer, or output audio from your computer through the OUTPUT jacks.

* For detailed recording setup instructions, please visit www.nuxaudio.com .

■Profiling with the NUX IMAGE app

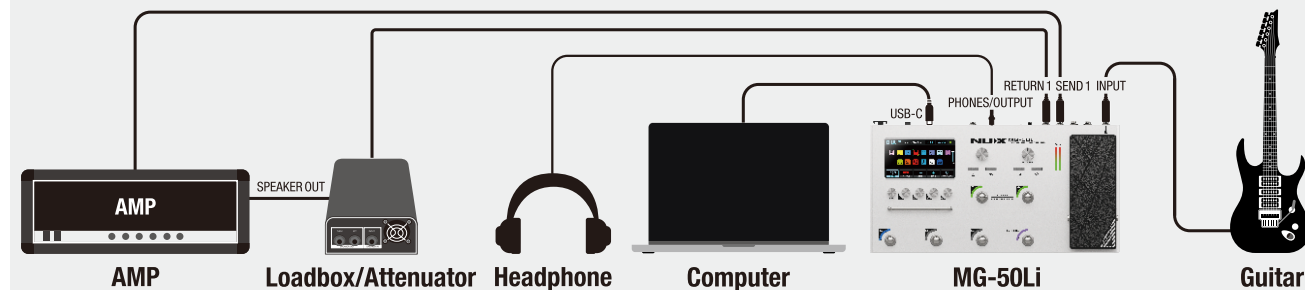
One of the most exciting features of the MG-50Li is its ability to profile your favorite amps via the NUX IMAGE app. You can then load these sounds into the MG-50Li for use anywhere.

Before you start, note that “.image” is a file format developed by NUX. It represents a single profile of an amp or preamp pedal. Meanwhile, “.deepimage” is another format created by combining multiple “.image” files. This combination delivers the best simulation of an amp's GAIN or VOLUME controls.

Below is a guide on using the NUX IMAGE app to create “.image” and “.deepimage” files, as well as how to load these files into your MG-50Li. The process only requires a few simple steps.

1.Connect your amp or OD/DIST pedal, guitar, computer and the MG-50Li as shown below.

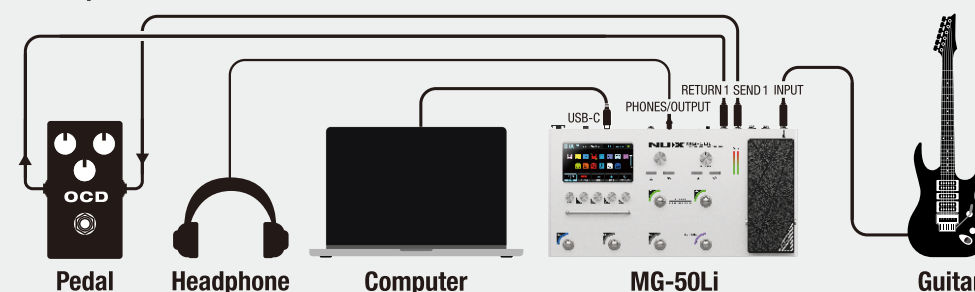
Profiling an amp with a loadbox(attenuator) with the MG-50Li



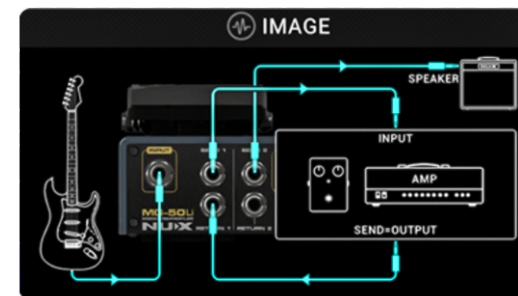
⚠ Warning!

Before you start profiling an amp, you must connect your amp's ‘SPEAKER OUT’ to a load-box or attenuator, then output the signal to the MG-50Li for profiling.

Profiling an OD/DIST pedal with the MG-50Li



The connection should follow below instruction.



2.Download the NUX IMAGE app from our official website: www.nuxaudio.com



3.Create “.Image” files with the NUX IMAGE app



**Notes:**

- Before starting profiling, you must check the “reference level”. It is recommended to set your amp's Gain to maximum and adjust the Master Volume to keep the “reference level” from being too high.
- The computer's volume should be set to maximum.
- Strum your guitar to test and make sure the wet signal level is at the “suggested wet signal level” as above.
- Click on “GO” to start.
- Once profiling is complete, you can compare the sound by switching between “Model” and “Reference”.
- Click “Export” to save the .image file to your computer.

**Warning!**

You must name your .image files using the format: “xxxx_0”, “xxxx_20”, “xxxx_40”, “xxxx_60”, “xxxx_80”, “xxxx_100”. Failure to do so will prevent you from combining them into a “.deepimage” file.

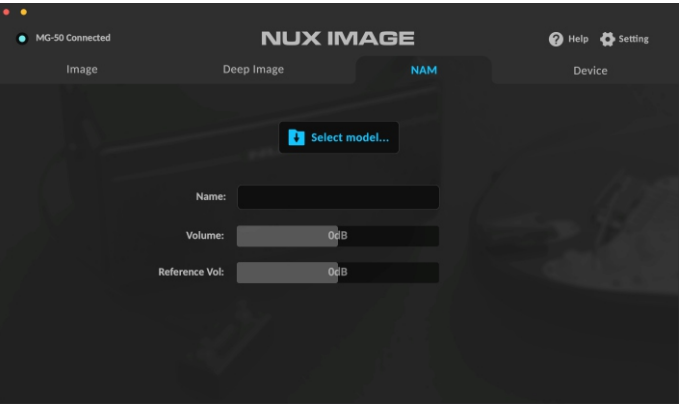
4.Create a “deepimage” file
Click “Select IMAGE files” and choose 2 to 6 of the .image files you created to combine into a .deepimage file.



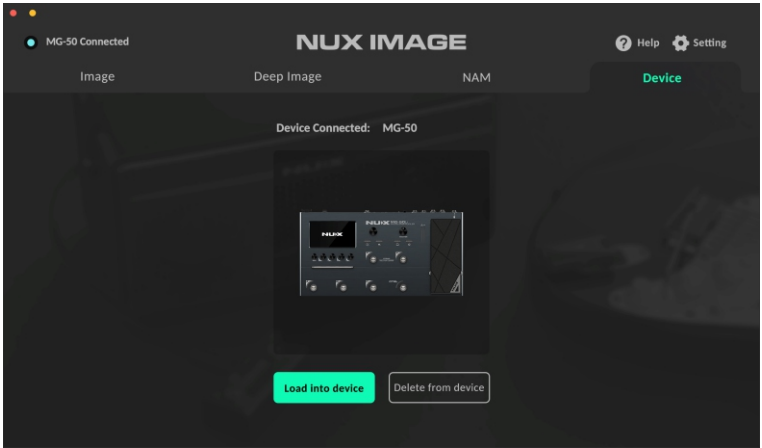
**Notes:**

- Based on your device type, select the Deeplmage style from “Amplifier, Stomp Box”.
- Select an EQ from “F'65, V'Diamond, M'British, High Gain, Bass”.
- You can preview the sound you created directly in the NUX IMAGE app.
- When everything is set up, click “Load into Device” to save it to your MG-50Li. Alternatively, click “Export” to save the .deepimage file to your computer.

5.Import a NAM file to MG-50Li
On this page, you can import a NAM file (created by Neural Amp Modeler) to the MG-50Li.



- 6.Load files into the MG-50Li
- On this page, you can load an .image or .deepimage file into the MG-50Li.
 - You can delete user-created .image or .deepimage files from the MG-50Li.



Softwares & Apps

Download the NUX AUDIO software for Windows and MacOS, as well as the mobile APPS for iOS and Android, from our official website: www.nuxaudio.com



Specifications	
Analog/Digital	Digital
Sampling Rate	48 kHz / 32 bit
System Latency	Minimum 3ms
Presets	150 x Factory, 147 x User
Number of EFX Blocks	14 (NG, CMP, EFX, AMP, EQ, S/R, IR, DLY, RVB, WAH, MOD, PL)
Effect Chain	Serial, Parallel, Split
Impulse Responses	Left & Right; 60 x Factory Cyber IRs, 60 x User IRs
Amps	27 White-box Modeling Amps, 33 DeeplImage Amps, 30 User Amps
USB	USB-C (24-bit / 48kHz USB Audio, USB MIDI [PC Editor], Firmware Update)
Bluetooth	NBT-1 Bluetooth Module (included) with APP Control
Expression Control	Yes (external EXP pedal or optional NMP-2 Lite footswitch)
Bypass Switching	Buffered Bypass
Software	NUX Audio Editor (PC), NUX Audio APP
INPUT/RETURN Impedance	1 MΩ
AUX IN Impedance	10 kΩ
OUTPUT L/R Impedance	1 kΩ
BALANCED OUTPUT Impedance	440 Ω
SEND Impedance	1 kΩ
PHONES OUT Impedance	10 Ω
INPUT to OUTPUT L/R Dynamic Range	110 dB
Power Supply	12V DC/ 1.5A (Center Negative)
Current Draw	< 1400 mA
Dimensions	393(L) x 210(W) x 72(H) mm
Weight	2.8 kg

Accessories

- Quick Start Guide
- USB Cable
- MIDI Conversion cable
- Power adapter
- NUX Sticker
- NBT-1 Bluetooth audio & MIDI adapter
- Gig bag

*Specifications and features are subject to change without notice.