

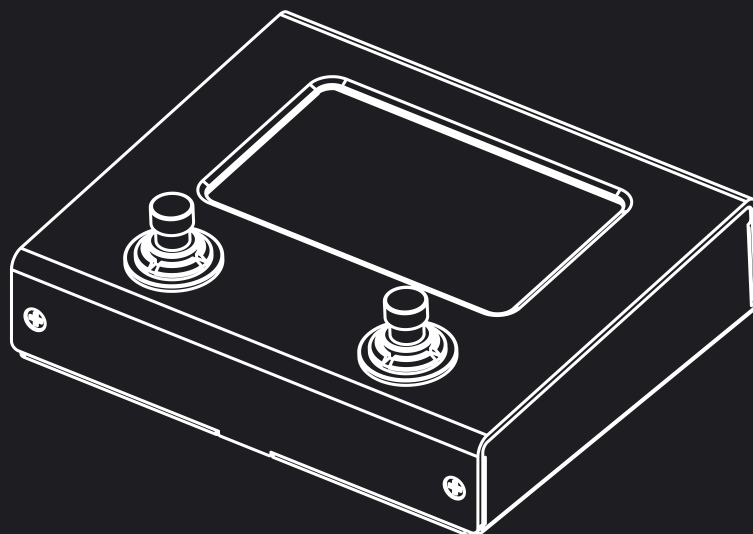


# AMPERO **MINI**

Amp Modeler / Effects Processor

## USER'S MANUAL

For Firmware V1.1



**HOTONE**  
DESIGN INSPIRATION

※ In the interest of product improvement, the specifications and/or the content of products (including but not limited to appearances, packaging design, manual content, accessories, size, parameters and display screen), are subject to change without prior notice. Please check with local supplier for exact offers. Specifications and features (including but not limited to appearances, colors and size) may vary by model owing to environmental factors, and all images are illustrative.

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# Welcome

Thank you for purchasing a Hotone product.  
Please read this manual carefully to get the most out of your Ampero Mini.  
Please keep this manual to use for further reference.

## Notice

Please read this manual carefully. It contains information regarding the proper use of this product and other important information.

### Warning

- Do not open the casing or attempt to modify the product or power supply. Hotone will not be responsible for product damage or bodily harm should the product be tampered with.
- To reduce the risk of hearing damage, do not use headphones at high volume for an extended period of time. Should you notice discomfort, discontinue use and see a medical professional immediately.
- Children using this product should be accompanied by an adult.

### Environment

Avoid using the unit in any of the following conditions that could cause malfunction:

- Extreme environment (extremely hot or cold places, near heaters and other heat sources, under strong sunlight, etc.)
- Sandy or dusty places
- Places that are extremely humid or exposed to splashing water
- Places with lots of vibrations

### Power Supply Safety

- Always use a DC 9V center negative adapter. Use of an adapter other than that specified could damage the unit or cause malfunction and pose a safety hazard.
- Always connect the adapter to an outlet that supplies the rated voltage required by the adapter.
- When disconnecting the adapter from an outlet, always pull the adapter itself. Pulling the cable will cause damage to the unit. Make sure to separate the power adapter and store in a safe place.
- During lightning storms or when not using the unit for an extended period, disconnect the adapter from the outlet.
- Make sure your hands are dry when plugging in the adapter.

### Operation Safety

- Never put objects filled with liquids on the unit as this could cause electric shock.
- Never place candles and other burning objects on top of the Ampero Mini. Doing so could cause a fire.
- Ampero Mini is a precision device. Do not apply excessive force to the switches and other controls. Do not expose the unit to strong impact or drop it.
- Do not apply excessive force to the touchscreen or casing, which

may cause malfunction.

- Do not place foreign objects (liquid or solid) into the product.
- The unit and power supply will become warm with extended use; this is normal.

### Connections and Interference

- Turn off Ampero Mini and all other connected devices before connecting any cables to it.
- Disconnect the power supply and other line connections before moving Ampero Mini to another location.
- Ampero Mini is designed to resist external electromagnetic interference, but may produce static in some cases of strong electromagnetic interfere (e.g. high power transformers or wireless TV/phone equipment). Turn off any nearby electromagnetic equipment when using, if possible.
- Like all digital devices, Ampero Mini may experience malfunction and/or loss of data if exposed to strong electromagnetic interference. Please use caution.

### Cleaning

Use a soft cloth to clean the panels if they become dirty. If necessary, slightly moisten the cloth. Never use cleansers, wax, or solvents such as paint thinner, benzene or alcohol.

### Malfunction

- If the unit should malfunction, disconnect the power adapter and turn the power OFF immediately. Then, disconnect all other connected cables. For:

- Power adapter malfunction
- The unit or power supply emits an odor
- Liquids or foreign objects entered the unit
- The unit has other obvious signs of malfunction (e.g. won't turn on, knobs won't work, won't produce sound, etc.)

Prepare information including the model name, serial number, specific symptoms related to the malfunction, your name, address and telephone number and contact the store where you bought the unit.

# Definitions

## Module

Ampero Mini supports the simultaneous use of up to 9 effects. Each is called an “effects module”, or simply “module”. There are several effects available in each module.

## Parameter

Variables that determine the application of an effect are called “parameters”. If we imagine each module as a separate effect pedal, then each parameter would be a knob on that pedal.

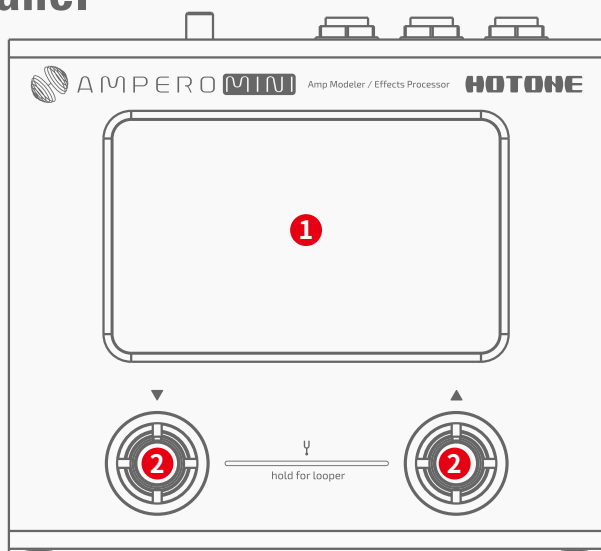
## Patch

The ON/OFF status of each module and the parameter settings are stored in units called “patches”. These are your “tones”. Use patches to recall, edit, and save your favorite tones.

## Bank

A set of 3 patches is called a “bank”. Ampero Mini has a total of 66 banks, including 33 editable player (user) banks and 33 factory banks (F01-F33), which can be adjusted by not saved.

# Panel

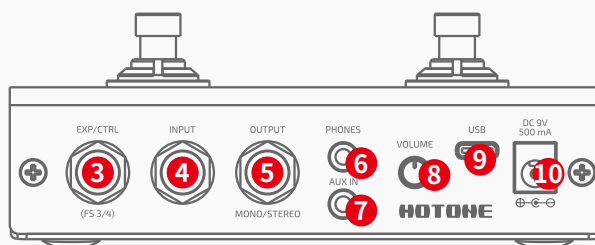


**1. Display Screen:** Displays Ampero Mini’s current status. Use the touchscreen to select effects, edit patches, and make tone adjustments.

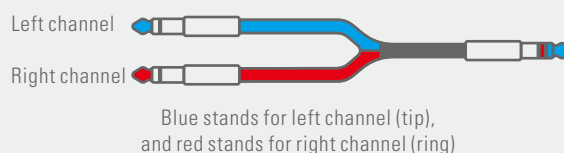
**2. Footswitch:** Use to change patches, turn on/off effects, set tap tempo, etc.

**3. EXP/CTRL (FS 3/4):** 1/4" TRS input, for connecting an external expression pedal/footswitch controller. Perfect for Hotone Ampero Press or Ampero Switch.

**4. INPUT:** 1/4" Mono input connection for both electric/acoustic instruments.



**5. OUTPUT:** Unbalanced 1/4" TRS stereo output connection to amplifiers or other equipment. For stereo connection, a Y cable is needed to split L/R output channels (Tip=Left channel, Ring=Right channel).



**6. PHONES:** 1/8" stereo output for connecting headphones.

**7. AUX IN:** 1/8" stereo input for connecting external devices (phone, MP3 player) for practice and jamming.

**8. Volume Knob:** Adjusts the overall volume of all output connections.

**9. USB:** USB 2.0 Type-C jack for connecting to your computer.

**10. Power Supply Connection:** Plug in the attached power supply (9V DC center negative) to turn the unit on.

# Getting Started

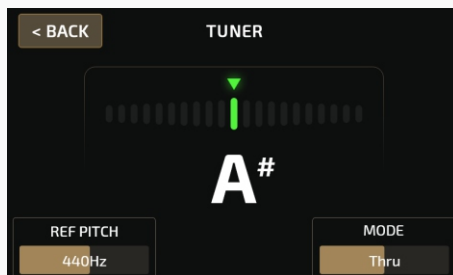
## 1. Connecting your Device

Plug your guitar in to the Ampero Mini input jack and run a 1/4" mono cable from OUTPUT to your amp. Please remember:

- (1) Keep your amp volume down.
- (2) Connect your cable to the amp's FX Loop Return if it has one. [See page 14.](#)
- (3) When connecting to stereo sound system, use a Y cable to split L/R channels.

2. Turn the Ampero Mini volume knob all the way down, then connect the power supply to turn Ampero Mini on.

3. Calibrate the strings. Press and hold footswitch 1 and 2 together to turn on the tuner. Pluck each string and tune until the pitch reaches the middle of the screen and turns green, as below:



When finished, tap any footswitch to exit the tuner.

4. Select a patch: Tap footswitch 1 to move back through the patches, tap footswitch 2 to move forward through the patches.

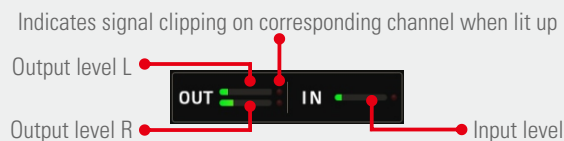
# Main Display Screen

When Ampero Mini is turned on it will display the main screen, as shown below:

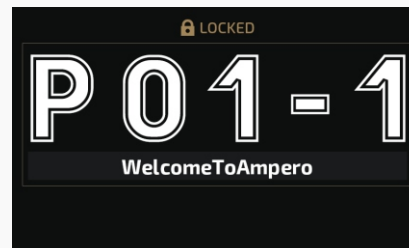


1. Current patch number
2. Current patch name, slide on the bar to go through the patches.
3. Patch selection back button
4. Patch selection forward button
5. Quick Access parameters - slide on it or tap +/- buttons to adjust. Holding the parameter name allows you to change the parameter you're controlling. [See page 9.](#)
6. CTRL/EXP gives you access to control settings. [See page 9.](#)
7. DRUM opens the drum machine settings. [See page 5.](#)
8. GLOBAL opens the global settings page. [See page 11.](#)
9. EDIT allows you to edit the current patch. [See page 7.](#)

10. Leveling meter that indicates current I/O level:



11. Hold to lock the device



After you hold the lock icon on the screen or press the lock button on the device, Ampero Mini will be locked. The screen will display like this.

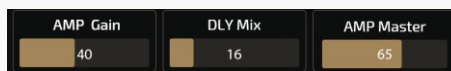
The device is unlocked after you press the lock button again. If you enter other pages (Tuner, Looper etc) by pressing the footswitches, the device is also unlocked.

12. Indicates the current patch tempo

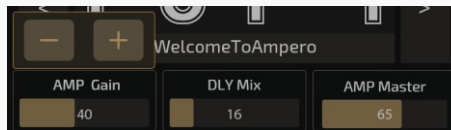
# Using the Screen

## Touch operation

Changing patches and editing settings can all be done with the touchscreen. You can also slide on the parameters to adjust them.



The "+/-" buttons will appear by pressing a parameter, as below:



Click "+/-" buttons to adjust the parameter (or press and hold for quick adjustment).

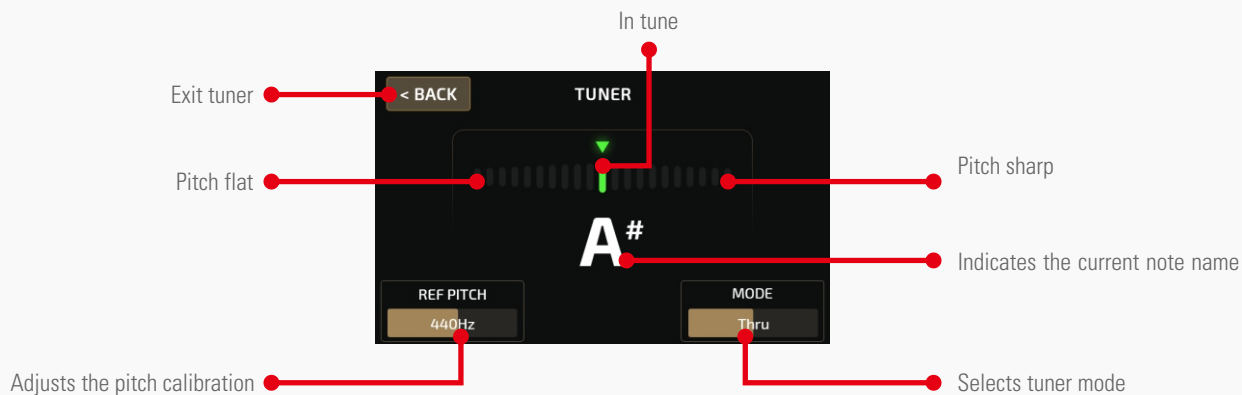
The "+/-" buttons will disappear if it is not operated for a period of time or press the current parameter again.

# Ampero Mini Tools

Ampero Mini is equipped with some great tools to expand your playing experience: a tuner, drum machine, looper and CTRL function.

## TUNER

In default mode, pressing 1 and 2 footswitchs together will open the tuner.



On the upper part is a scale that indicates your pitch. Left of center is flat, and right of center is sharp. As you tune your instrument towards the middle, the color of the scale will change from red (out of tune) to yellow (near pitch) to green (in tune).

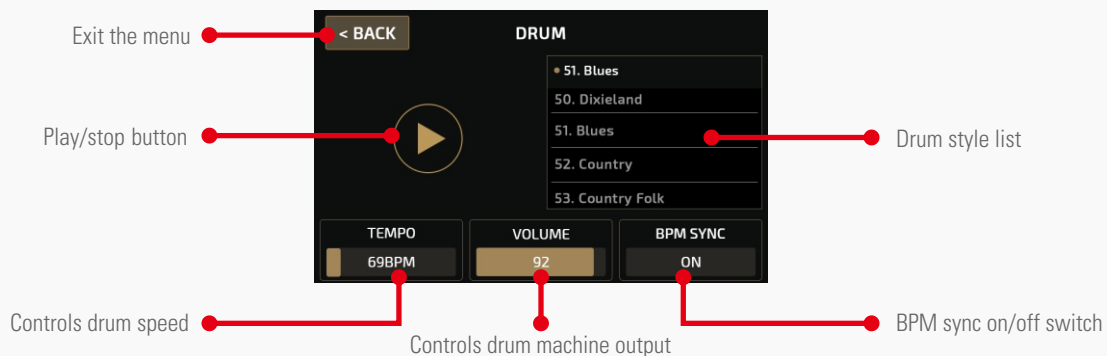
Use REF PITCH to adjust the pitch calibration ranging from 432Hz to 447Hz. Standard pitch is set at 440Hz.

MODE lets you select the tuner mode from Thru (for signal through), Bypass (bypass tuning) or Mute (for silent tuning).

You can exit the tuner either by pressing any footswitch or by pressing the Back button on the touchscreen.

## DRUM

Press DRUM on the main screen to access the drum machine.



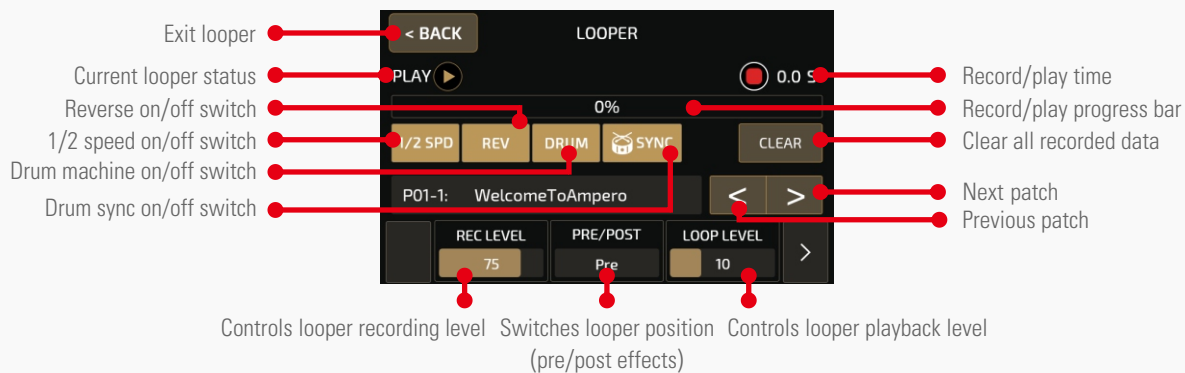
Use the style list to scroll between genre styles. Ampero Mini has 100 drum styles. See page 32.  
Use TEMPO to adjust the drum tempo, ranging from 40BPM-250BPM.  
Use VOLUME to adjust the drum volume from 0-100.  
Turn on BPM SYNC switch if you need to set drum tempo by Tap Tempo function. In this case, the drum tempo will be the same as

patch tempo.  
Exit the drum machine menu by pressing BACK at the top left. Exiting the menu will not stop the drums from playing.

**Reminder: Setting the drum tempo will affect patch tempo if you turn BPM SYNC ON.**

## LOOPER

In default mode, holding footswitch 1 and 2 together for more than 2 seconds to open looper menu.



The progress bar at the top will be shown in red during recording and overdubbing. It will be shown in green in play mode.  
Footswitch 1 is "Rec/Play" function. Footswitch 2 is "Stop/Clear" function.

When you record phrases with drum rhythms, you can sync drum rhythms to your loop phrase by turning on drum sync switch. Please note that some unusual operations (e.g. randomly play/stop looping/drum machine or change drum style/tempo) may break the sync status. Switching 1/2 SPD and REV on/off won't affect this.

REC LEVEL adjusts the loop recording level from 0-99.  
PRE/POST selects the position of looper in the effects chain.  
• In Pre mode, the looper will record mono audio without any effects, up to 100 seconds.  
• In Post mode, the looper will record stereo audio with effects, up to 50 seconds.  
LOOP LEVEL adjusts the loop playback volume from 0-99.  
Exit the looper by pressing BACK on the upper left of the screen.

# Ampero Mini Tools

Default Looper operation and status modes:

Operation	Function/ Status	LED Color (FS 1)	LED Color (FS 2)
On with no data	Stop	None	None
Tap footswitch 1 when there's no data	Record	Steady red	None
Tap footswitch 1 while recording, overdubbing, or paused	Play	Steady green	Steady green
Tap footswitch 1 while loop is playing	Overdub	Steady blue	Steady green
Tap footswitch 2 while loop is playing	Stop	Flashing green	Flashing green
Tap and hold footswitch 2	Clear	Quickly flashing green	Quickly flashing green
Each time a recorded loop plays from the beginning	/	Single flash	Single flash

You can use "Footswitch X" (X=1-2, corresponding to FS 1,2) to assign function of footswitch in looper page. The function includes the following:

Rec/Play: Tap to recording, then tap again to start playback

Drum Rec/Play: Start drum when starting to record

Stop/Clear: Tap to stop recording and hold to clear

Drum Stop/Clear: Stop drum when stop recording

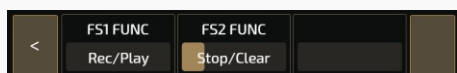
FX: Tap to toggle 1/2 speed function. Hold to toggle reverse function. (Violet LED on)

1/2 SPD: On (Yellow LED on)/Off (Yellow LED off)

REV: On (White LED on)/Off (White LED off)

Drum: On (Cyan LED on)/Off (Cyan LED off)

Looper Exit: Exit looper page



Reminder:

1. When the loop recording reaches it's time limit, the looper will automatically stop the recording and begin playback.
2. When the looper is in Post mode, changing patches will not change already recorded loop phrases.
3. Half-speed and Reverse functions will affect all recorded loop phrases.
4. If the looper is switched to a different position while it's running, the loop will automatically stop and be erased.

## Using CTRL Function

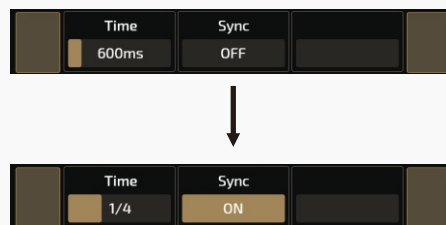
You can switch the function to CTRL function by pressing and holding the footswitch 1, then you can repeatedly pressing the footswitch 1 will turn it on or off, with green and red LED lights to show the current status respectively. Use the CTRL Settings menu to select which modules of the current patch will be controlled by the CTRL function. (see page 9).

Ampero Mini supports up to 3 CTRL controls (CTRL 1-3). Press and hold footswitch 1 to apply CTRL 1 function, use external footswitch for CTRL 2/3 function (see page 12).

## Tap Tempo and Tap Divide

Hold the footswitch 2 to switch the function in to Tap Tempo, the footswitch LED will turn blue and will flash with the tempo set. Set the tempo by repeatedly tapping the footswitch. This tempo will apply to the delay time and other effects with adjustable speed parameters.

If you want a certain effect to be controlled by tap tempo, go into the patch settings, select an effect, then select SYNC. When you do this, the time will sync to the tap tempo value.



You can also opt to use tap divide rather than time-based tempo. The default tap divide is set to quarter notes (1/4).

Tap divide values in relation to their musical beats are shown below:

Time Value	Beats (Quarter note as 1)	Display
Whole note	4	1/1
Half note	2	1/2
Dotted half note	3	1/2D
Half note triplet	4/3	1/2T
Quarter note (no divide)	1/1	1/4
Dotted quarter note	3/2	1/4D
Quarter note triplet	2/3	1/4T
Eighth note	1/2	1/8
Dotted eighth note	3/4	1/8D
Eighth note triplet	1/3	1/8T
Sixteenth note	1/4	1/16

# Customizing Your Ampero Mini

This section will show you how to customize your Ampero Mini's settings, edit patches, setup the expression pedal, and change other features to your taste.

## EDIT

Edit your patches to get the tone you want.

Remember that turning the modules on/off and adjusting parameters will change the current patch. If you switch patches or turn Ampero Mini off before saving your changes, the changes will be lost.

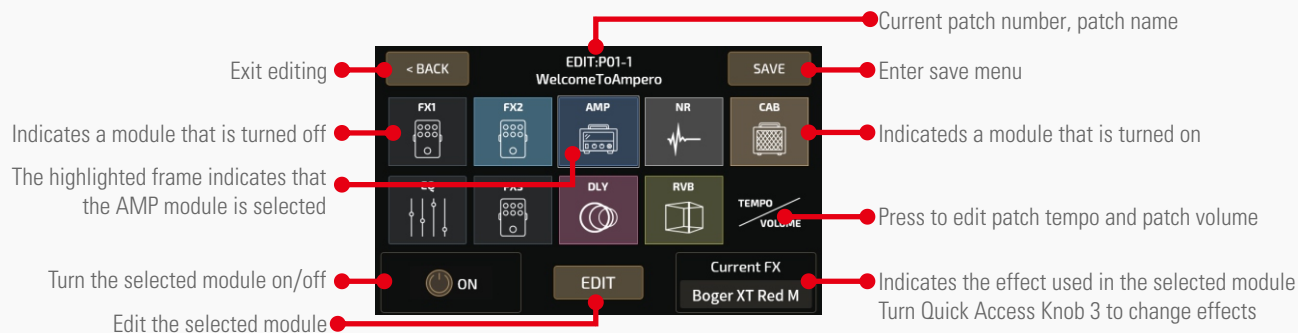
Make sure to press SAVE on the upper right of the display screen to save your settings.

### Patch Edit Menu

Select a patch from the main menu by using the forward/backward arrows on the screen.

Tap the footswitch 1 to move back through the patches, tap the footswitch 2 to move forward through the patches.

Next, press EDIT to enter the patch edit menu:



The menu is made of ten icon squares representing Ampero Mini's nine effects modules and a volume/tempo module.

The default signal chain is ordered like this:

FX1 (select one) - FX2 (select one) - AMP (amp simulator) - NR (noise reducer) - CAB (cabinet simulator) - EQ (equalization) - FX3 (select one) - DLY (delay) - RVB (reverb)

FX1, FX2, and FX3 will hold effects of your choosing.

Press a square to select that module, then use the on/off button to turn that module on or off. Press EDIT to enter the module edit menu.

Current FX shows the effect on the current module.

When you select TEMPO/VOLUME square, you can adjust the patch tempo (40-250BPM) and the patch volume (0-99) with the touch screen.

To move a square to a different position, press a square twice to pick it up:



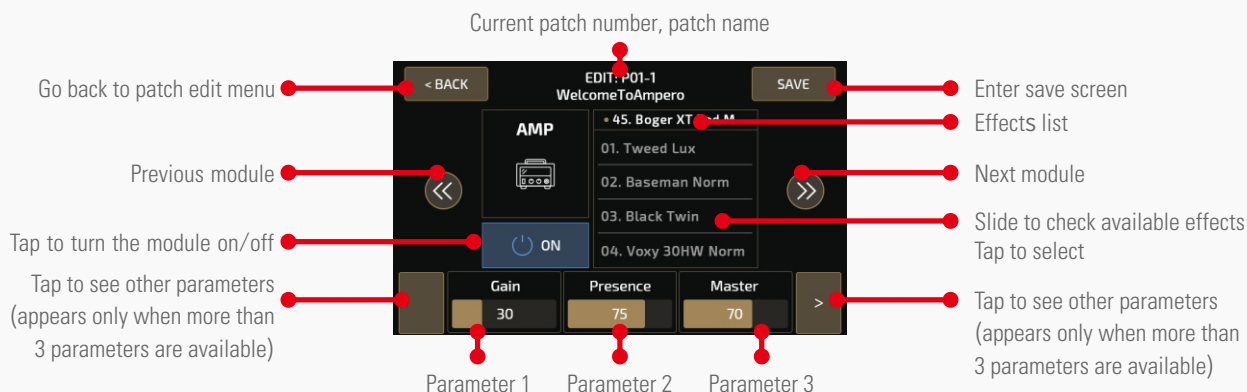
Press another square to insert into the selected position:



Reminder: The VOLUME/TEMPO square is fixed at the end.

# Customizing Your Ampero Mini

## Module Edit Menu



Use the module control panel to edit or turn the current module on/off.

Select an effect from the effects list.

The parameter panel shows the adjustable parameters of the effect selected.

If the selected effect has more than three adjustable parameters, there will be an arrow at the right of the parameter panel. Press the arrow to see the other parameters.

Slide on the three quick adjust paras or tap +/- buttons to adjust the parameters.

For more information on modules, effects, and parameters. [See page 18.](#)

**Reminder:** In some extreme cases the signal processor may become overloaded and display a "System Overload" caution.

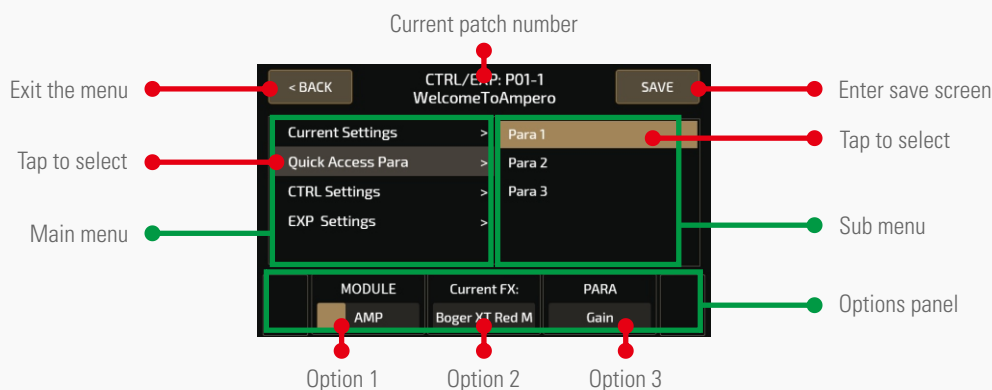
## Control Settings

Use the control settings to determine the CTRL function and quick access para targets, setup the expression pedal parameters, and calibrate the expression pedal.

Remember that all the control settings will change as you change patches. If you switch patches or turn Ampero Mini off before saving your changes, the changes will be lost.

Make sure to press SAVE on the upper right of the display screen to save your settings.

Press CTRL on the main menu to enter the control menu.



Make selections from the right and left panels.

Like the effects module parameter menu, the selection panel features three adjustable options. These options will change according to the current menu option.

If the selected menu has more than three adjustable options, there will be an arrow at the right of the selection panel. Press the arrow to see the other options.

# Customizing Your Ampero Mini

## Current Settings

Pressing Current Settings allows you to see the CTRL footswitch function for the current patch, the quick access knobs targets, and the expression pedal target.



## Quick Access Paras

This menu allows you to set the parameter targets for the three quick access parameters under the current patch. The parameter targets can also be the effects parameters of the current effects module, patch volume and patch tempo.



Use MODULE to select the target module. If you don't want the quick access para on, select OFF to turn its function off.

The effect the current module is using will show up in the center of the selection panel.

Use PARA to select the parameter you want to control. The controllable parameters will vary with the different modules and effects.

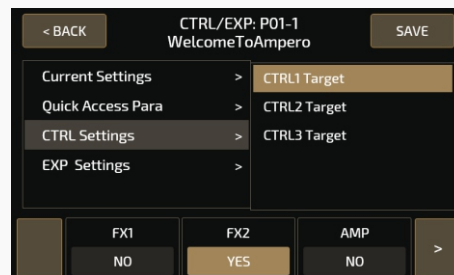
Refer to Effects List for more on the controllable parameters of different modules and effects. [See page 18.](#)

You can hold any parameter on the selection panel of the main menu to change a quick access para control target in the pop-up menu. Tap on a parameter to change.



## CTRL Settings

This menu is used to set the CTRL function of Ampero Mini. Ampero Mini allows you to set up to 3 CTRL functions, you can assign the same or different CTRL targets for CTRL 1-3. Use the CTRL 1 function by holding the footswitch 1, use the CTRL 2, 3 by external footswitch.



The 9 Ampero Mini effects modules are listed in the panel. with yes and no below each module to show if the CTRL 1-3 are activated or not. In the example image above, FX2 is controlled by the CTRL 1. Press to change between yes/no, and press the arrows on the right/left to scroll through the modules.

## EXP Settings

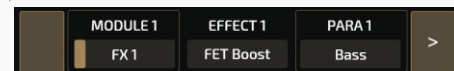
From this menu, you can control the settings of or calibrate your external expression pedal.



There are 3 options within this menu: Target, Expression Range, and Calibrate.

- Target

Under the Target option, you can set the pedal's control target. You can set up a maximum of 5 parameters for the expression pedal: 4 effect parameters and a volume control.



In the selection panel, MODULE X (X standing for 1-4 controllable targets) represents the effects module in play. EFFECT X displays the actual effect name, and PARA X shows the effect's controllable parameter.

# Customizing Your Ampero Mini

In the selection panel, turn VOLUME switch ON for using the expression pedal for overall volume control (post volume). The range is fixed: minimum at fully heel and maximum at fully toe.



Note: The volume control will work simultaneously with the other four effect parameter controls when you turn it on.

You can turn the expression pedal off by turning selecting OFF in the settings panel.

## - Expression Range

Under the Expression Range option, you can set the expression pedal expression range and sweep curve. There are four adjustable targets to change these settings. The volume control won't be affected.



In the selection panel, MIN X (X standing for 1-4 controllable targets) represents the lowest range value. This is the value the pedal will have when pushed all the way up. MAX X represents the highest range value, when the pedal is pushed all the way down. CURVE X represents the curve line the pedal will follow when pushed from all the way up to all the way down.

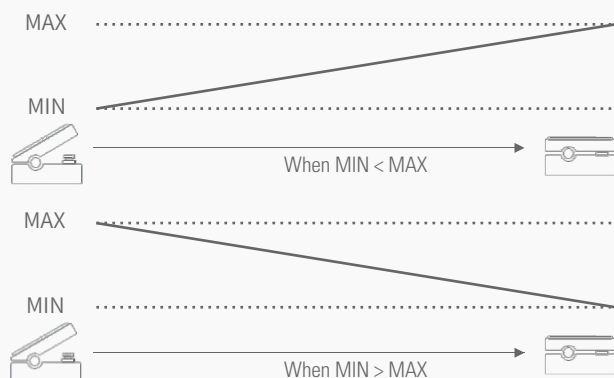
The MIN and MAX range is 0-100, and the MIN value can be greater than the MAX value.

There are three CURVE types:

Line follows a straight line.

Exp follows an exponential line from slow to fast.

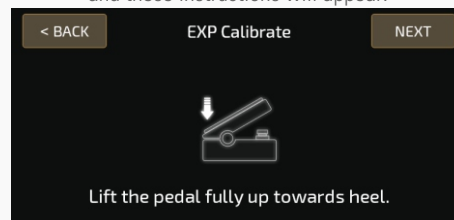
Log follows a logarithmic line that changes as the pedal moves.



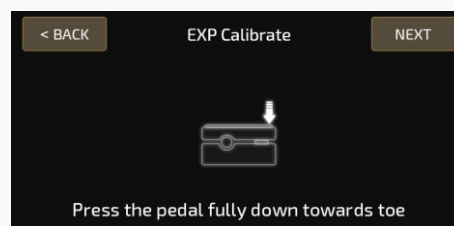
## - Calibrate

The Calibrate option helps you calibrate your expression pedal. It is important to calibrate the expression pedal if you find the sweep has very little or too much change in the effect you've set.

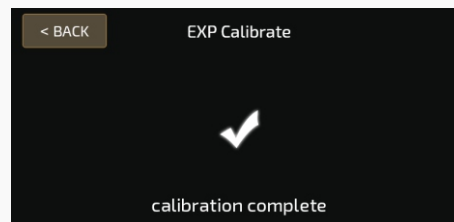
Press Calibrate on the selection panel, and these instructions will appear:



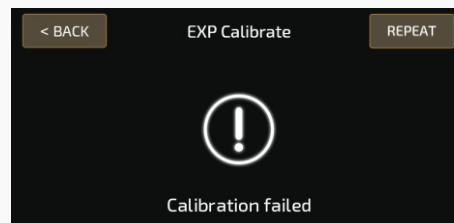
Bring the pedal all the way up (back) and press NEXT.



Then press the pedal all the way down and press NEXT.



Then, strongly press the pedal toe down and press NEXT. The calibration will be set, and this message will appear:



Press REPEAT to begin the calibration process again, or press BACK to exit the calibration process and return to the previous menu.

# Customizing Your Ampero Mini

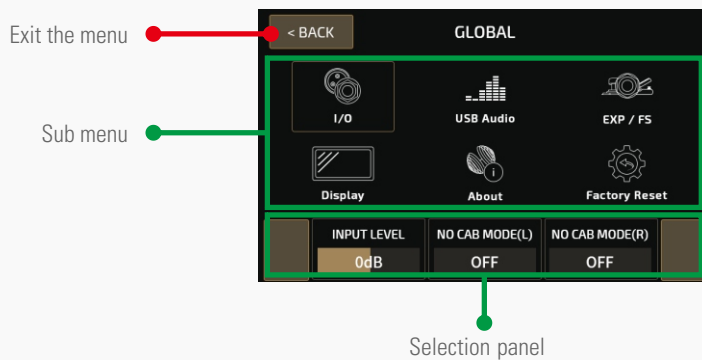
## SAVE

In the SAVE menu, you can save the changes you made to your effects parameters, control information, and other editable targets. It is very important to save the changes you made to your tone and control settings!



## GLOBAL

Use the GLOBAL menu to set Ampero Mini's global functions, including I/O settings. You can also return to factory settings from this menu. Global settings will affect Ampero Mini's overall working status. These will override any other settings made to your patches. Any changes made in Global setting will be automatically saved and immediately operational. In the main menu, press GLOBAL to enter the global settings menu. The screen will look like this:

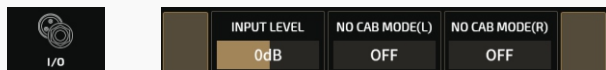


The selection panel will display the adjustable options of the target you select. These will vary according to the selection. If there are more than three options in the current selection, use the arrows to the right and left to scroll through the options.

# Customizing Your Ampero Mini

## I/O

Set the global input/output levels and modes in the I/O menu.



Adjust the optimal Input Level for the instrument or other input you're using. Adjustable range is from -20dB to +20dB. Default is set to 0dB. No Cab Mode is for connecting to instrument amplifiers without changing saved presets. Turning this on will bypass the CAB module for Ampero Mini's L/R output channels ignoring preset settings. You can apply different settings on L/R output channels for different scenarios. Default is set to Off.

## USB Audio

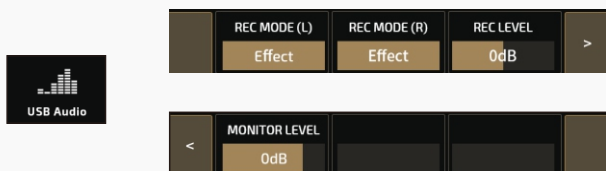
Use this menu to set up USB audio settings when using Ampero Mini as a USB audio interface.

The Rec Mode options allow you to select USB recording input sources on left (L) and right (R) input channels. The selections for these are same: dry signal (Dry) and wet signal (Effect).

When recording, adjust the optimal Rec Level and Monitor Level according to the instrument or other devices you're using.

Rec Level: range: -20dB to +20dB, default: 0dB

Monitor Level: range: -20dB to +6dB, default: 0dB



## EXP / FS

You can connect external footswitches to EXP/FS jack for further control. This menu allows you to set up the working mode of EXP/FS jack and the functions of external footswitches.

The menu includes MODE, FS3 TAP, FS4 TAP, BANK SEL MODE.



Select a mode from EXP (connect to expression pedal), Single FS (single footswitch controller) and Dual FS (dual footswitch controller).

The MODE selection affects available options in this menu:

EXP: all other options are unavailable

Single FS: FS3 TAP is unavailable

Dual FS: all other options are available

FS3 TAP and FS4 TAP can be set up as follows:

CTRL 1/2/3: For controlling module on/off

Looper Rec/Play: Record/play loop phrases

Loop Stop: Stops looper playback

Looper: Enter/exit looper menu

Drum On/Off: Drum rhythm play/stop

Drum: Enter/exit drum menu

Tuner: Enter/exit tuner

Bank+/Bank-: Change banks by toggling up or down

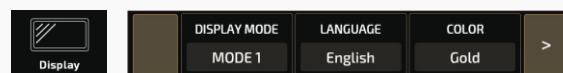
Tap Tempo: Tap tempo function

Patch+/Patch-: Change patches by toggling up or down

FX1~RVB On/Off: Switch modules on/off

## Display

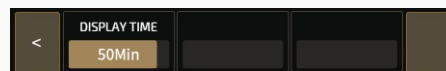
This menu setup the display and language of Ampero Mini.



Use DISPLAY MODE to switch two display modes in Main Display screen. Mode 1 stresses patch number, and Mode 2 stresses patch name. Default is set to Mode 1.

Use LANGUAGE to switch system language.

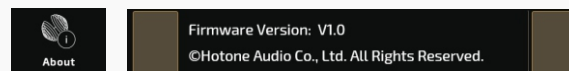
Use COLOR to switch between 7 theme colors.



Use DISPLAY TIME to set how long screen display lasts for energy saving. Selections are Always On, 1min, 5min, 10min, 20min, 30min, 40min, 50min, 60min. Default is set to 30min. After screen display goes out, any operation on Ampero Mini (incl. touching the screen/pressing footswitches or exp pedal) will wake up the screen.

## About

About will show you information about Ampero Mini's firmware.



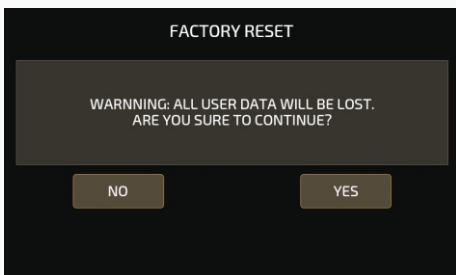
# Customizing Your Ampero Mini

## Factory Reset

Use this menu to perform a factory reset. Remember, resetting Ampero Mini will delete all of your saved changes and personal settings. Once it is executed, it cannot be undone, so please back up your settings before performing a factory reset.



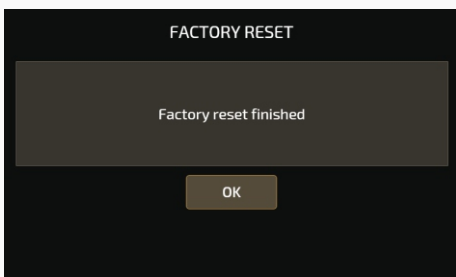
Press Factory Reset on the screen.



This display will come up with a warning. Pressing YES will perform the factory reset. Pressing NO will return to the previous menu.



After continuing with the factory reset, this screen will appear showing that reset is in progress. Do not disconnect the power supply while the reset is in progress. Disconnecting the power supply may cause Ampero Mini to malfunction.



When the factory reset is complete, this message will appear. Press OK to return to the main menu.

## Suggested Setups

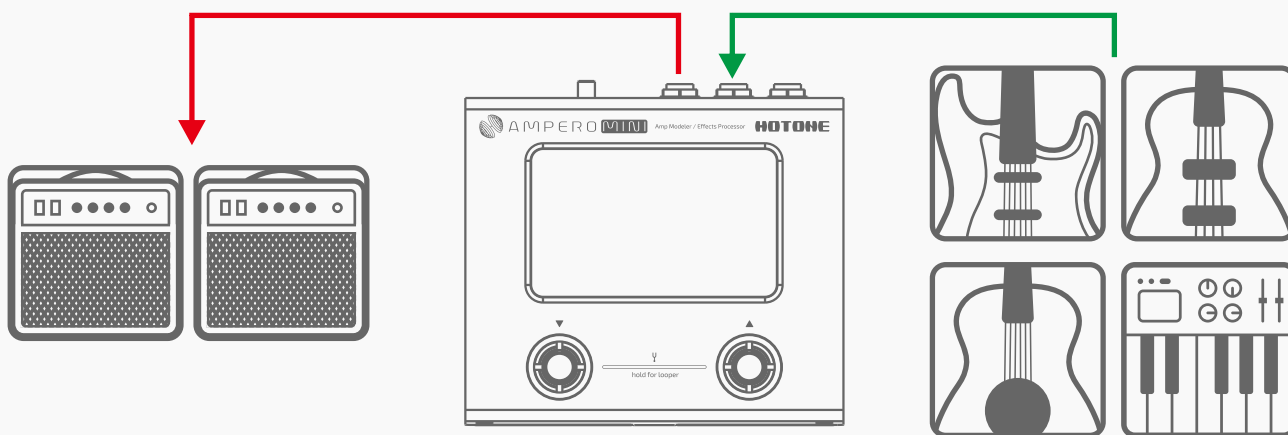
Here are some common setups to get the most out of Ampero Mini.

### Using with your instrument and amp

Plug your instrument into the Ampero Mini instrument IN jack, and run a cable from the OUT to your amplifier (s). For stereo connection, a Y cable is needed to split L/R output channels (Tip=Left channel, Ring=Right channel).



For best results, turn off the AMP and CAB modules on Ampero Mini.

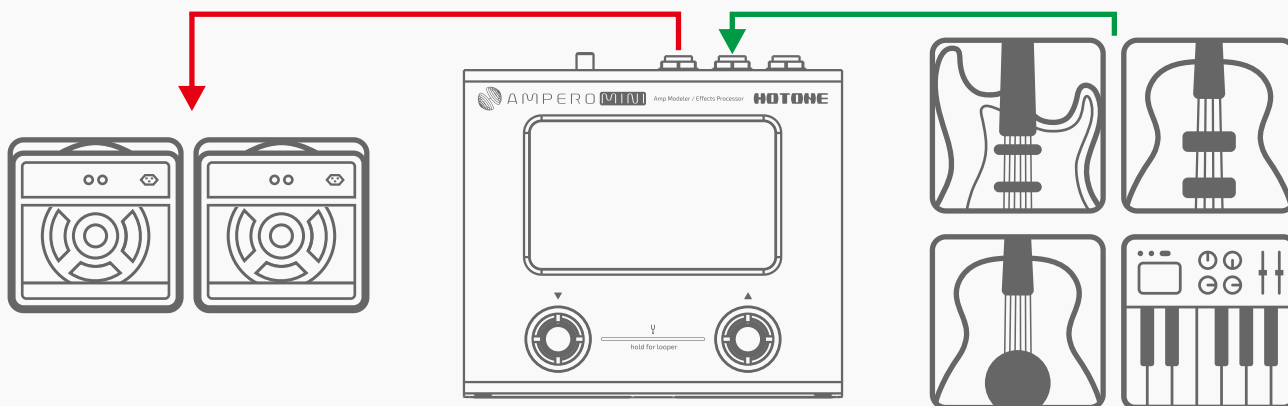


### Connecting to your amp's RETURN or Power Amp (Loudster) INPUT

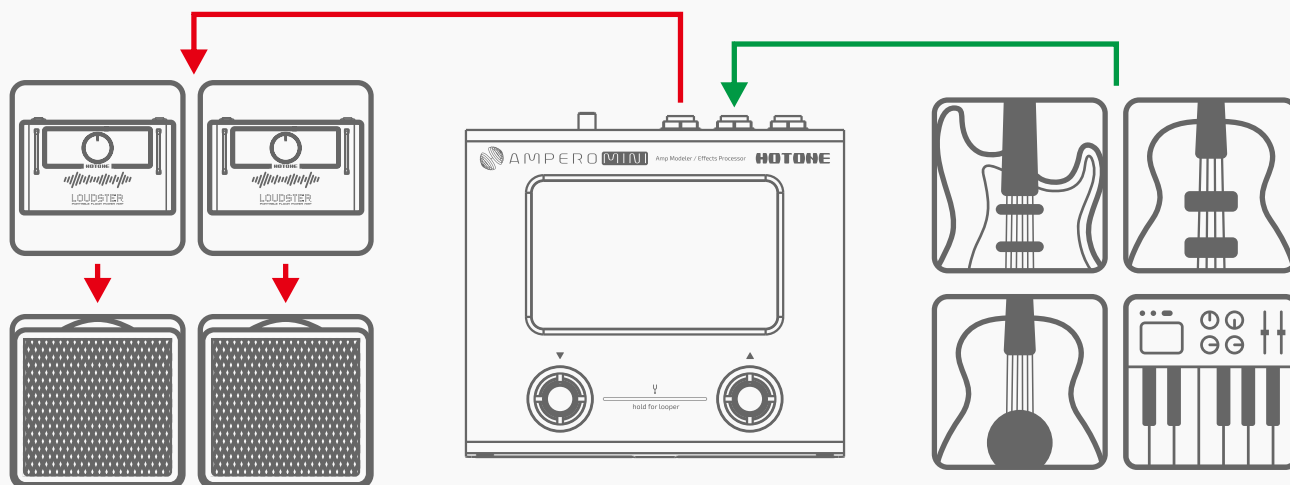
Connect the output to your amp's FX Loop Return input or post amp input. For stereo connection, a Y cable is needed to split L/R output channels (Tip=Left channel, Ring=Right channel).



For best results, turn off the AMP and CAB modules on Ampero Mini.



## Suggested Setups

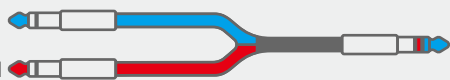


## Connecting your mixer, interface, headphones, and other equipment

Connect Ampero Mini's output to your mixer or audio interface's corresponding inputs. For stereo connection, a Y cable is needed to split L/R output channels (Tip=Left channel, Ring=Right channel).

Left channel

Right channel

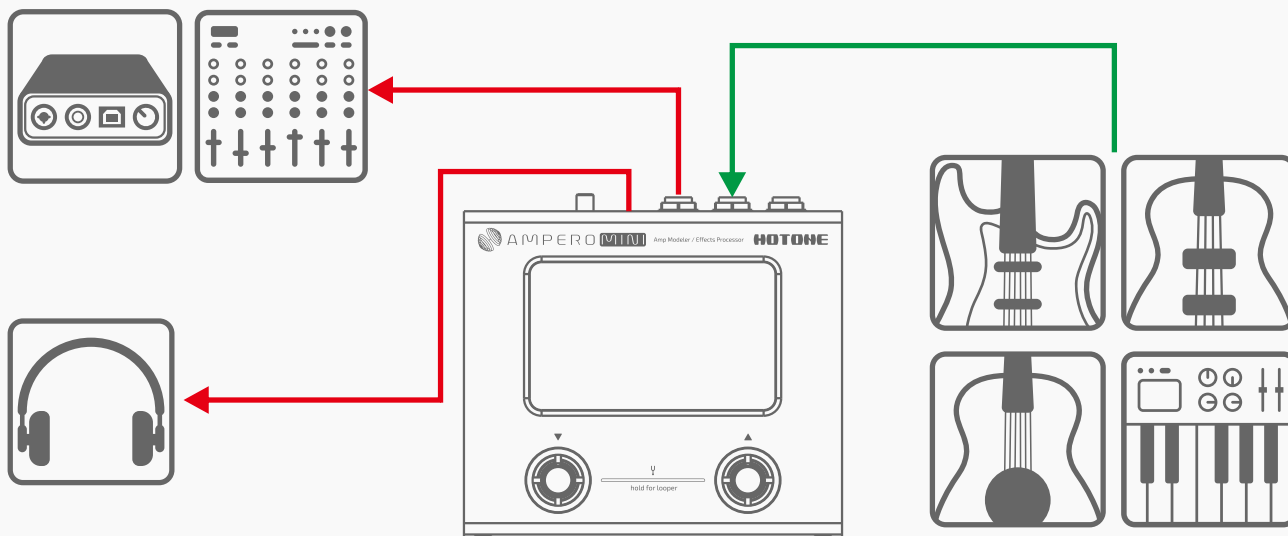


Blue stands for left channel (tip), and red stands for right channel (ring)

If necessary, you can use a DI box (purchase separately) to convert the unbalanced output signal to balanced output signal for better S/N ratio or reducing signal loss over long cable lengths. Turn on the Ampero Mini and turn the output volume all the way down before connecting mixer or audio interface to prevent harm to your device.

Turn the Ampero Mini output volume all the way down before connecting headphones to prevent harm to your ears. Ampero Mini's headphones out comes with hi-fi stereo sound.

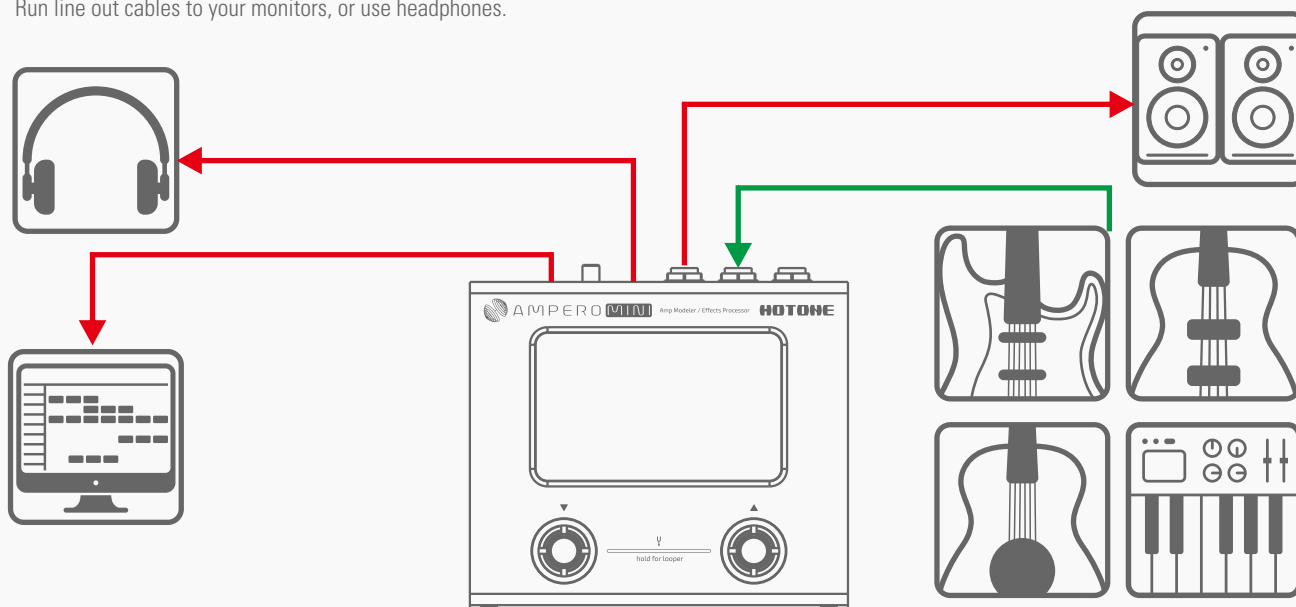
For best results with headphones, turn on Ampero Mini's AMP and CAB modules.



## Suggested Setups

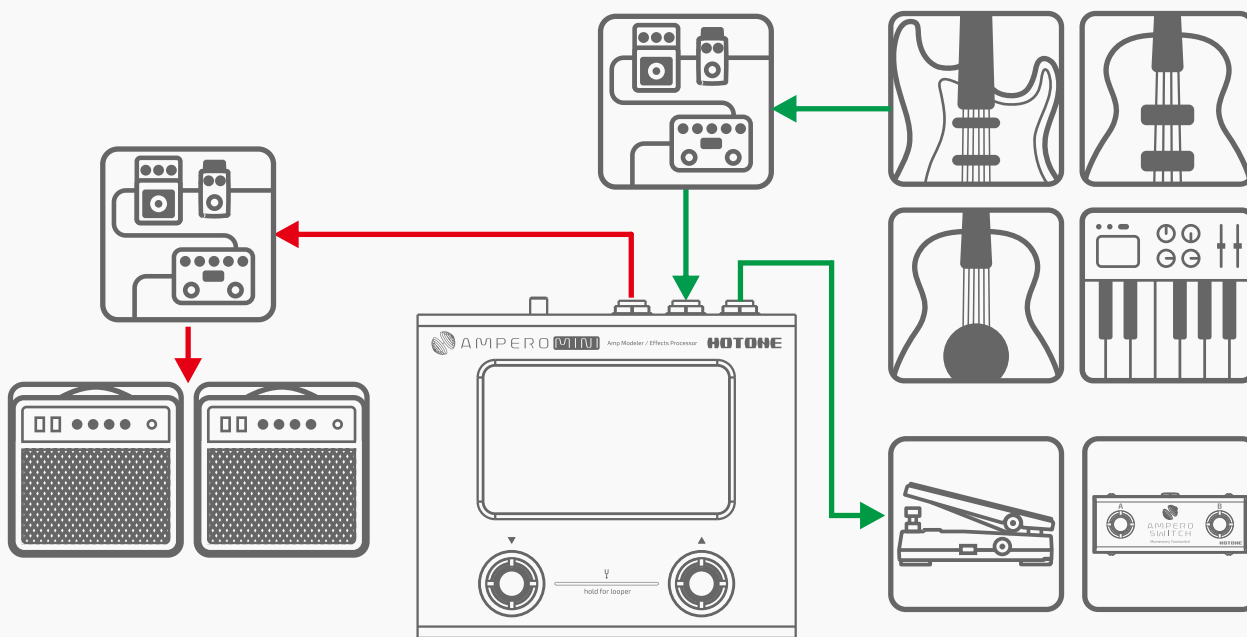
### Connecting to your computer as an audio interface

Connect USB cable from Ampero Mini to your computer. For PC systems, you'll need to set up the driver. Ampero Mini is plug and play for macOS. Run line out cables to your monitors, or use headphones.



### Connecting pedalboards

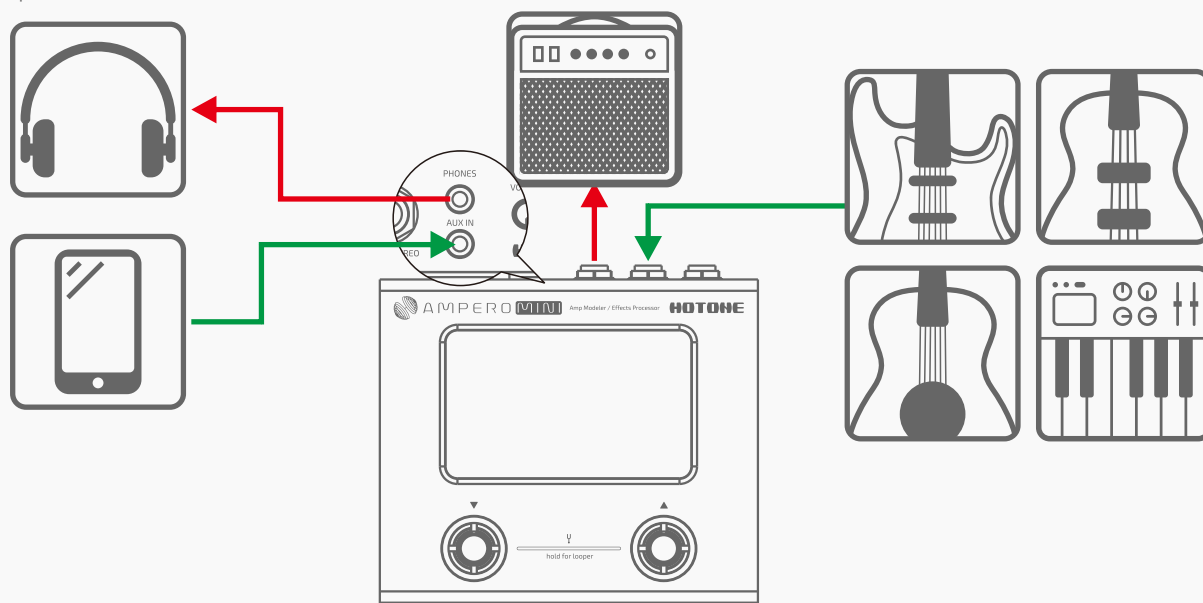
Set your Ampero Mini into your pedalboard, then connect other pedals/controllers depending on your I/O configurations.



## Suggested Setups

### Using the AUX IN line

Connect a male-to-male 1/8" stereo cable from your audio source (phone or music player) to Ampero Mini's AUX IN jack. This line will be unaffected by Ampero Mini's internal effects and USB audio.



## Included Software

Connect Ampero Mini to your computer and access the free software to manage your Ampero Mini device, adjust tonal settings, transfer files, update firmware, restore settings, and upload third party IR files. Ampero Mini software is compatible with Windows and macOS platforms. Log on to [www.hotoneaudio.com/support](http://www.hotoneaudio.com/support) to download the free software.



# Effect List

## Effect Models List

FX1, FX2, FX3		
Dynamic		
FX Title	Description	Parameters & Ranges
<b>Comproso</b>	Based on the legendary Ross™ Compressor	Sustain (0~100) Controls the compression amount Output (0~100) Controls the effect output volume
<b>Squeezer</b>	Flexible, fully adjustable compressor effect	Threshold (0~100) Controls the compression threshold Ratio (0~100) Controls the compression ratio Output (0~100) Controls the effect output volume Attack (0~100) Controls how soon the compressor starts to process the signal Release (0~100) Controls how soon the compressor starts to release the signal level back to normal after the level drops below the threshold Tone (0~100) Controls the effect tone brightness Blend (0~100) Controls the wet/dry signal ratio
<b>Affinity Boost</b>	Based on famous Xotic® AC Booster* pedal	Gain (0~100) Controls the gain amount Volume (0~100) Controls the effect output volume Bass (0~100) Controls the low frequency amount Treble (0~100) Controls the high frequency amount
<b>FET Boost</b>	Based on legendary green clip-on FET Preamp	Bass (0~100) Controls the low frequency amount Treble (0~100) Controls the high frequency amount Volume (0~100) Controls the effect output volume Low Cut (Off/On) Switches the low cut (-6dB/oct @200Hz) filter on/off
<b>Enhancer</b>	Based on famous Xotic® EP Booster* pedal	+3dB (Off/On) Switches min. boost amount from 0dB to +3dB Bright (Off/On) Switches extra brightness on/off Volume (0~100) Controls the effect output volume
<b>Smart Gate</b>	Based on famous ISP® Decimator™* noise gate pedal	Threshold (0~100) Controls the noise gate threshold
<b>Fast Gate</b>	A 2-mode noise gate with fast response	Threshold (0~100) Controls the noise gate threshold Mode(I/II) Selects from two modes: Mode I: resopnds faster Mode II: responds smoother
<b>Gated Boost</b>	Pure boost designed for modern Dentlemen and metalheads with built-in noise gate and low cut function	Boost (0~100) Controls the boost amount Gate (0~100) Controls the noise gate threshold Low Cut (0~100) Cuts the low frequency signal
Frequency		
<b>Acoustic Refiner</b>	Designed for acoustic instruments, bringing you a more natural "woody" acoustic sound	Shape (0~100) Controls the detailed sound character
<b>AC Sim</b>	Acoustic guitar simulator designed for guitars	Body (0~100) Controls the body resonance Top (0~100) Controls the upper harmonics Volume (0~100) Controls the effect output Mode (Standard/Jumbo/Enhanced/Piezo) Switches from 4 modes: STANDARD: Simulates a standard acoustic guitar JUMBO: Simulates a jumbo acoustic guitar ENHANCED: Simulates an acoustic guitar with enhanced attack PIEZO: Simulates the sound of a piezo pickup

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# Effect List

## Effect Models List

<b>Toucher</b>	A wide ranged envelope filter (a.k.a. touch wah) designed for guitarists and bassists that is touch-sensitive and flexible	Sens (0~100) Controls the sensitivity Range (0~100) Controls the filter center frequency range Q (0~100) Controls the filter Q Mix (0~100) Controls the wet/dry signal ratio Mode (Guitar/Bass) Switches from guitar/bass modes
<b>Crier</b>	Providing a variable auto wah effect for both guitars and basses	Depth (0~100) Controls the effect depth Rate (0~100) Controls the effect speed Volume (0~100) Controls the effect output Low (0~100) Controls the filter low frequency range Q (0~100) Controls the filter Q High (0~100) Controls the filter high frequency range Sync (Off/On) Switches Tap Tempo sync on/off
<b>Voxy Wah</b>	Based on legendary VOX® V846* wah pedal	Range (0~100) Controls the filter frequency range Q (0~100) Controls the filter Q Volume (0~100) Controls the effect output To use expression pedal as a wah pedal, assign Range as control target; you'll hear the difference by switching the pedal on and moving back and forth
<b>Cry Wah</b>	Based on legendary Dunlop® CryBaby®* wah pedal	
<b>Bass Press</b>	Based on Hotone Bass Press (WAH mode)	
<b>Clean Octa</b>	Provides polyphonic octave effect	Low Oct (0~100) Controls the lower octave volume High Oct (0~100) Controls the higher octave volume Dry (0~100) Controls the dry signal level
<b>Harmony</b>	Polyphonic pitch shifter/harmonizer based on Hotone Harmony	Hi Pitch (0~+24) Controls the lower pitch by half notes Low Pitch (0~-24) Controls the higher pitch by half notes Dry (0~100) Controls the dry signal level Hi Volume (0~100) Controls the high pitch volume Low Volume (0~100) Controls the low pitch volume
<b>Telephone Line</b>	Simulates vintage telephone effect	Noise (0~100) Controls the background noise amount Shake (0~100) Controls the sound vibration
<b>Satisfaction</b>	Vintage tape saturation simulator providing analog warmth and natural distortion	Saturation (0~100) Controls the gain amount Mix (0~100) Controls the wet/dry signal ratio Output (0~100) Controls the effect output High Cut (0~100) Controls the effect high cut amount
<b>Path Filter</b>	A 4-step auto filter machine for creating synth-like sounds	Step 1/Step 2/Step 3/Step 4 (0~100) Controls filter center frequency of 4 filters (steps) Rate (0~100) Controls the effect speed Sync (Off/On) Switches Tap Tempo sync on/off
<b>Bit Krusher</b>	Provides bitcrushing/sample reducing effect with musical fashion	Mix (0~100) Controls the wet/dry signal ratio Krush (0~100) Controls the downsampling rate Bit (0~100) Controls the bit depth Hi Cut (0~100) Controls the high cut amount Lo Cut (0~100) Controls the low cut amount

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# Effect List

## Effect Models List

<b>Ring Mod</b>	A ring modulator for creating interesting inharmonic frequency spectra (like bells and chimes)	Mix (0~100) Controls the wet/dry signal ratio Freq (0~100) Controls the modulation frequency Fine (-50~0~+50) Fine tune the modulation frequency by 1Hz Tone (0~100) Controls the tone brightness
<b>Sweller</b>	This model is auto swell effect that creating a violin-like tone. Two parameters make it simple.	Attack (0~100) Controls how fast the effect swells the input signal Curve (Line/Exp/Log) Selects the volume swell curve
<b>Pitch Shift</b>	A polyphonic pitch shifter with max. 2 octaves pitch shifting range. Tips for using expression pedals: assign the Position parameter to your expression pedal, turn the expression pedal on, and you can bend the pitch by moving the pedal back and forth	Pitch (-24~+24) Controls the maximum pitch shifting range (fully toe position) by $\pm 24$ semitones Volume (0~100) Controls the effect output volume Position (0~100) Controls the pedal position Dry (0~100) Controls the dry signal level
<b>Classic PS</b>	This model is a monophonic pitch shifter with max. 2 octaves pitch shifting range, simulating the classic Whammy® tone. Assign the Position parameter to your expression pedal, turn the expression pedal on, and you can bend the pitch by moving the pedal back and forth.	Range (0~100) Selects the pitch shifting range Position (0~100) Controls the pedal position (min=0, max=100) Mix (0~100) Controls the dry/wet signal ratio Level (0~100) Controls the effect output
<b>Overdrive/Distortion</b>		
<b>Green Drive</b>	Based on legendary Ibanez® TS-808 Tube Screamer®* overdrive pedal	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Super Drive</b>	Based on the legendary 3-knob yellow overdrive pedal, reproducing the thick, warm sound produced by asymmetric overdrive circuitry	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Screamood</b>	Classic overdrive Inspired by legendary TS-style overdrive served with its most enduring modification	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume Fat (Off/On) Switches extra resonance on/off Air (Off/On) Switch extra presence on/off
<b>Zen Garden</b>	Based on legendary Hermida® Zendrive®* overdrive pedal	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume Voice (0~100) Controls the upper harmonics character
<b>Big Pie</b>	Based on legendary Electro-Harmonix® Big Muff Pi®* fuzz/distortion pedal	Sustain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Face Fuzz</b>	Based on legendary Dallas-Arbiter® Fuzz Face®* fuzz pedal	Fuzz (0~100) Controls the gain amount
<b>Bend Fuzz</b>	Based on legendary Sola Sound® Tone Bender® MkII* fuzz pedal	Volume (0~100) Controls the effect output volume
<b>Black Tail</b>	Based on legendary ProCo™ The Rat* distortion (early LM308 OP-amp version)	Gain (0~100) Controls the gain amount Filter (0~100) Counterclockwise controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Smooth Dist</b>	Based on the legendary 3-knob orange distortion released in late 1970s	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume

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# Effect List

## Effect Models List

<b>Governor</b>	Based on Marshall® Guv'Nor* distortion pedal	Gain (0~100) Controls the gain amount Volume (0~100) Controls the effect output volume Bass (0~100) Controls the low frequency amount Middle (0~100) Controls the mid frequency amount Treble (0~100) Controls the high frequency amount
<b>Crunchist</b>	Based on MI Audio® Crunch Box®* distortion pedal, providing classic UK-style high gain stack sound	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Bass Crusher</b>	Based on a yellow bass overdrive pedal with wide tonal range	Gain (0~100) Controls the gain amount Blend (0~100) Controls the wet/dry signal ratio Volume (0~100) Controls the effect output volume Bass (0~100) Controls the low frequency amount Treble (0~100) Controls the high frequency amount
<b>Solid Steel</b>	A bass drive with rich, solid sound and flexible tonal range	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume Mode (Normal/Scoop/Edge) Selects from 3 different modes: <small>Normal: Neutral mode /Scoop: Mid-scooped mode/Edge: A mode with boosted highs</small> Blend (0~100) Controls the wet/dry signal ratio
<b>Dr. Blues</b>	Based on the widely used blues overdrive (and the famous PHAT-modified version), Dr. Blues is a roadmap of classic bluesy textures to take you from sweet Tennessee to screaming Texas. Turn up the GAIN knob to get a warm distortion with tons of sensitivity and a wide frequency response. It works great on bass too!	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Blues Butter</b>	This Blues Butter overdrive model recreates the magic of the classic Blues breaker®* sound for you. Based on the Marshall® Blues breaker®* overdrive pedal, this low-mid-gain overdrive will add sweetness (and a little wildness) to your guitar sound. You can use it as a clean boost too!	Gain (0~100) Controls the gain amount Tone (0~100) Controls the tone brightness Volume (0~100) Controls the effect output volume
<b>Magic T</b>	Magic T is an overdrive model based on the legendary Paul Cochrane Timmy®* overdrive (V2) pedal – one of the first transparent overdrive pedals. Like the original, Magic T pushes your amp/guitar to the limit while maintaining the original flavor and dynamics.	Gain (0~100) Controls the overdrive amount Volume (0~100) Controls the effect output Bass/Treble (0~100) 2-band EQ that controls the effect tone (counterclockwise, same as original) Mode (I/II/III) Selects from three clipping modes: -I: asymmetrical clipping -II: symmetrical clipping -III: symmetrical clipping with more compression feel
<b>Modulation</b>		
<b>Aozora Chorus</b>	Based on legendary Arion® SCH-1* stereo chorus pedal, producing classic 1980s chorus tone that loved by Clapton and Landau	Depth (0~100) Controls the chorus depth Rate (0~100) Controls the chorus speed Tone (0~100) Controls the tone brightness Sync (Off/On) Switches Tap Tempo sync on/off

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# Effect List

## Effect Models List

<b>Grand Chorium</b>	Based on the legendary huge ensemble chorus pedal born in late 1970s (chorus mode), producing rich, shimmering vintage analog chorus tone	Depth (0~100) Controls the chorus depth Rate (0~100) Controls the chorus speed Volume (0~100) Controls the output volume Sync (Off/On) Switches Tap Tempo sync on/off
<b>Liquid C</b>	Based on a legendary 4-button purple stereo chorus pedal, providing detailed rich chorus tone that expands sonic dimensions	Mode (1/2/3/4) Selects from 4 sound characters
<b>Chorium B</b>	Based on the famous ensemble chorus unit tuned for bassists	Depth (0~100) Controls the chorus depth Rate (0~100) Controls the chorus speed E.Level (0~100) Controls the effect output volume Sync (Off/On) Switches Tap Tempo sync on/off
<b>Detune</b>	Combines a slightly pitch shifted signal with original sound, producing chorus-like tone	Range (-50 Cents~+50 Cents) Controls the detune amounts by 1 cent Wet (0~100) Controls the effect output volume Dry (0~100) Controls the dry signal level
<b>Jetter</b>	Classic flanging effect that is rich and natural	Depth (0~100) Controls the flanger depth Rate (0~100) Controls the effect speed Pre Delay (0~100) Controls the pre delay time Feedback (0~100) Controls the feedback amount Sync (Off/On) Switches Tap Tempo sync on/off
<b>Jetter B</b>	Classic flanging effect tuned for basses	
<b>Jetter N</b>	A flanger with negative feedback, producing "underwater" style sound	
<b>Trem Jet</b>	Combines flanger and tremolo in one	Flg Depth (0~100) Controls the flanger depth Flg Rate (0~100) Controls the flanging speed Feedback (0~100) Controls the feedback amount Trm Depth (0~100) Controls the tremolo depth Trm Rate (0~100) Controls the tremolo speed Flg Sync (Off/On) Switches flanger Tap Tempo sync on/off Trm Sync (Off/On) Switches tremolo Tap Tempo sync on/off
<b>Pulser</b>	Based on a BBD-based blue vibrato pedal, producing natural analog vibrato sound	Depth (0~100) Controls the vibrato depth Rate (0~100) Controls the vibrato speed Sync (Off/On) Switches Tap Tempo sync on/off
<b>Grand Vibrato</b>	Based on the legendary huge ensemble chorus pedal born in late 1970s (vibrato mode), producing rich, shimmering vintage analog vibrato tone	Depth (0~100) Controls the vibrato depth Rate (0~100) Controls the vibrato speed E.Level (0~100) Controls the output volume Sync (Off/On) Switches Tap Tempo sync on/off
<b>Shiver T</b>	A special vibrato with touch-sensitive dynamic depth control	Sens (0~100) Counterclockwise controls the effect sensitivity Rate (0~100) Controls the effect speed Output (0~100) Controls the output volume Sync (Off/On) Switches Tap Tempo sync on/off
<b>90 Phaser</b>	Based on legendary MXR® M101 Phase 90*	Rate (0~100) Controls the phaser speed Sync (Off/On) Switches Tap Tempo sync on/off
<b>Green Phaser</b>	Based on a legendary 2-knob green phaser with sharp sound character	Depth (0~100) Controls the phaser depth Rate (0~100) Controls the phaser speed Sync (Off/On) Switches Tap Tempo sync on/off

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# Effect List

## Effect Models List

<b>Revolver</b>	Based on legendary Shin-ei® Uni-Vibe®*	Depth (0~100) Controls the effect depth Rate (0~100) Controls the effect speed Volume (0~100) Controls the output volume Mode (Chorus/Vibrato) Selects from two sound characters: Chorus/Vibrato Sync (Off/On) Switches Tap Tempo sync on/off
<b>Helicopter</b>	Based on legendary Demeter® TRM-1 Tremulator*, offering classical opto tremolo sound	Depth (0~100) Controls the tremolo depth Rate (0~100) Controls the tremolo speed Sync (Off/On) Switches Tap Tempo sync on/off
<b>Custom Trem</b>	A custom tremolo with 4 different waveforms and super wide tonal range	Depth (0~100) Controls the tremolo depth Rate (0~100) Controls the tremolo speed Volume (0~100) Controls the output volume Color (0~100) Controls the effect tone Shape (Sine/Triangle/Square/Sawtooth) Selects from sine/triangle/square/sawtooth tremolo waveforms Bias (0~100) Controls the waveform offset amount Sync (Off/On) Switches Tap Tempo sync on/off
<b>AMP</b>		
<b>Clean</b>		
<b>Tweed Lux</b>	Based on Fender® Tweed Deluxe* (bright channel, 5E3 version)	Volume (0~100) Controls the amp pre gain Tone (0~100) Controls the tone brightness Output (0~100) Controls the amp output volume
<b>Baseman Norm</b>	Based on Fender® '59 Bassman®* (normal channel)	Volume (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Output (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Black Twin</b>	Based on Fender® '65 Twin Reverb®*	Gain (0~100) Controls the amp pre gain Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response Bright (Off/On) Switches extra brightness on/off
<b>Voxy 30HW Norm</b>	Based on VOX® AC30HW* (normal channel)	Volume (0~100) Controls the amp pre gain Tone Cut (0~100) Counterclockwise controls the tone brightness Master (0~100) Controls the amp output volume Bright (Off/On) Switches extra brightness on/off
<b>Jazz Clean</b>	Based on the legendary "Jazz Chorus" solid state combo	Volume (0~100) Controls the amp output volume Bright (0~100) Switches extra brightness on/off Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response

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# Effect List

## Effect Models List

<b>Emperor Clean</b>	Based Matchless™ Chieftain 212 combo* (clean tone)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Superstar Clean</b>	Based on Mesa/Boogie® Lone Star™ (CH1)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Glacian Clean</b>	Based on Bogner® Shiva* (20th Anniversary version, Ch1)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Treble (0~100) Controls the amp high frequency response Bright (Off/On) Switches extra brightness on/off
<b>Tweed Prince</b>	The Tweed Prince is an amp simulator based on one of the legendary studio combo amps: Fender® Tweed Princeton Amp* (5F2-A version), another "huge tone in a small box" masterpiece which remains popular among players, builders and collectors. A Tone knob makes it more versatile.	Volume (0~100) Controls the effect output and gain amount Tone (0~100) Controls the effect tone Output (0~100) Controls the effect output
<b>Black Prince</b>	The Black Prince is an amp simulator based on the Fender® Blackface Princeton®* amp (AA964 version). Push it to the verge of breakup you'll find the fantastic tone beloved by lots of musicians.	Volume (0~100) Controls the effect output and gain amount Output (0~100) Controls the effect output Bass/Treble (0~100) 2-band EQ that controls the effect tone
<b>Drive</b>		
<b>Baseman Bright</b>	Based on Fender® '59 Bassman®* (bright channel)	Volume (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Output (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Voxy 30HW TB</b>	Based on VOX® AC30HW* (Top Boost channel)	Volume (0~100) Controls the amp pre gain Tone Cut (0~100) Counterclockwise controls the tone brightness Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Treble (0~100) Controls the amp high frequency response Char (Cool/Hot) Selects from 2 gain ranges
<b>Emperor Drive</b>	Based on Matchless™ Chieftain 212 combo* (dirty tone)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response

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# Effect List

## Effect Models List

<b>Superstar Drive</b>	Based on Mesa/Boogie® Lone Star™ (CH2)	Gain (0~100) Controls the amp pre gain Drive (0~100) Controls the amp drive amount Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Marshall 45</b>	Based on Marshall® JTM45* (normal channel)	Volume (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Output (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Marshall 45+</b>	Based on Marshall® JTM45* (High Treble channel)	
<b>Marshall 45 Jump</b>	Based on Marshall® JTM45* ("Jump" connection)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Output (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Marshall 50</b>	Based on Marshall® JMP50* (normal channel)	Volume (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Marshall 50+</b>	Based on Marshall® JMP50* (High Treble channel)	
<b>Marshall 50 Jump</b>	Based on Marshall® JMP50* ("Jump" connection)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Output (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Hot Kitty Drive</b>	Based on Bad Cat® Hot Cat 30* (drive channel)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Messe IIC+ 1</b>	Based on Mesa/Boogie® Mark II C+™ (Lead channel) with 3 different onboard switch combinations	
<b>Messe IIC+ 2</b>		
<b>Messe IIC+ 3</b>		
<b>Soloist 100 Crunch</b>	Based on Soldano® SLO100* (normal channel, dirty sound)	
<b>Marshall 800</b>	Based on Marshall® JCM800*	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Fryman B1</b>	Based on the famous "Brown Eye" UK-style boutique amp head (BE channel) with 2 different onboard switch combinations	
<b>Fryman B2</b>		
<b>Glacian Drive</b>	Based on Bogner® Shiva* (20th Anniversary version, Ch2)	

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# Effect List

## Effect Models List

HiGain		
<b>Marshall 900</b>	Based on Marshall® JCM900* (Model 4100, channel B)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Dizzle VH B</b>	Based on Diezel® VH4* (CH3, blue version)	
<b>Dizzle VH S</b>	Based on Diezel® VH4* (CH3, silver version)	
<b>Engle Saga 1</b>	Based on ENGL® Savage 120 E610* (CH4, contour off)	
<b>Engle Saga 2</b>	Based on ENGL® Savage 120 E610* (CH4, contour on)	
<b>Fryman HB</b>	Based on the famous "Brown Eye" UK-style boutique amp head (HBE channel) with 2 different onboard switch combinations	
<b>Fryman HB+</b>		
<b>Eddie 51</b>	Based on Peavey® 5150® (LEAD channel)	
<b>Soloist 100 Lead</b>	Based on Soldano® SLO100* (overdrive channel)	
<b>Messe IV Lead 1</b>	Based on Mesa/Boogie® Mark IV™ (Lead channel) with 3 different onboard switch combinations	
<b>Messe IV Lead 2</b>		
<b>Messe IV Lead 3</b>		
<b>Tangerine R100</b>	Based on Orange® Rockerverb 100™* (Dirty channel)	Gain (0~100) Controls the amp pre gain Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Rector Dual V</b>	Based on Mesa/Boogie® Dual Rectifier® (CH3, vintage mode)	Gain (0~100) Controls the amp pre gain Presence (0~100) Controls the amp presence Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Rector Dual M</b>	Based on Mesa/Boogie® Dual Rectifier® (CH3, modern mode)	
<b>Dizzle VH+B</b>	Based on Diezel® VH4* (CH4, blue version)	
<b>Dizzle VH+S</b>	Based on Diezel® VH4* (CH4, silver version)	
<b>Bogert XT Red M</b>	Based on Bogner® Ecstasy* ("Red" channel, Modern mode)	
Bass		
<b>Alchemy Pre</b>	Based on Alembic™ F-2B* preamp	Volume (0~100) Controls the amp output volume Bright (Off/On) Switches extra brightness on/off Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response
<b>Ampeg Classic</b>	Based on Ampeg® SVT* bass amp	Gain (0~100) Controls the amp pre gain Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Midrange (220Hz/450Hz/800Hz/1.6kHz/3kHz) Selects from 5 mid frequency ranges Treble (0~100) Controls the amp high frequency response Master (0~100) Controls the amp output volume
<b>Ampeg Flip</b>	Based on Ampeg® B-15* "Flip Top" bass amp	Volume (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Treble (0~100) Controls the amp high frequency response
<b>Voxy Bass</b>	Based on vintage VOX® AC-100* bass amp	
<b>Messe Bass 400</b>	Based on Mesa/Boogie® Bass 400* amp	Volume (0~100) Controls the amp pre gain Master (0~100) Controls the amp output volume Bass (0~100) Controls the amp low frequency response Middle (0~100) Controls the amp mid frequency response Treble (0~100) Controls the amp high frequency response

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# Effect List

## Effect Models List

Acoustic		
<b>Acoustic Preamp 1</b>	Based on AER® Colourizer 2* acoustic preamp with 2 different onboard switch combinations	Volume (0~100) Controls the output volume Tone (0~100) Controls the tone brightness Balance (0~100) Controls the tone control balance; turn to 0 to disable tone control EQ Freq (0~100) Controls the EQ center frequency from 90Hz to 1.6kHz EQ Q (0~100) Controls the EQ bandwidth EQ Gain Controls the EQ boost/cut amount
<b>Acoustic Preamp 2</b>		Volume (0~100) Controls the output volume Tone (0~100) Controls the tone brightness Balance (0~100) Controls the tone control balance; turn to 0 to disable tone control EQ Freq (0~100) Controls the EQ center frequency from 680Hz to 11kHz EQ Q (0~100) Controls the EQ bandwidth EQ Gain Controls the EQ boost/cut amount
NR		
All effects in this module are also available in FX1 and FX2 modules		
<b>Smart Gate</b>	Based on famous ISP® Decimator™* noise gate pedal	Threshold (0~100) Controls the noise gate threshold
<b>Fast Gate</b>	A 2-mode noise gate with fast response	Threshold (0~100) Controls the noise gate threshold Mode(I/II) Selects from two modes: Mode I: responds faster Mode II: responds smoother
CAB/IR		
All effects in this module (include user IRs) share the same parameters: Mic Type: Selects (or turn off) the different microphone simulations Volume: Controls the output volume Low Cut/High Cut: Cuts the low/high frequency Position X/Y/Z: Controls the mic position simulations; X/Y controls the microphone horizontal/vertical position, set X=Y=0 to set the microphone on axis; Z controls the distance between microphone and speaker cap		
Factory Cab		
FX Title	Description	
<b>Super Zep 1x6</b>	Supro®* 1x6" cabinet with oval speaker	
<b>Tweed Chap 1x8</b>	Vintage Fender® Champ* 1x8" cabinet	
<b>Black Lux 1x12</b>	Vintage Fender® Deluxe* 1x12" cabinet	
<b>Black Vint 1x12</b>	Vintage Fender® Vibrolux* 1x12" cabinet	
<b>Glacian 1x12</b>	Bogner® Shiva* 1x12" cabinet	
<b>Bad Kitty 1x12</b>	Black Cat® Hot Cat* 1x12" cabinet	
<b>Voxy 1x12</b>	Vintage VOX® AC15* 1x12" cabinet	
<b>Tweed Lux 1x12</b>	Fender® Tweed Deluxe* 1x12" cabinet	
<b>Ace 20 1x12</b>	Morgan® AC-20 Deluxe* 1x12" cabinet	
<b>UK G12M 1x12</b>	Marshall®* 1x12" cabinet	
<b>Voxy 2x12</b>	Vintage VOX® AC30* 2x12" cabinet	
<b>Emperor 2x12</b>	Matchless® Chieftain* 2x12" cabinet	
<b>Jazz Twin 2x12</b>	Legendary "Jazz Chorus" 2x12" cabinet	
<b>Black Twin 2x12</b>	Vintage Fender® '65 Twin Reverb* 2x12" cabinet	
<b>Tweed Super 2x10</b>	A custom Fender® Tweed* 2x10" cabinet	
<b>Boutique 2x12</b>	A unique custom 2x12" cabinet	
<b>Baseman 2x12</b>	Vintage Fender® "Piggyback" Bassman®* 2x12" cabinet	

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# Effect List

## Effect Models List

<b>Superb 2x12</b>	Supro® 1624T* 2x12 cabinet"
<b>Superstar 2x12</b>	Mesa/Boogie® Lonestar* 2x12" cabinet
<b>Twin Rock 2x12</b>	Two-Rock®* 2x12" cabinet
<b>Bluesky 2x12</b>	A custom 2x12" cabinet with Celestion® Alnico Blue* speakers
<b>Baseman 4x10</b>	Fender® '59 Bassman®* 4x10" cabinet
<b>UK Lead 4x12</b>	Marshall® 1960AV* 4x12" cabinet
<b>UK Trad 2x12</b>	68 Marshall® Basketweave* 4x12" cabinet
<b>UK Modern 4x12</b>	Custom modified Marshall®* 4x12" cabinet
<b>UK Green 4x12</b>	Vintage Marshall® 4x12" cabinet with Celestion® Greenback®* speakers
<b>Eddie 4x12</b>	Peavey® 6505* 4x12" cabinet
<b>Rector 4x12</b>	Mesa/Boogie® Rectifier®* 4x12" cabinet
<b>Bogner 4x12</b>	Bogner®* 4x12" cabinet
<b>Engle 4x12</b>	ENGL®* 4x12" cabinet
<b>Urban 4x12</b>	Bogner® Uberkab* 4x12" cabinet
<b>Soloist 4x12</b>	Soldano®* 4x12" cabinet
<b>Tang 4x12</b>	Orange® PPC412* 4x12" cabinet
<b>Hiway 4x12</b>	Vintage Hiwatt® SE4123* 4x12" cabinet
<b>UK Black 4x12</b>	1968 Marshall®* 4x12" cabinet
<b>The Way 4x12</b>	Vintage WEM®* 4x12" cabinet
<b>Dizzle 4x12</b>	Diezel®* 4x12" cabinet
<b>Triple 4x12</b>	Hughes & Kettner® Triamp* 4x12" cabinet
<b>UK T75 4x12</b>	Marshall®* 4x12" cabinet with Celestion® G12T-75* speakers
<b>US King 4x12</b>	Mesa/Boogie® Road King®* 4x12" cabinet
<b>Adam 1x15</b>	David Eden®* 1x15" bass cabinet
<b>Worker 1x15</b>	SWR®* 1x15" bass cabinet
<b>Flip Top 1x15</b>	Ampeg® PF-115HE* 1x15" bass cabinet
<b>US Bass 2x10</b>	Mesa/Boogie®* 2x10" bass cabinet
<b>Mark 2x10</b>	Mark Bass®* 4x10" bass cabinet
<b>Adam 4x10</b>	David Eden®* 4x10" bass cabinet
<b>Ampage 4x10</b>	Ampeg® SVT-410HE* 4x10" bass cabinet
<b>Worker 4x10</b>	SWR® Workingman's* 4x10" bass cabinet
<b>Hacker 4x12</b>	Hartke®* 4x12" bass cabinet
<b>Ampage 8x10</b>	Ampeg SVT-810E* 8x10" bass cabinet
<b>Factory Acoustic IR</b>	
<b>Dreadnought 1</b>	Dreadnought guitar simulation 1
<b>Dreadnought 2</b>	Dreadnought guitar simulation 2
<b>Orchestal</b>	Simulates an OM type acoustic guitar
<b>Jumbo</b>	Simulates a jumbo acoustic guitar
<b>Hum Bird</b>	Simulates the iconic "H-Bird" acoustic guitar
<b>Auditorium</b>	Simulates a GA type acoustic guitar
<b>Classical</b>	Simulates a classical guitar
<b>Mandolin</b>	Simulates a mandolon
<b>Fretless Bass</b>	Simulates a fretless acoustic bass
<b>Double Bass</b>	Simulates a double bass

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## Effect Models List

User IR		
User IR 1-10	For loading 3rd party IR files; the output will be muted when switched to an empty User IR slot	
Mic Type		
Name	Based On	Type
<b>OFF</b>	N/A	N/A
<b>Dyn 57</b>	Shure® SM57*	Dynamic
<b>Dyn 58</b>	Shure® SM58*	Dynamic
<b>Dyn 421</b>	Sennheiser® MD421*	Dynamic
<b>Dyn 16</b>	Electro-Voice RE16*	Dynamic
<b>Dyn 112</b>	AKG® D112*	Dynamic
<b>Dyn 609</b>	Sennheiser® e609*	Dynamic
<b>Con U67</b>	Neumann® U67*	Condenser
<b>Con 87A</b>	Shure® Beta 87A*	Condenser
<b>Con U87</b>	Neumann® U87*	Condenser
<b>Rib 121</b>	Royal® R121*	Ribbon
EQ		
FX Title	Description	Parameters & Range
<b>Guitar EQ 1</b>	Equalizer designed for guitars	125Hz (-50~+50) Boosts/cuts the frequency band 400Hz (-50~+50) Boosts/cuts the frequency band 800Hz (-50~+50) Boosts/cuts the frequency band 1.6kHz (-50~+50) Boosts/cuts the frequency band 4kHz (-50~+50) Boosts/cuts the frequency band Volume (0~100) Controls the output volume
<b>Guitar EQ 2</b>		100Hz (-50~+50) Boosts/cuts the frequency band 500Hz (-50~+50) Boosts/cuts the frequency band 1kHz (-50~+50) Boosts/cuts the frequency band 3kHz (-50~+50) Boosts/cuts the frequency band 6kHz (-50~+50) Boosts/cuts the frequency band Volume(0~100) Controls the output volume
<b>Bass EQ 1</b>	Equalizer designed for basses	50Hz (-50~+50) Boosts/cuts the frequency band 120Hz (-50~+50) Boosts/cuts the frequency band 400Hz (-50~+50) Boosts/cuts the frequency band 800Hz (-50~+50) Boosts/cuts the frequency band 4.5kHz (-50~+50) Boosts/cuts the frequency band Volume (0~100) Controls the output volume
<b>Bass EQ 2</b>	Equalizer designed for basses	125Hz (-50~+50) Boosts/cuts the frequency band 400Hz (-50~+50) Boosts/cuts the frequency band 800Hz (-50~+50) Boosts/cuts the frequency band 1.6kHz (-50~+50) Boosts/cuts the frequency band 4kHz (-50~+50) Boosts/cuts the frequency band Volume (0~100) Controls the output volume

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<b>Para EQ</b>	4-band parametric EQ with low/high shelving filters suitable for any instrument	Band 1 (50Hz-400Hz) Controls the band 1 center frequency Q 1 (0.1-10) Controls the band 1 Q bandwidth Gain 1 (-12dB~+12dB) Boosts/cuts band 1 by $\pm 12$ dB Band 2 (200Hz-2.0kHz) Controls the band 2 center frequency Q 2 (0.1-10) Controls the band 2 Q bandwidth Gain 2 (-12dB~+12dB) Boosts/cuts band 2 by $\pm 12$ dB Band 3 (1.0kHz-10.0kHz) Controls the band 3 center frequency Q 3 (0.1-10) Controls the band 3 Q bandwidth Gain 3 (-12dB~+12dB) Boosts/cuts band 3 by $\pm 12$ dB Band 4 (5.0kHz-16.0kHz) Controls the band 4 center frequency Q 4 (0.1-10) Controls the band 4 Q bandwidth Gain 4 (-12dB~+12dB) Boosts/cuts band 4 by $\pm 12$ dB Lo Shelf Controls the low shelf filter boost/cut range by $\pm 12$ dB Hi Shelf Controls the high shelf filter boost/cut range by $\pm 12$ dB Volume Controls the output volume
<b>Graphic EQ</b>	10-band graphic EQ suitable for any instrument	31Hz (-12dB~+12dB) Boosts/cuts the frequency band 63Hz (-12dB~+12dB) Boosts/cuts the frequency band 125Hz (-12dB~+12dB) Boosts/cuts the frequency band 250Hz (-12dB~+12dB) Boosts/cuts the frequency band 500Hz (-12dB~+12dB) Boosts/cuts the frequency band 1kHz (-12dB~+12dB) Boosts/cuts the frequency band 2kHz (-12dB~+12dB) Boosts/cuts the frequency band 4kHz (-12dB~+12dB) Boosts/cuts the frequency band 8kHz (-12dB~+12dB) Boosts/cuts the frequency band 16kHz (-12dB~+12dB) Boosts/cuts the frequency band Volume (0~100) Controls the output volume
<b>V-EQ</b>	Based on the 5-band EQ module on Mesa/Boogie®* amps	80Hz (-50~+50) Boosts/cuts the frequency band 240Hz (-50~+50) Boosts/cuts the frequency band 750Hz (-50~+50) Boosts/cuts the frequency band 2.2kHz (-50~+50) Boosts/cuts the frequency band 6.6Hz (-50~+50) Boosts/cuts the frequency band
<b>DLY</b>		
<b>Sweetie</b>	Based on the legendary 3-knob BBD analog delay pedal with "REPEAT RATE" control	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Recaller</b>	Based on legendary Electro-Harmonix® Deluxe Memory Man®*	
<b>Pure Eko</b>	Produce pure, precised delay sound	
<b>Analog Eko</b>	Producing warm delay sound with analog feel	
<b>Mag Eko</b>	Simulates solid-state tape echo sound	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Tube Eko</b>	Simulates tube-driven tape echo sound	
<b>Backmask</b>	Producing a special delay effect with reversed feedback	

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<b>Ping Pong</b>	A ping-pong delay producing stereo feedback bounces back and forth between left and right channels	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Multi Head</b>	A multi tap delay that simulates a huge 4-head tape echo machine	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Tone (0~100) Controls the effect tone brightness Mode (1-12) Selects from 12 different head variations Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Slapback</b>	Simulates the classic slapback echo effect	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-300ms) Controls the delay time Trail (Off/On) Switches effect trail on/off
<b>Vintage Rack</b>	Reproduces the sound of a vintage 1980's rack-mount delay machine with slightly sample-reduced feedback	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Mod (0~100) Controls the modulation amount Tone (0~100) Controls the modulation brightness Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Sweep Eko</b>	Producing a delay effect with sweeping filter modulated repeats	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Sweep Depth (0~100) Controls the sweeping depth Sweep Rate (0~100) Controls the sweeping speed Swp Sync (Off/On) Switches sweeping Tap Tempo sync on/off Time Sync (Off/On) Switches delay Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Trem Eko</b>	Producing a delay effect with tremolo altered repeats	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Trem Depth (0~100) Controls the tremolo depth Trem Rate (0~100) Controls the tremolo speed Trem Sync (Off/On) Switches tremolo Tap Tempo sync on/off Time Sync (Off/On) Switches delay Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Lofi Eko</b>	Producing a delay effect with lo-fi'd repeats	Mix (0~100) Controls the wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Bit (0~100) Controls the effect bit depth Krush (0~100) Controls the effect downsampling rate Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off

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# Effect List

## Effect Models List

<b>Ring Eko</b>	Producing a delay effect with ring modulated repeats	Dly Mix (0~100) Controls the delay wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Ring Mix (0~100) Controls the modulation wet/dry signal ratio Freq (0~100) Controls the ring modulation frequency Tone (0~100) Controls the ring modulation tone Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>Ekoverb</b>	Combines delay and reverb in one	Dly Mix (0~100) Controls the delay wet/dry signal ratio Feedback (0~100) Controls the feedback amount Time (20ms-4000ms) Controls the delay time Rvb Mix (0~100) Controls the reverb wet/dry signal ratio Hi Cut (0~100) Controls the reverb high cut amount Decay (0~100) Controls the reverb decay time Sync (Off/On) Switches Tap Tempo sync on/off Trail (Off/On) Switches effect trail on/off
<b>RVB</b>		
<b>Room</b>	Simulates the spaciousness of a room	Mix (0~100) Controls the wet/dry signal ratio Pre Delay (0ms-100ms) Controls the pre delay time Decay (0~100) Controls the reverb decay time Trail (Off/On) Switches effect trail on/off
<b>Hall</b>	Simulates the spaciousness of a performance hall	
<b>Church</b>	Simulates the spaciousness of a church	
<b>Plate</b>	Simulates the sound character produced by a vintage plate reverberator	Mix (0~100) Controls the wet/dry signal ratio Decay (0~100) Controls the reverb decay time High Damp (0~100) Controls the high cut amount Trail (Off/On) Switches effect trail on/off
<b>Spring</b>	Simulates the sound character produced by a vintage spring reverberator	Mix (0~100) Controls the wet/dry signal ratio Decay (0~100) Controls the reverb decay time Tone (0~100) Controls the effect tone brightness Trail (Off/On) Switches effect trail on/off
<b>Izumi</b>	Special-tuned reverb effect with liquid-like decays and deep low ends	Mix (0~100) Controls the wet/dry signal ratio Decay (0~100) Controls the reverb decay time Trail (Off/On) Switches effect trail on/off
<b>Northstar</b>	Special-tuned reverb effect with lush, bright decays	
<b>Oceandeep</b>	Special-tuned reverb effect with huge, deep decays	
<b>Sweet Space</b>	Produces a modulated reverb effect that is lush and sweet	Mix (0~100) Controls the wet/dry signal ratio Pre Delay (0ms-100ms) Controls the pre delay time Decay (0~100) Controls the reverb decay time Lo End (-50~+50) Controls the effect low frequency amount Hi End (-50~+50) Controls the effect high frequency amount Trail (Off/On) Switches effect trail on/off
<b>Shimmer</b>	Produce a rich, shimmering reverb effect	Mix (0~100) Controls the wet/dry signal ratio Pre Delay (0ms-100ms) Controls the pre delay time Decay (0~100) Controls the reverb decay time Lo End (-50~+50) Controls the effect low frequency amount Hi End (-50~+50) Controls the effect high frequency amount Trail (Off/On) Switches effect trail on/off

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# Effects List

## Drum Machine Rhythms

Type	Number	Name	Time Signature
8 Beat Rhythms	0	8-Beat 1	4/4
	1	8-Beat 2	4/4
	2	8-Beat 3	4/4
	3	8-Beat 4	4/4
	4	8-Beat 5	4/4
	5	8-Beat 6	4/4
	6	8-Beat 7	4/4
	7	8-Beat 8	4/4
	8	8-Beat 9	4/4
	9	8-Beat 10	4/4
16 Beat Rhythms	10	16-Beat 1	4/4
	11	16-Beat 2	4/4
	12	16-Beat 3	4/4
	13	16-Beat 4	4/4
	14	16-Beat 5	4/4
	15	16-Beat 6	4/4
	16	16-Beat 7	4/4
	17	16-Beat 8	4/4
	18	16-Beat 9	4/4
	19	16-Beat 10	4/4
4 Beat Rhythms	20	4-Beat 1	4/4
	21	4-Beat 2	4/4
	22	4-Beat 3	4/4
	23	4-Beat 4	4/4
	24	4-Beat 5	4/4
	25	4-Beat 6	4/4
	26	4-Beat 7	4/4
	27	4-Beat 8	4/4
	28	4-Beat 9	4/4
	29	4-Beat 10	4/4
Rock	30	Roots	4/4
	31	Classic Rock	4/4
	32	Pop Rock	4/4
	33	Slow Rock	4/4
	34	Rock Shuffle	4/4
	35	Rock Ballad	4/4
	36	Punk	4/4
	37	New Wave	4/4
	38	Hard Rock	4/4
	39	Metal	4/4
Funk	40	Funk	4/4
	41	Funk Rock	4/4
	42	Electro Funk	4/4
	43	Soul	4/4
	44	R&B	4/4

# Effects List

## Drum Machine Rhythms

Type	Number	Name	Time Signature
Jazz	45	Jazz	4/4
	46	Big Band	4/4
	47	Fusion	4/4
	48	Swing	4/4
	49	Dixieland	4/4
Blues	50	Blues	4/4
	51	Country	4/4
	52	Folk	4/4
	53	Rockabilly	4/4
	54	Bluegrass	2/4
Latin	55	Bossa nova	4/4
	56	Rumba	4/4
	57	Samba	4/4
	58	Cha Cha	4/4
	59	Tango	4/4
	60	Reggae	4/4
	61	Beguine	4/4
	62	Latin Pop	4/4
Latin	63	Latin Rock	4/4
	64	Latin Dance	4/4
Electronic	65	Hip Hop	4/4
	66	Trip Hop	4/4
	67	Techno	4/4
	68	Break Beat	4/4
	69	Drum n' Bass	4/4
World	70	Waltz	3/4
	71	Polka	4/4
	72	March	4/4
	73	6/8 March	6/8
	74	Army March	4/4
	75	Mazurka	3/4
	76	Musette	3/4
	77	Ska	4/4
	78	New Age	4/4
	79	World	4/4
Various Beat	80	3/4 Beat1	3/4
	81	3/4 Beat2	3/4
	82	6/8 Beat1	6/8
	83	6/8 Beat2	6/8
	84	5/4 Beat	5/4
	85	6/4 Beat	6/4
	86	7/4 Beat	7/4
	87	9/8 Beat	9/8
	88	10/8 Beat	10/8
	89	11/8 Beat	11/8

# Effects List

## Drum Machine Rhythms

Type	Number	Name	Time Signature
Metronome	90	Metronome 1/4	1/4
	91	Metronome 2/4	2/4
	92	Metronome 3/4	3/4
	93	Metronome 4/4	4/4
	94	Metronome 5/4	5/4
	95	Metronome 6/4	6/4
	96	Metronome 7/4	7/4
	97	Metronome 6/8	6/8
	98	Metronome 7/8	7/8
	99	Metronome 9/8	9/8

## Troubleshooting

### Device won't turn on

- Make sure the adapter is working properly and the power jack is firmly connected.
- Check if you're using the correct power adapter.

### No sound or slight sound

- Make sure your cables are connected properly.
- Make sure the volume knob is adjusted properly.
- When the expression pedal is used for volume control, check it's position and volume settings.
- Check the effects module volume settings.
- Check the patch volume settings.
- Make sure your input device is not muted.

### Noise

- Make sure your cables are connected properly.
- Check your instrument output jack.
- Check if you're using the correct power adapter.
- If the noise is coming from your instrument, try using the noise reduction module to adjust it.

### Sound problems

- Make sure your cables are connected properly.
- Check your instrument output jack.
- If you're using an external expression pedal to control distortion or other similar parameters, check to see if the expression pedal is set up properly.
- Check your effects parameter setup. If effects are set to extremes, Ampero Mini may only emit noise.
- If you're using stereo output connection, please make sure you're using a proper Y cable.

### Problems with expression pedal

- Check your EXP/FS settings in Global menu.
- Try calibrating the pedal.
- When using an external expression pedal, make sure you're using a 1/4" male-to-male TRS cable.

## Technical Specifications

**Digital Audio Signal Processing:** 24-bit depth, 44.1kHz sample rate

**DNR:** Max. 112dB (DA)

**Effects:** 199

**Effects Modules:** Total of 9 simultaneous

**Patches:** 198 (99 user patches, 99 factory patches)

**Looper Time:** Mono 100 seconds, Stereo 50 seconds

**Internal Drum Machine:** 100 Rhythm Patterns

### Inputs:

- One 1/4" Tip Sleeve (TS) Instrument jack
- One 1/8" Stereo Auxiliary In (Aux In) jack
- One 1/4" Tip Ring Sleeve (TRS) Expression Pedal input jack

### Outputs:

- One 1/4" Tip Ring Sleeve (TRS) Unbalanced Stereo output jack
- One 1/8" Stereo headphones output jack

### Input resistance:

- Instrument Input: 4.7M $\Omega$
- Aux In: 10k $\Omega$

### Output resistance:

- Output: 1k $\Omega$
- Headphones: 22 $\Omega$

**Screen:** 4" 800 x 480 Color Dynamic Display Touch Screen

**USB Port:** USB 2.0 Type-C port, supports USB Audio 2.0

**Impulse Response/IR processing:** Supports 24-bit/44.1kHz Mono WAV files, 1024 points

**Power Requirements:** 9V DC Center Negative

**Current Consumption:** 500mA Max

**Dimensions:** 134mm (W) x 120mm (D) x 49mm (H)

**Weight:** 529g