



Headphone Guitar Amp

User Manual

For V1.0.2 Firmware Version



SONICAKE

www.sonicake.com

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ATTENTION

Handling

- Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately.
- Do not block any of the ventilation openings.
- Keep away from heat sources.
- Disconnect the unit during storms to prevent damage.
- Operation of this unit within significant electromagnetic fields should be avoided.

Connecting the power and input/output jacks

- Always turn OFF the power to the unit and all other equipment before connecting or disconnecting any cables.
- Also make sure to disconnect all connection cables and the AC adapter before moving the unit.

Cleaning

- Clean only with a dry cloth.

Alterations

- Do not open the unit.
- Do not attempt to service the unit yourself.
- Opening the chassis for any reason will void the manufacturer's warranty.

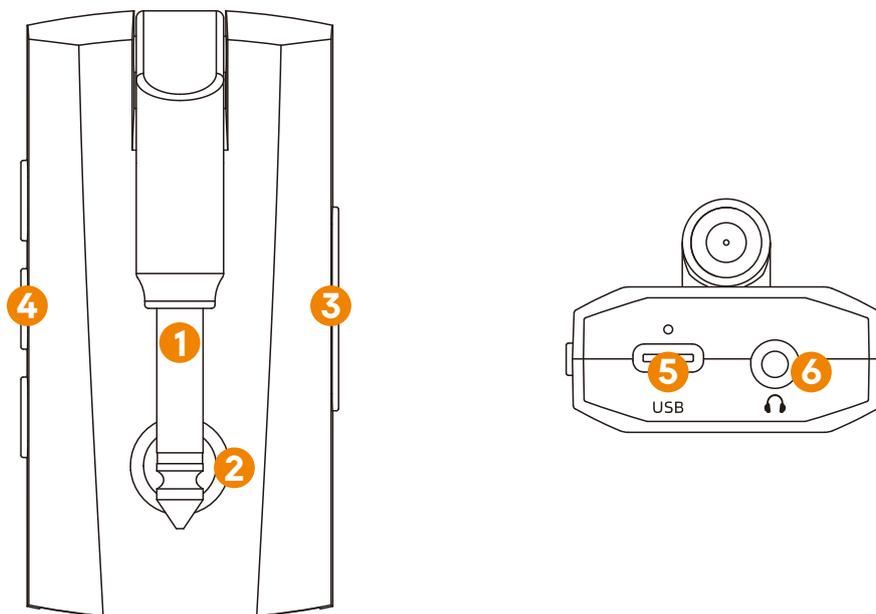
Operation instructions for the power supply adapter

- Always use a DC5V. Use of an adapter other than that specified could damage the unit or cause malfunction and pose a safety hazard.
- Pay attention to the voltage range requirements marked on the power supply.
- Unplug the unit during lightning storms or when unused for long periods of time.

Malfunction

- If the unit should malfunction, disconnect the DC adapter and turn the power OFF immediately. Then, disconnect all other connected cables. Prepare information including the model name, serial number, specific symptoms related to the malfunction and contact SONICAKE support (support@sonicake.com).

Panel Introduction



- ❶ 1/4" (6.35mm) TS mono input for plugging in your instrument.
- ❷ Hold to turn the device on/off; when the device is on, short press to turn on/off the BT function.
RGB Light Display:
Blue Blinking: Device not connected
Blue: Device connected
Pink: Device muted
Red Intermittent Blinking: Low battery
- ❸ Press "+" / "-" to adjust the Master volume; press "+" & "-" simultaneously to mute.
- ❹ Press "A" / "B" / "C" to switch between local presets. Each button has 3 presets (Red / Green / Blue) that can be cycled through, for a total of 9 local presets.
- ❺ USB Type-C to connect to a mobile phone or computer for recording and firmware upgrade.
- ❻ 1/8" (3.5mm) TRS stereo output for connect headphones, amps, pedals, etc.

Using Amphonix 2 as an audio interface

When used as a USB audio interface, the Amphonix 2 will be recognized by the system as a 2-in/2-out USB device.

Compatible Software

When you connect your Amphonix 2 with the Android/iOS/Windows/ Mac, you can use the free Amphonix 2 software to manage multiple functions, including adjusting tones, importing / exporting patches, firmware upgrade, loading third-party IRs and more.

The Amphonix 2 software supports both Android/iOS/Windows/Mac platforms.

Please download the software at www.sonicake.com

Using SONICLINK Software

Connecting the Device

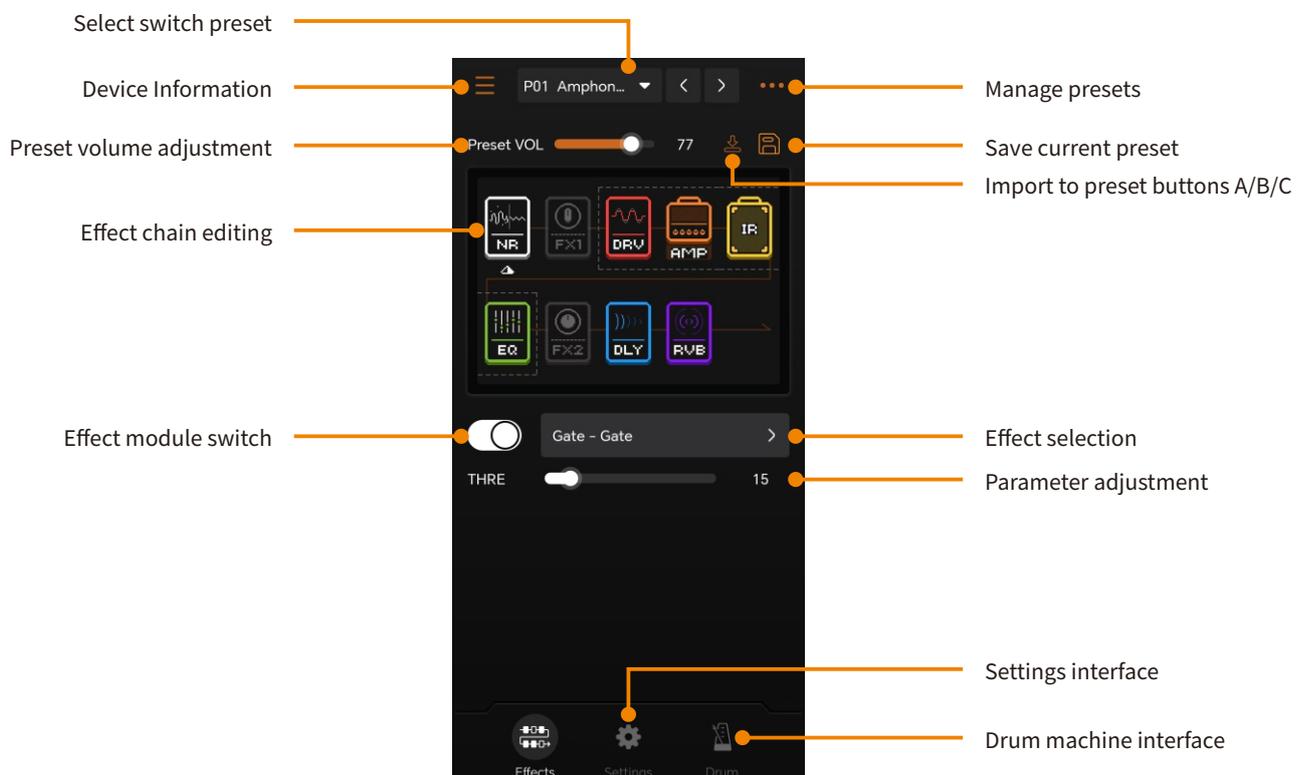
Turn on BT on your smartphone or tablet, open the SONICLINK app.

When using for the first time, the SONICLINK App will request Bluetooth permissions (and location permissions for Android devices). Allow these permissions when prompted on your device. The software will automatically search for nearby devices. When your Amphonix 2 appears in the device list, select it and tap Connect Selected Device to pair. At this time, the BT status light of Amphonix 2 will turn solid blue to indicate that the BT connection is successful.

Note: BT audio and BT control are independent. You need to connect BT audio and BT control separately to use all functions of the Amphonix 2.

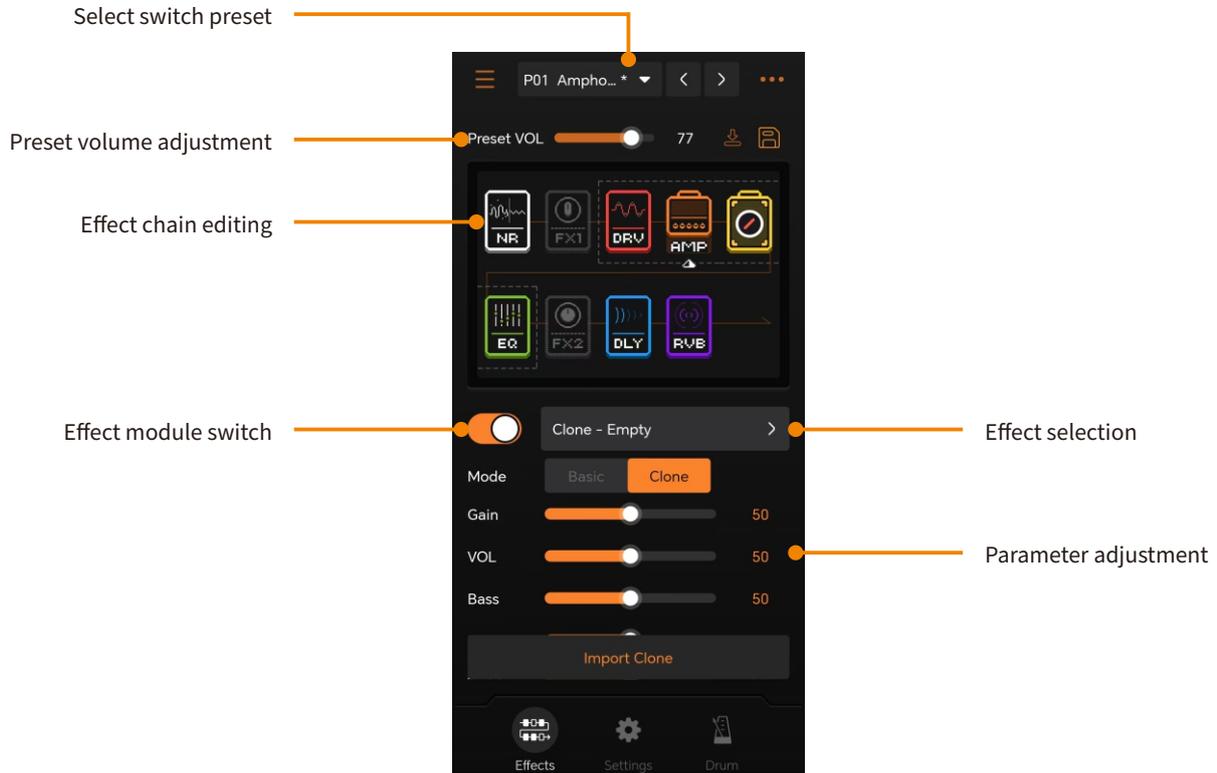
Tone Adjustment

After successful connection, the SONICLINK software will enter the preset interface:



Editing Presets

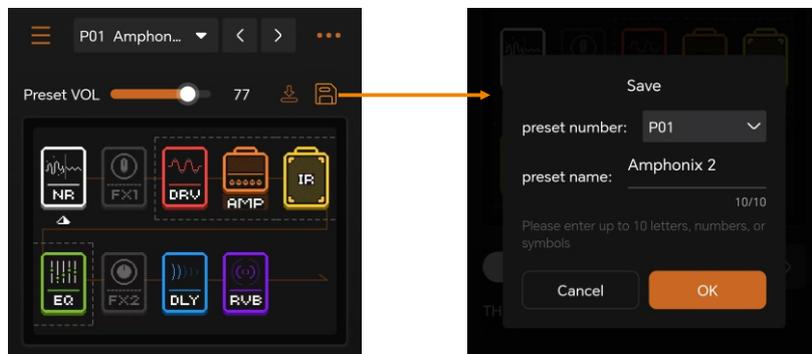
You can edit the parameters of the current preset in the preset interface, where you can:



Note: Long-press and drag effect modules to reorder them. DRV/AMP/CAB/EQ modules cannot be moved.

Saving Presets

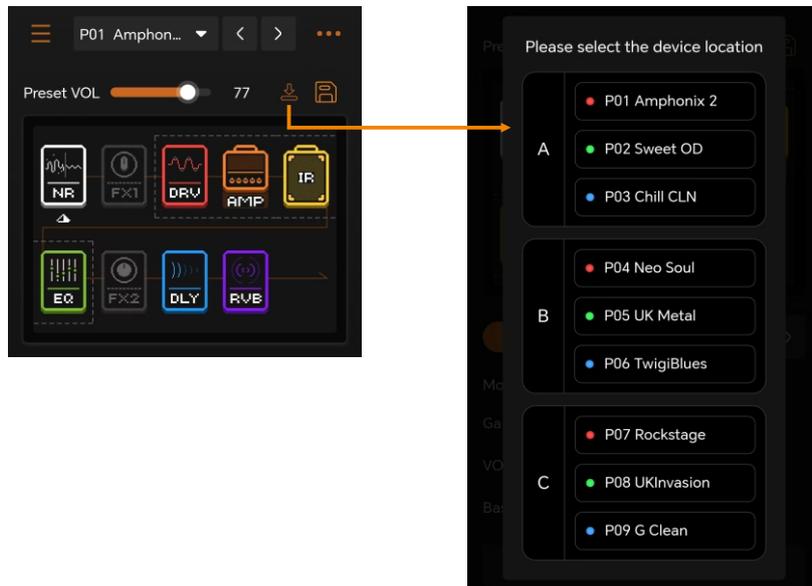
If you are satisfied with the current tone, remember to save it to prevent loss of adjusted parameters.



Note: Preset names must be in English and cannot exceed ten characters.

Save preset to button A/B/C

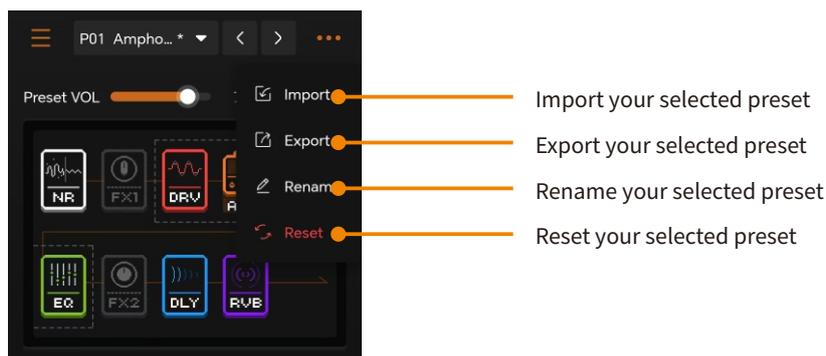
Import preset buttons A/B/C for instant access to a total of 9 sounds on your device.



Note: Clicking will replace the existing preset at that location.

Preset Management

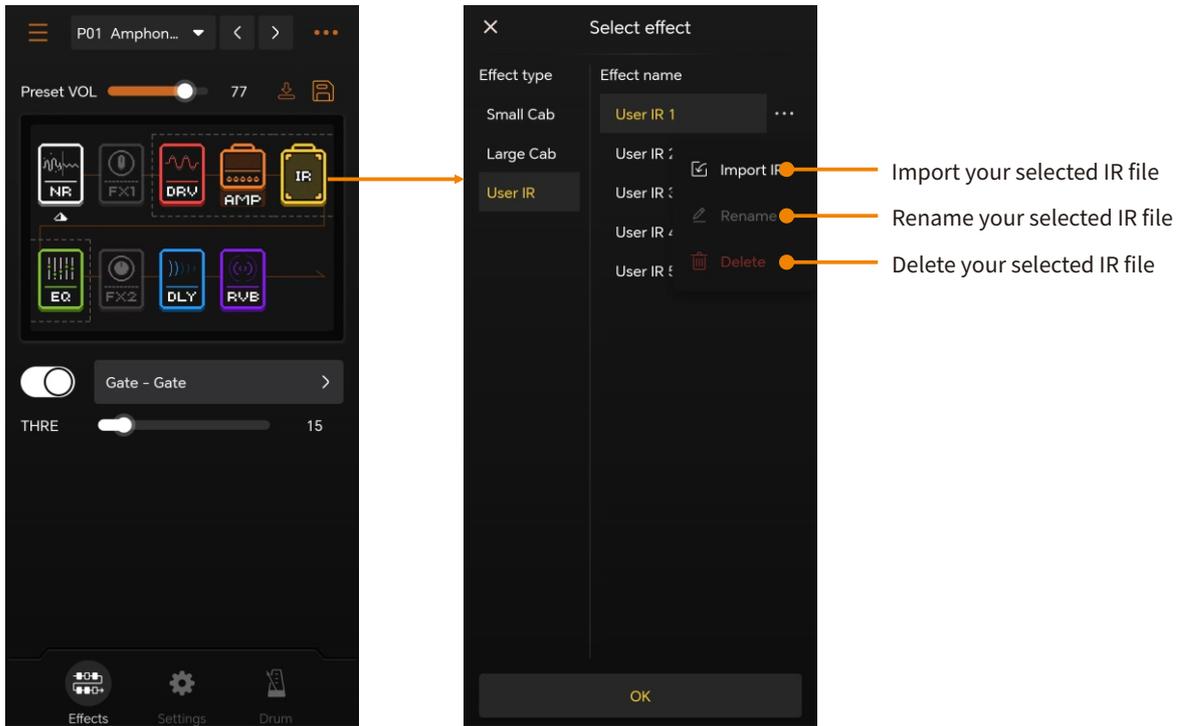
You can click the ... icon to manage the presets on the Amphonix 2:



Note: You can import/export single or multiple presets simultaneously.

Importing IR

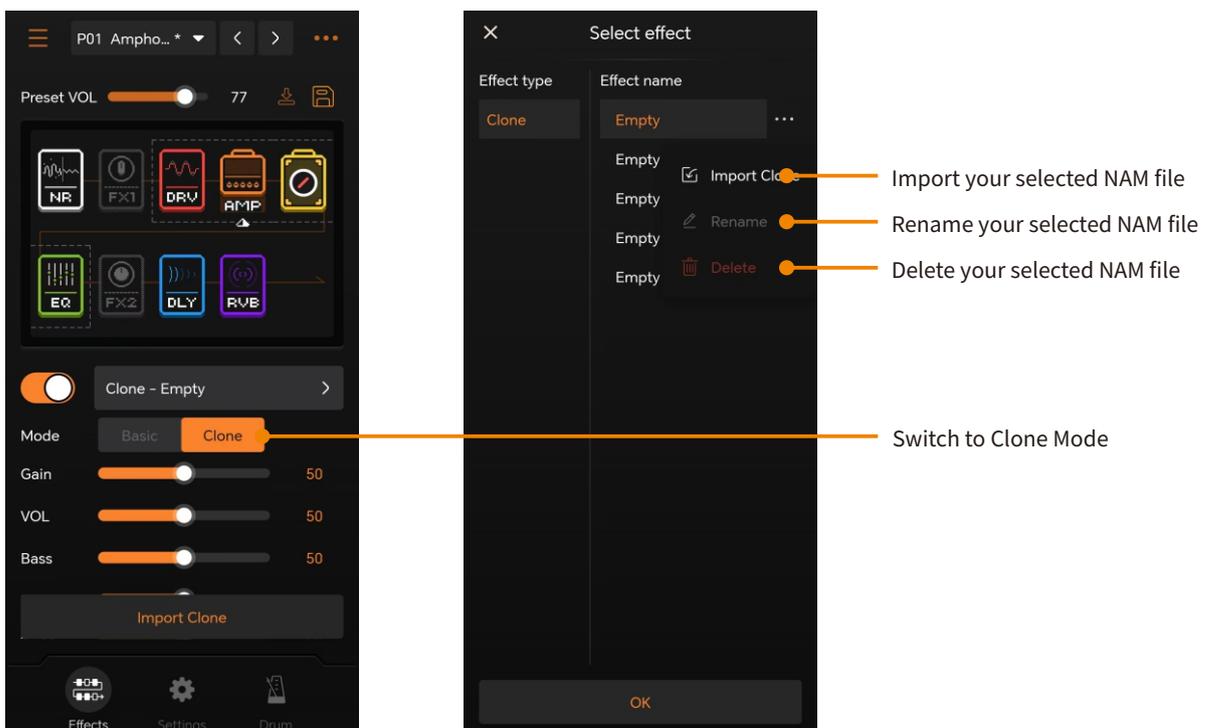
You can manage IR files in the CAB module or effect selection page:



Note: The Amphonix 2 supports IR files with 44.1kHz 24-bit resolution and 512 sample points.

Importing NAM Files

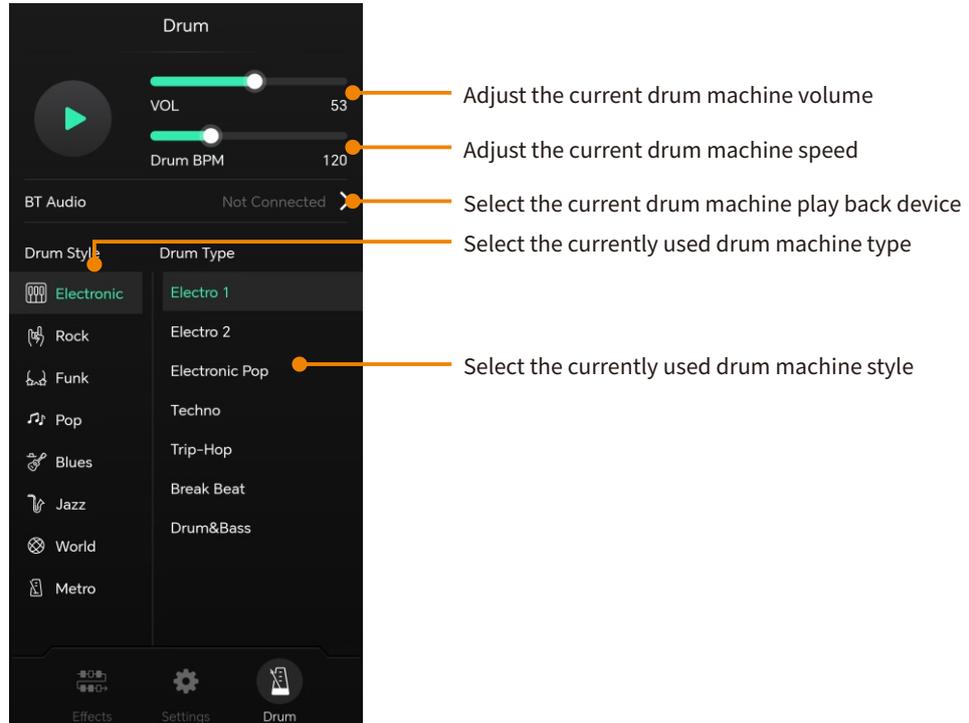
You can manage NAM files in the Clone Mode or effect selection page



Note: The optimal NAM configuration for Amphonix 2 is the AMP+CAB file format.

Using the Drum Machine

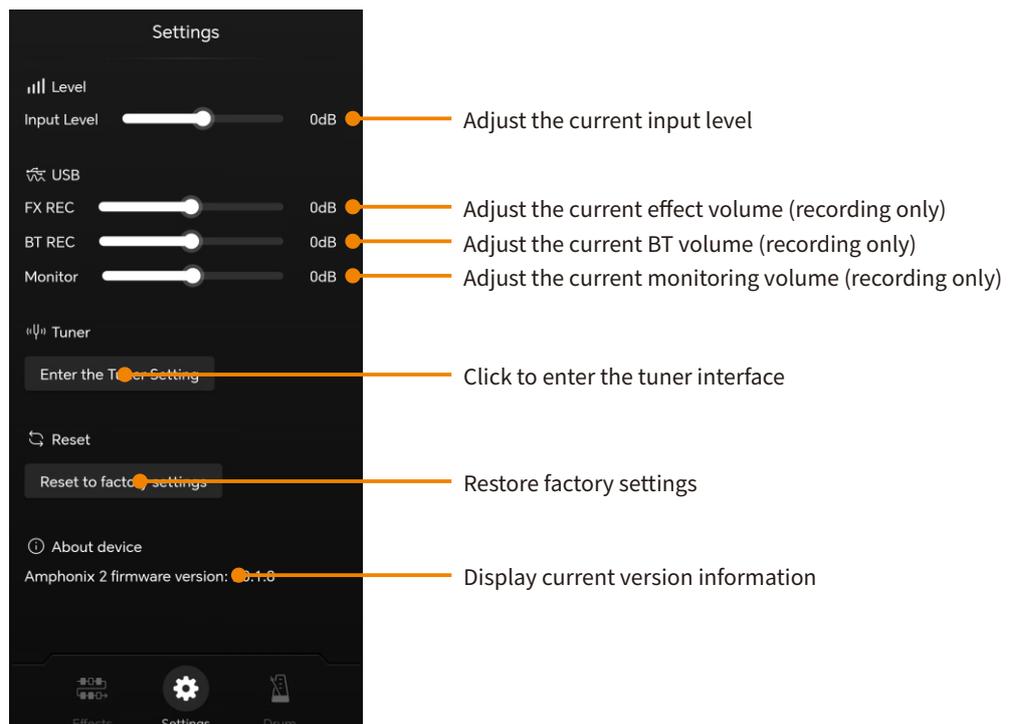
In the drum machine interface, you can select the drum machine currently in use:



Note: The drum machine will not play normally if no drum machine playback device is selected.

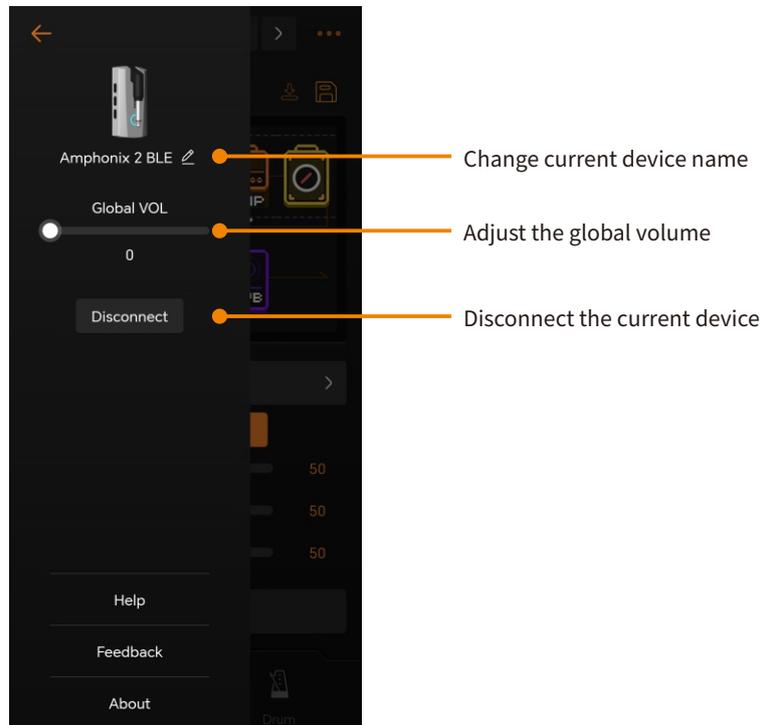
Device Settings

You can configure current device parameters in the settings interface:



Device Information

You can view and configure device information in the device interface:



Effect List

FX Title	Description	Parameters
NR		
Gate	Based on famous ISP® Decimator™* noise gate pedal.	THRE: Controls the gate trigger level
FX1 & FX2		
COMP 1	Based on the legendary Ross™ Compressor*.	Sustain: Controls the compression amount VOL: Controls the effect output
COMP 2	Based on the Keeley® C4 4-knob compressor*.	Sustain: Controls the compression amount Attack: Controls how soon the compressor starts to process the signal VOL: Controls the effect output Clipping: Controls the input sensitivity
Touch Wah	A wide-range envelope filter (a.k.a. touch wah). Control the wah sound by playing intensity.	Sense: Controls the effect sensitivity Range: Controls the frequency range of the filter Q: Controls the sharpness of the filter Mix: Controls the wet/dry signal ratio Mode: Selects from two modes: Guitar/Bass
Auto Wah	Set the rate to make the wah sound work regularly. Provides a variable auto-wah effect for both guitars and basses.	Depth: Controls the effect depth Rate: Controls the effect speed VOL: Controls the output level Low: Controls the bottom point of center frequency (low freq) High: Controls the top point of center frequency (high freq) Q: Controls the sharpness of the filter
Boost	Based on the famous Xotic® EP Booster* pedal.	Gain: Controls the effect output/boost amount +3dB: Selects the minimum boost amount from 0dB (off) to +3dB (on) Bright: Selects the sound character from vintage (Bright off) to flat (Bright on)
A-Chorus	Based on the legendary Arion® SCH-1 Stereo Chorus* pedal.	Depth: Controls the chorus depth Rate: Controls the chorus speed Tone: Controls the effect tone
B-Chorus	This vintage-voiced chorus model is based on the famous ensemble chorus unit that tuned for bass players.	
Flanger	Classic flanger effect, producing rich and natural flanger tone.	Depth: Controls the flanger depth Rate: Controls the flanger speed P.Delay: Controls the pre delay time F.Back: Controls the amount of feedback
Phaser	Based on legendary MXR® M101 Phase 90*.	Rate: Controls the vibrato rate
Vibe	Based on the legendary Voodoo Lab® Micro Vibe*.	Depth: Controls the effect depth Rate: Controls the effect speed
Vibrato	Based on a BBD-based blue vibrato pedal.	
Tremolo	Based on legendary Demeter® TRM-1 Tremulator*, offering classical opto tremolo sound.	
Sine Trem	Sine tremolo waveforms and super wide tonal range.	Depth: Controls the effect depth Rate: Controls the effect speed VOL: Controls the effect output

FX Title	Description	Parameters
Bias Trem	Bias tremolo waveforms and super wide tonal range.	Depth: Controls the effect depth Rate: Controls the effect speed VOL: Controls the effect output Bias: Adjust the offset change of the waveform
Octave	Provides polyphonic octave effect.	Low: Controls the volume of lower octave (1 oct down) High: Controls the volume of higher octave (1 oct up) Dry: Controls the dry signal level
Pitch	Polyphonic pitch shifter/harmonizer.	High/Low Pitch: Controls the low/high pitch shifting range by semitones Dry: Controls the dry signal level H/L-VOL: Controls the low/high pitch volume
Detune	A detuning effect that combines a slightly shifted signal with the original signal to create a chorus-like tone.	Detune: Controls the detune amount from -50 to +50 cents Dry/Wet: Controls the dry/wet signal level
DRV		
Scream	Based on legendary Ibanez® TS-808 Tube Screamer®* overdrive pedal.	Gain: Controls the overdrive amount Tone: Controls the effect tone VOL: Controls the effect output
Butter OD	Based on the legendary 2-knob yellow overdrive pedal.	Gain: Controls the overdrive amount VOL: Controls the effect output
JP Dist	Based on a classic orange three-knob distortion pedal.	Gain: Controls the distortion amount Tone: Controls the effect tone VOL: Controls the effect output
Shark	Based on MI Audio® Crunch Box®* distortion pedal.	Gain: Controls the distortion amount Tone: Controls the effect tone VOL: Controls the effect output
Dark Mouse	Based on legendary ProCo™ The Rat* distortion (early LM308 OP-amp version).	Gain: Controls the distortion amount Filter: Controls the effect tone VOL: Controls the effect output
Grey Fuzz	Based on the legendary Sola Sound® Tone Bender Mk II®* fuzz pedal – the legend of the legends.	Fuzz: Controls the gain amount VOL: Controls the effect output
Red Fuzz	Based on legendary Dallas- Arbiter® Fuzz Face®* fuzz pedal.	
Bass Drive	This is an overload effect device specially designed for bass (include the five-string bass) .	Gain: Controls the distortion amount Blend: Controls the wet/dry signal ratio VOL: Controls the effect output Bass/Treble: 2-band EQ that controls the effect tone
AMP		
TWD Deluxe	Based on Fender® Tweed Deluxe*.	Gain: Controls the gain amount (pre gain) Tone: Controls the effect tone VOL: Controls the output volume (post gain)
B-Man N	Based on Fender® '59 Bassman®* (Normal channel).	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom VOL: Controls the output volume (post gain) Bass/Middle/Treble: 3-band EQ that controls the effect tone

FX Title	Description	Parameters
Dark Twin	Based on Fender® '65 Twin Reverb®*.	Gain: Controls the gain amount (pre gain) VOL: Controls the output volume (post gain) Bass/Middle/Treble: 3-band EQ that controls the effect tone Bright: Switches extra brightness on/off
Voks 30N	Based on VOX® AC30HW* (Normal channel).	Gain: Controls the gain amount (pre gain) VOL: Controls the output volume (post gain) Tone: Controls the effect tone Bright: Switches extra brightness on/off
Jazz 120	Based on the legendary "Jazz Chorus" solid state combo.	VOL: Controls the effect gain/output amount Bass/Middle/Treble: 3-band EQ that controls the effect tone Bright: Switches extra presence on/off
Brit 45	Based on Marshall® JTM45* (Normal channel).	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom VOL: Controls the output volume (post gain) Bass/Middle/Treble: 3-band EQ that controls the effect tone
Brit 50JP	Based on Marshall® JTM50* with "Jump" connection.	Gain 1/2: Controls the gain amount (pre gain) PRES: Controls the effect headroom VOL: Controls the output volume (post gain) Bass/Middle/Treble: 3-band EQ that controls the effect tone
Brit 800	Based on the legendary Marshall® JCM800*.	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom VOL: Controls the output volume (post gain)
B-Man B	Based on Fender® '59 Bassman®* (Bright channel).	Bass/Middle/Treble: 3-band EQ that controls the effect tone
Voks 30TB	Based on VOX® AC30HW* (TB channel).	Gain: Controls the gain amount (pre gain) Tone: Controls the effect tone VOL: Controls the output volume (post gain) Bass/Treble: 2-band EQ that controls the effect tone Char: Selects from two sound characters: Cool (lower gain)/Hot (higher gain)
Sol 100 OD	Based on Soldano® SLO100* (crunch channel).	
Dizzy VH	Based on the 3rd channel of the famous Diezel® VH4*.	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom
Eng 120	Based on famous ENGL® Savage 120 E610*.	VOL: Controls the output volume (post gain)
Halen 51	Based on Peavey® 5150®* (LEAD channel).	Bass/Middle/Treble: 3-band EQ that controls the effect tone
Sol 100 LD	Based on Soldano® SLO100* (Overdrive channel).	
Calif Dual V	Based on Mesa/Boogie® Dual Rectifier®* (Vintage mode).	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom
Calif Dual M	Based on Mesa/Boogie® Dual Rectifier®* (Modern mode).	VOL: Controls the output volume (post gain)
Eng Power	Based on the lead channel (Channel 4) of the famous ENGL® Powerball II E645/2* amp head.	Bass/Middle/Treble: 3-band EQ that controls the effect tone

FX Title	Description	Parameters
Flyman B1+	Based on the famous “Brown Eye” UK-style boutique amp head (HBE channel).	Gain: Controls the gain amount (pre gain) PRES: Controls the effect headroom VOL: Controls the output volume (post gain)
Bog XT	The Bogner® XTC* red channel is known for its fiery high gain distortion and the main timbre.	Bass/Middle/Treble: 3-band EQ that controls the effect tone
A BassVT	Based on Ampeg® SVT* bass amp.	Gain: Controls the gain amount VOL: Controls the output volume (post gain) MidFreq: Selects the center frequency Bass/Middle/Treble: 3-band EQ that controls the effect tone
Voks Bass	Based on vintage VOX®* AC-100* bass amp.	VOL: Controls the effect gain/output amount Bass/Treble: 2-band EQ that controls the effect tone
IR		
TWD 1x8	Vintage Fender® Champ* 1x8" cabinet.	VOL: Controls the output volume
TWD-P 1x10	Vintage Fender® Princeton* 1x10" cabinet.	
Vibluxe 1x12	Vintage Fender® Vibrolux* 1x12" cabinet.	
Voks 1x12	Vintage VOX® AC15* 1x12" cabinet.	
TWD 2x12	A custom Fender® Tweed* 2x10" cabinet.	
Double 2x12	Vintage Fender® ‘65 Twin Reverb* 2x12" cabinet.	
Star 2x12	Mesa/Boogie® Lonestar* 1x12" cabinet.	
Jazz 2x12	Legendary “Jazz Chorus” 2x12" cabinet.	
Brit GN 2x12	Marshall® 2550* 2x12" cabinet.	
Brit GN 4x12	Vintage Marshall® 4x12" cabinet with Celestion® Greenback®* speakers.	
Bog 4x12	Bogner®* 4x12" cabinet.	
Dizzy 4x12	Diezel®* 4x12" cabinet.	
Halen 4x12	Peavey® 6505* 4x12" cabinet.	
Sol 4x12	Soldano®* 4x12" cabinet.	
Dual 4x12	Mesa/Boogie® Rectifier®* 4x12" cabinet.	
User IR 1~5	User IR.	
EQ		
GT EQ 1	5-Band Equalizer designed for guitars.	125Hz, 400Hz, 800Hz, 1.6kHz, 4kHz: Use the five bands above to control the EQ level. VOL: Controls the output level
GT EQ 2	5-Band Equalizer designed for guitars.	100Hz, 500Hz, 1kHz, 3kHz, 6kHz: Use the five bands above to control the EQ level. VOL: Controls the output level
Bass EQ	5-Band Equalizer designed for basses.	50Hz, 120Hz, 400Hz, 800Hz, 4.5kHz: Use the five bands above to control the EQ level. VOL: Controls the output level

FX Title	Description	Parameters
DLY		
Pure	Produces pure, precise delay sound.	Mix: Controls the delay wet/dry signal ratio Time: Controls the delay time F.Back: Controls the amount of feedback
Slap	Simulates the classic slapback echo effect.	
Warm	Producing warm delay sound with analog feel.	
Mag	Simulates solid-state tape echo sound.	
Tube	Simulates tube-driven tape echo sound.	
Reverse	Producing a special delay effect with reversed feedback.	
Analog	Reproduces the sound of a vintage 1980' s rack-mount delay machine with slightly sample-reduced feedback.	
Sweep	Producing a delay effect with sweeping filter modulated repeats.	Mix: Controls the delay wet/dry signal ratio Time: Controls the delay time F.Back: Controls the amount of feedback S-Depth: Controls the sweep filter depth S-Rate: Controls the sweep filter speed
Ping Pong	A ping-pong delay producing stereo feedback bounces back and forth between left and right channels.	Mix: Controls the delay wet/dry signal ratio Time: Controls the delay time F.Back: Controls the amount of feedback
RVB		
Air	An airy reverb effect with natural decays.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time Damp: Dampens the effect high frequency amount
Room	Simulates the spaciousness of a room.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time
Hall	Simulates the spaciousness of a performance hall.	
Church	Simulates the spaciousness of a church.	
Plate 1	Simulates the sound character produced by a large plate reverberator.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time
Plate 2	Simulates the sound character produced by a vintage plate reverberator.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time Damp: Dampens the effect high frequency amount
Spring	Simulates the sound character produced by a vintage spring reverberator.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time
Light	Special-tuned reverb effect with lush, bright decays.	
Ocean	Special-tuned reverb effect with huge, deep decays.	
Dream	Produces a modulated reverb effect that is lush and sweet.	Mix: Controls the wet/dry signal ratio Decay: Controls the duration of reverb time Damp: Dampens the effect high frequency amount Mod: Controls the effect modulation amount

*The manufacturers and product names mentioned above are trademarks or registered trademarks of their respective owners. The trademarks were used merely to identify the sound character of the products.

Specifications

Technical Specifications

A/D/A Converter: 24-bit

Sampling Frequency: 44.1 kHz

SNR: 103dB

Maximum Simultaneous Effects: 9

Preset Memory: Built-in 50 factory presets, 9 preset storage locations

Analog Input Connections

IN: 1/4" (6.35mm) Unbalanced (TS), 1M Ω

Analog Output Connections

OUT (PHONES): 1/8" (3.5mm) Stereo (TRS), 100 Ω

Digital Connections

USB Port: USB 2.0 Type-C Port

USB Recording Specification

Sample Rate: 44.1 kHz

Bit Depth: 16-bit

Size and Weight

Dimensions: 84.3mm (w) x 43.7mm (D) x 32.2mm (H)

Unit Weight: 64g

Power

Power Requirements: USB Type-C, DC 5V

Built-in Lithium Battery: 1000mAh

Troubleshooting

Device Won't Turn On

- Make sure the power supply is properly connected and the device is switched on.
- Check if the power adapter is working properly.
- Check if you're using the correct power adapter.

No Sound or Low Volume

- Make sure your cables are connected properly.
- Make sure the volume knob is adjusted properly.
- Check the patch Master 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 reduce it.

Sound Problems

- Make sure your cables are connected properly.
- Check your instrument output jack.
- If you use Amphonix 2 with other effects, please check whether the other effects are set up correctly.
- Check your effects parameter setup. If effects are set to extremes, Amphonix 2 may have abnormal noise.