

REACTOR
[100]

REACTOR
[50]

User Manual

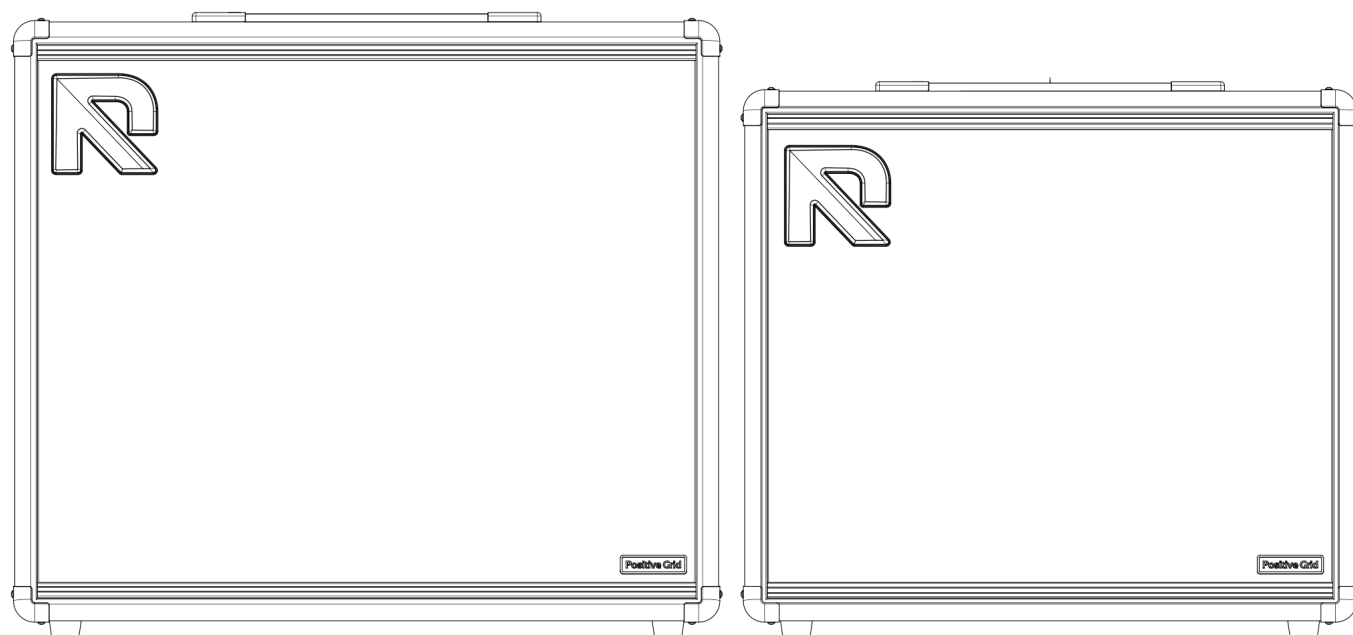


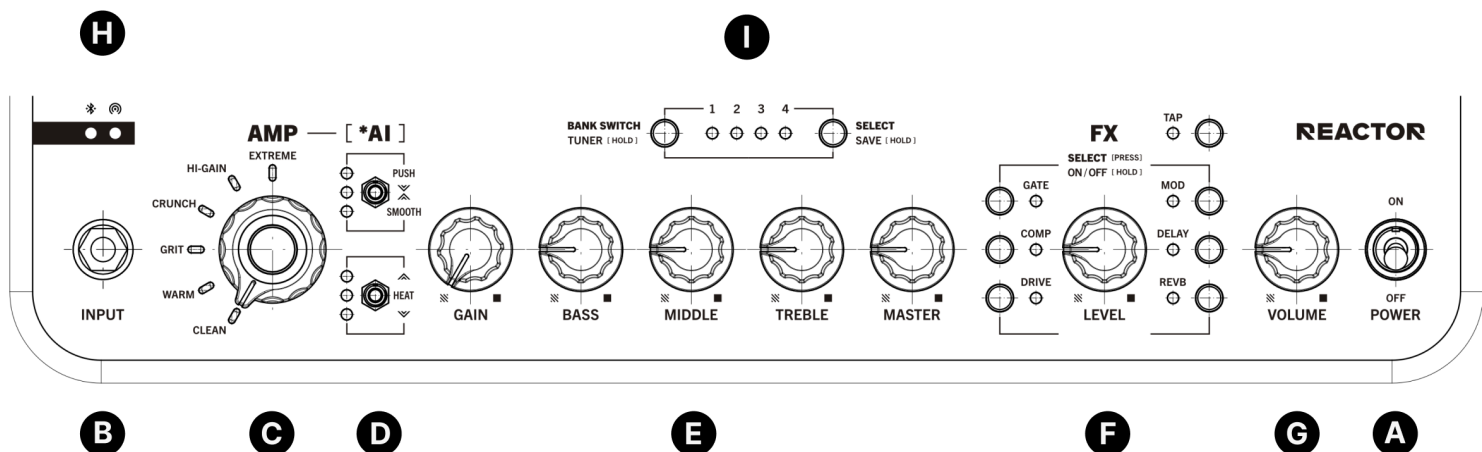
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Product Specification

Features	REACTOR 50	REACTOR 100
Power Amp Rating	50W	100W
Power Control	50W / 25W / 1W	100W / 25W / 1W
Speaker	1 x 12" custom speaker, 4Ω	1 x 12" custom speaker, 8Ω
Controls	Power switch, Volume knob, Preset Selector button, Bank Switch/Tuner button; Amp selector knob, Push/Smooth switch, Heat switch; Amp control knobs (Gain, Bass, Mid, Treble, Master); FX Level knob, FX ON/OFF buttons (GATE, MOD, COMP, DELAY, DRIVE, REVB), TAP button; Bluetooth Pair button, Power Control switch	
Effects	8 simultaneous effects (Gate, Wah/Volume, Compressor, Overdrive, Mod, Delay, EQ, Reverb)	
Presets (onboard)	8 onboard presets (customizable)	
Guitar Input	1 x 1/4" (6.35mm) ; Supports Hi-Z and standard instrument signals	
Power Amp In	1 x 1/4" (6.35mm)	
FX Loop	1/4" Send + Return; serial behavior (insert active based on Return detect)	
Line Out	1 x 1/4"	
Headphone Out	1/8" (3.5mm)	
MIDI (DIN)	5-pin MIDI In	
REACTOR Control Input	1/4" TRS (bi-directional control); MIDI IN and REACTOR Control are mutually exclusive	
USB Audio Interface	1-in / 2-out, 48kHz / 24-bit, compatible with macOS and Windows	
Bluetooth Version / Roles	Bluetooth 5.0; A2DP (audio) + BLE (control)	
Included in Box	Amp + Quick Start Guide + Power cord	
Dimensions / Weight	18.11 x 9.45 x 16.46 inches 460 x 240 x 418 mm 10.7 kg / 23.59 lb	20.87 x 9.88 x 18.5 inches 530 x 251 x 470 mm 13.9 kg / 30.64 lb

Top Panel



A - Power Switch

Flip the switch up to power on, down to power off.

Tip: Turn the Volume knob down first to avoid any pops or unwanted noise.

B - Input (1/4")

Plug in your guitar here.

C - Amp Selector

Turn the knob to choose from six different amp styles: Clean, Warm, Grit, Crunch, Hi-Gain and Extreme. Each amp includes a default mode and an AI-optimized variation for that tone style.

D - Amp Intelligence Switches

Push / Smooth (3-way toggle):

Push (up) brings your tone forward with more bite and presence—perfect for cutting through a mix.

Smooth (down) softens the attack for a more laid-back tone.

Center keeps your amp in its default mode.

Heat (5-stage toggle):

Adjusts feel, harmonics and gain without significantly affecting volume.

Crank up the heat for a faster, tighter attack with richer harmonics. Or dial it down for a smoother, more elastic feel that stays connected to your fingers.

E - Amp Control

Gain, Bass, Middle, Treble, and Master knobs to adjust your current amp settings.

F - FX Control

Tap an FX button to select the effect. Hold the button to turn it on or off.

Use the LEVEL knob to adjust the effect level or mix, and the TAP button to sync delay or mod timing.

G - Speaker Volume Control

Sets the overall output volume for both the speaker and headphones.

Plug in headphones, and the amp switches automatically.

H - Wireless Indicators

Shows your Bluetooth and Wi-Fi status:

Solid Blue/Green: Connected

Flashing Blue/Green: Pairing

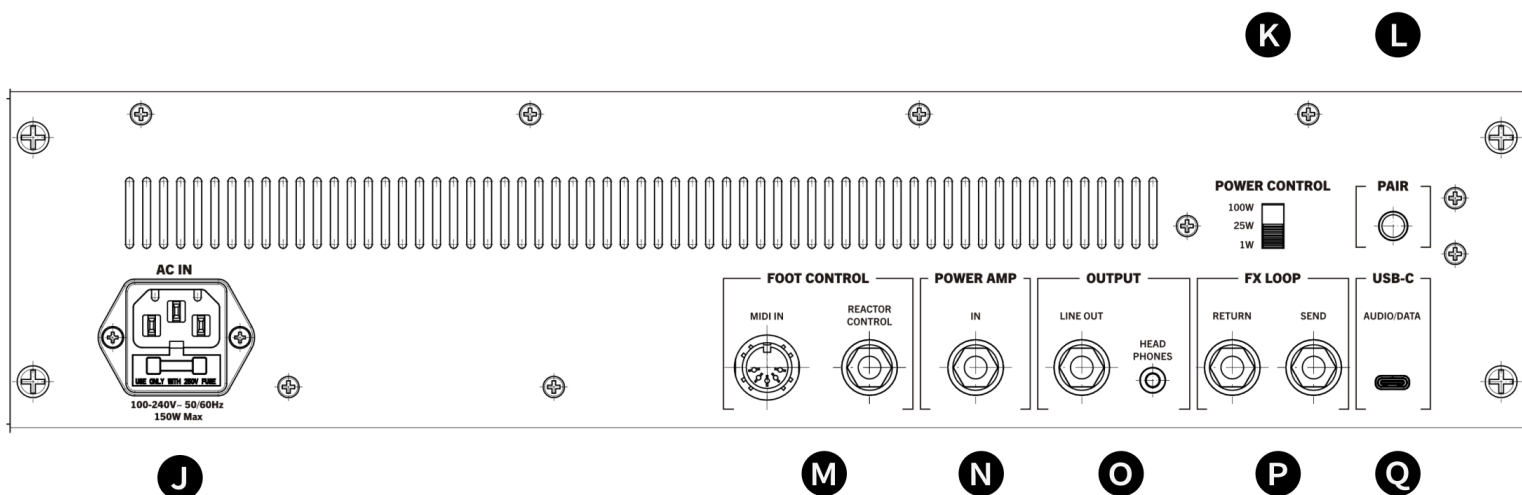
Off: Not connected

I - Preset Selector

Select/Save: Tap to cycle through the four presets in the current bank (8 onboard presets in total). Hold to save changes.

Bank Switch: Tap to switch between the banks. Hold to activate the Tuner.

Rear Panel



J - AC In

Plug in the included power cable.
Supports 100–240V AC input.

K - Power Control

Choose your output power:
100W / 50W (depending on model) – Full power for live performance
25W – Balanced for jam sessions or small venues
1W – Perfect for personal practice

L - Bluetooth Pair Button

Tap to pair to a mobile device via Bluetooth.
Hold to pair with the REACTOR Control footswitch.

M - Foot Control

MIDI In: Connect a standard MIDI controller for preset or FX switching.
REACTOR Control: Connect the REACTOR Control footswitch (sold separately) for low-latency control.

N - Power Amp In

Plug in an external modeler or preamp to use REACTOR as a clean power amp, bypassing all internal effects.

O - Output

Line Out: Send your signal directly to a mixer, interface, or monitor at fixed line level.
Headphones: 3.5mm stereo out—automatically mutes the main speaker when plugged in.

P - FX Loop

Plug in your own pedals or effects to the Send/Return jacks. You can adjust its position and levels in the signal chain using the REACTOR App.

Q - USB-C® Port

Connect to a PC or Mac using a USB-C® cable to use REACTOR as a USB audio interface or to perform firmware updates.

Get Started

Step 1: Connect & Power On

1. Place the amplifier on a stable, flat surface with adequate ventilation
2. Connect the included power cord to the **Power Input (J)** on the rear panel
3. Plug your guitar into the **Guitar Input (B)** on the front panel
4. Set the **Output Volume (G)** to minimum (fully counterclockwise)
5. Set the **Power Control (K)** on the rear panel to your preferred wattage
6. Flip the **Power Switch (A)** to the ON position
7. Wait for the status LEDs to complete their startup sequence
8. Turn up the **Output Volume (G)**

Step 2: Select a Preset and Adjust Your Amp

1. Select a preset via **Preset Selector (I)**
2. Turn the **Amp Knob (C)** to change amp category if needed.
3. Adjust the **Push/Smooth Switch** and **Heat Switch (D)** to taste
4. Set **Gain, Bass, Mid, Treble**, and **Master** to your liking

Step 3: Add Effects

1. **Short press** any of the 6 effect buttons to select it
2. **Long press** the same button to turn the effect on (LED lights up)
3. Turn the **Effect Knob (F)** to adjust the effect level
4. Use the **TAP button** to set tempo for Delay and Modulation effects

Step 4: Set Your Volume

Gradually turn up the **Output Volume (G)** to your desired listening level.

Step 5: Save Your Preset

When you're happy with your tone, **long press the Select button (I)** to save it to the current preset slot.

Next step: [Download the REACTOR App](#) to access deep editing, AI tone creation, ToneCloud community tones, and more.

Using Effects from the Top Panel

Toggle On/Off

Press and hold any effect button. The LED lights up when the effect is on and breathes to indicate that it is selected for adjustment.

Select an Effect

Short press any of the six active effect buttons. The LED begins breathing, indicating that the Effect Level knob is assigned to that effect's primary parameter.

Adjust Parameters

Turn the Effect Knob to adjust the selected effect's Level, Mix, or Threshold (depending on the effect type).

Tip: For deeper parameter editing (e.g., delay time, reverb decay, chorus rate), use the REACTOR App.

Signal Chain

All effect blocks can be freely rearranged in the signal chain via the REACTOR App. The default signal chain order is:

Guitar In → Gate → Comp → Drive → Wah → EQ → [Amp] → Mod → Delay → Reverb → FX Loop → Output

The FX Loop can be inserted at any position in the chain, adjustable via the REACTOR App.

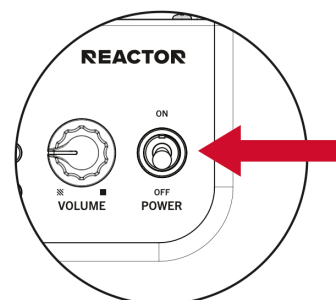
Pairing REACTOR with the REACTOR App

View the REACTOR App User Manual [here](#).

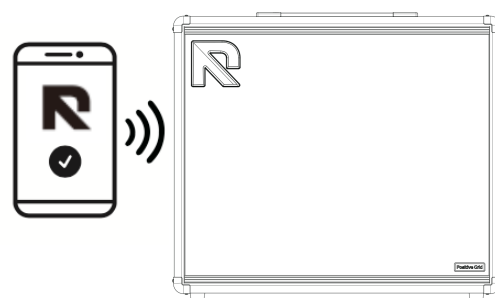
- Download the REACTOR app using the QR code provided or search 'REACTOR amp' in the App Store or Google Play Store.



- Turn on REACTOR by flipping the Power switch up.

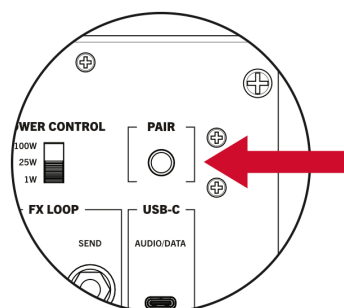


- Open the REACTOR app on your mobile device and follow the instructions to connect your REACTOR to access all of the gear, advanced features, and more.

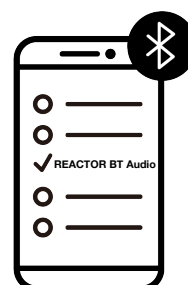


Playing Music via Bluetooth®

- To pair a new device, press the Pair button on the Rear Panel of REACTOR, turn Bluetooth® on in the settings of your mobile device, and select "REACTOR 50 BT Audio" or "REACTOR 100 BT Audio" from the list of available devices.



- REACTOR will automatically pair with the last device it connected to. If the last device is not available, REACTOR will automatically connect to a device that has been previously paired.



USB Audio

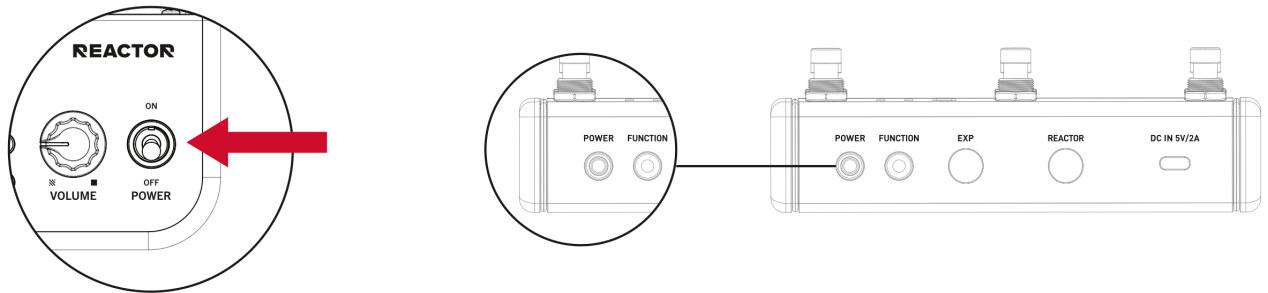
1. With REACTOR turned off, connect to a computer via **USB-C (Q)** with a USB-C cable.
2. Turn on REACTOR and select “REACTOR 50/100 USB Audio” as the recording/playback device.
3. Adjust direct guitar monitoring with the Speaker Volume knob.
4. Adjust USB playback volume with the volume controls on your computer or in DAW.
5. ASIO driver is required for Windows users. A download link is available on the [Reactor support page](#).

Connecting REACTOR Control (Sold Separately)

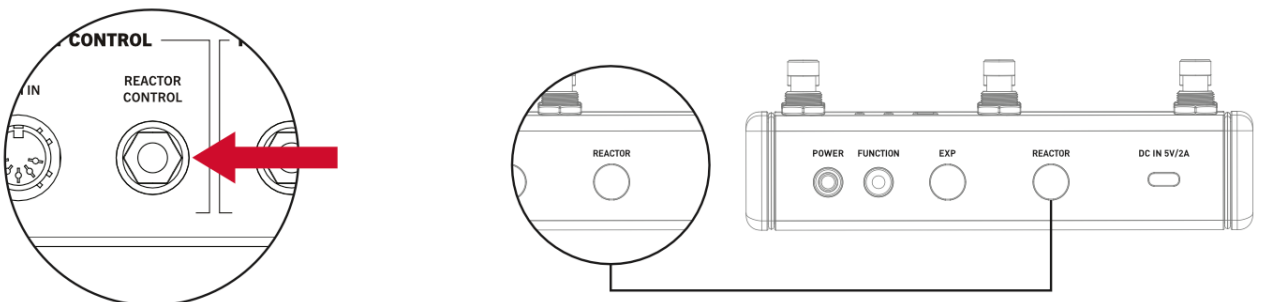
Wired Connection to REACTOR Control

Connect directly to your REACTOR Control using a 1/4" TRS cable for low latency, wired control.

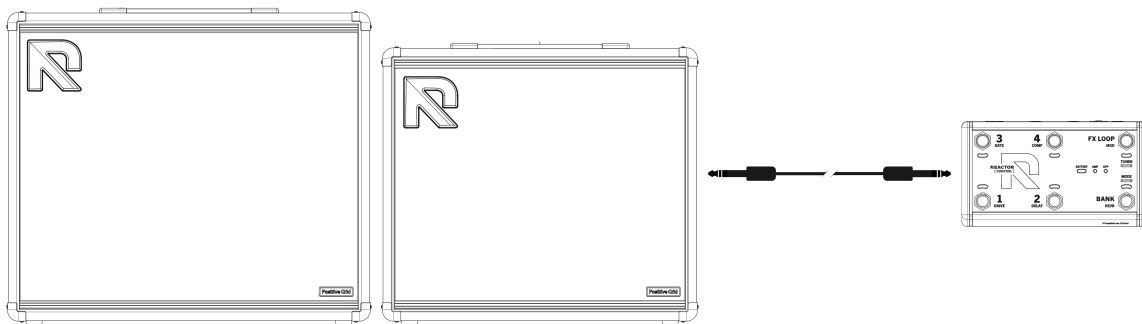
- **Step1.** Turn on your REACTOR amp and REACTOR Control.



- **Step2.** Plug directly into the REACTOR Control jack on the rear panel of your REACTOR amp using a 1/4" TRS cable.



- **Step3.** You're all set. REACTOR Control is now ready to use with your REACTOR amp.

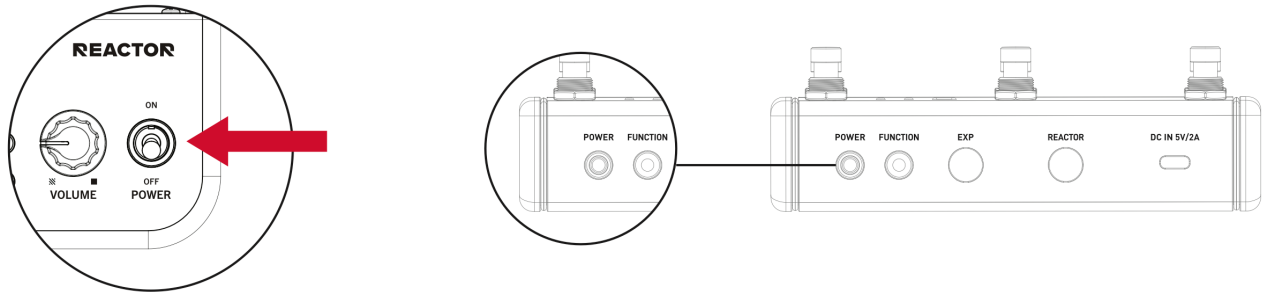


Wirelessly Connect to REACTOR Control

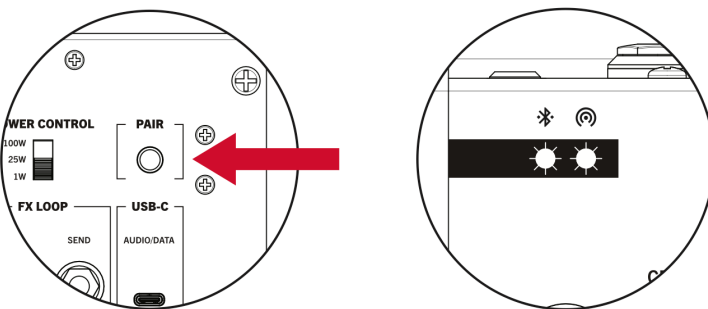
Connect REACTOR Control to your REACTOR amp wirelessly for convenient, seamless control.

Note: Plugging in a TRS cable will automatically switch to wired mode and disable the wireless connection.

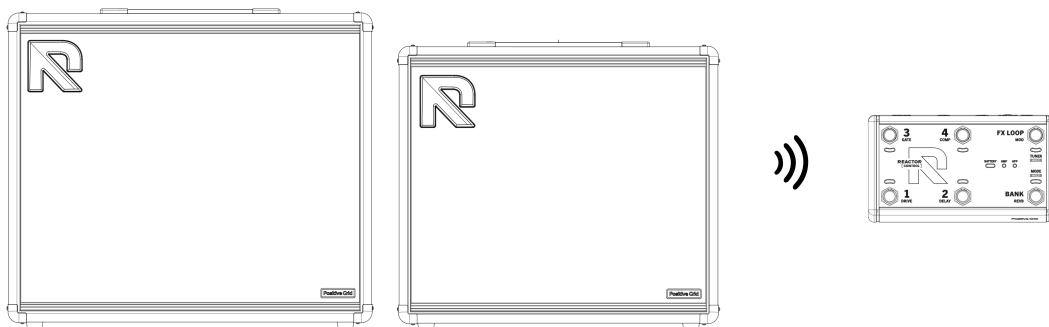
- **Step1.** Turn on your REACTOR amp and REACTOR Control.



- **Step2.** Press and hold the Pair button on the back of the REACTOR amp until both Wireless Indicator LEDs on the front panel light up.



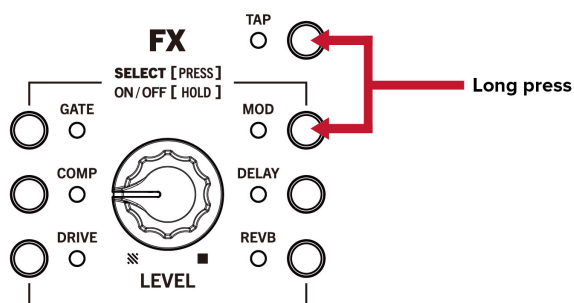
- **Step3.** Your REACTOR amp will automatically connect to REACTOR Control.



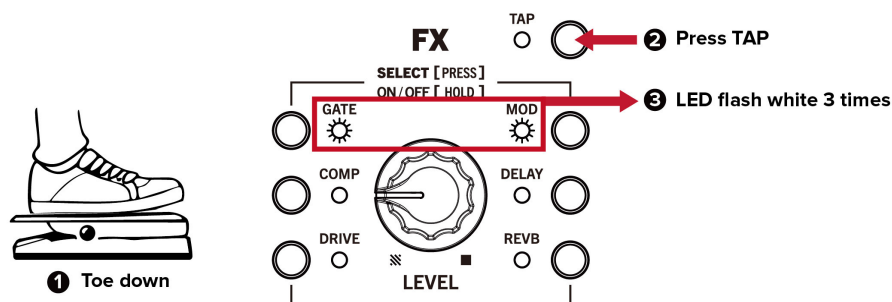
Expression Pedal Calibration

If your expression pedal does not respond accurately with REACTOR Control, calibrate it **via the REACTOR app Settings menu** or **follow the steps below** to calibrate it on your REACTOR amp:

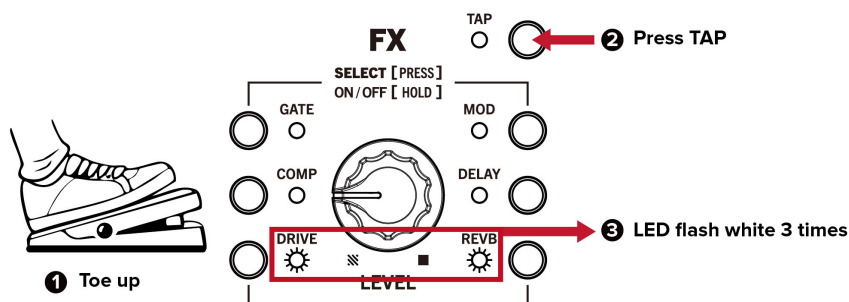
- **Step 1.** Connect an expression pedal to the REACTOR Control. On the REACTOR amp, long press TAP + MOD buttons simultaneously (1 second) to enter calibration mode



- **Step 2.** Top two FX LEDs (GATE, MOD) breathe white — push the pedal fully down (toe down), then short-press the TAP button to record. The top LEDs will flash white 3 times to confirm



- **Step 3.** Bottom two FX LEDs (DRIVE, REVERB) breathe white — lift the pedal fully up (toe up), then short-press the TAP button to record. The bottom LEDs will flash white 3 times and complete the calibration.



***To cancel:** Long press any FX button for 1+ seconds during calibration (LEDs flash red twice).

***Timeout:** Calibration exits automatically after 60 seconds of inactivity.

Setup Scenarios

Headphone / Silent Practice

1. Connect headphones to the **Headphone Out (O)** — the speaker mutes automatically
2. Adjust volume with the front panel **Output Volume (G)** knob
3. Cabinet simulation is automatically applied for a natural tone

USB Recording

1. Connect the REACTOR to your computer/tablet via **USB-C (Q)** with a USB-C cable.
2. Select "REACTOR 50 USB Audio" or "REACTOR 100 USB Audio" as your audio input in your DAW
3. Record directly — the REACTOR functions as a 48kHz/24-bit audio interface
4. Monitor through headphones or speaker

Tip: No external audio interface needed. REACTOR's USB audio includes the full signal chain (amp and effects).

Direct Out to PA / Mixer

1. Connect the **Line Out (O)** to your PA system or mixer using a 6.35mm (1/4") cable
2. Line Out volume is at a fixed line level
3. Speaker output continues to function — use it as your stage monitor, you can also mute the speaker while using line out via the setting menu in REACTOR app

FX Loop — External Pedals

Insert your external effect pedals into the signal chain:

1. Connect the **FX Send (P)** to your pedal's input
2. Connect your pedal's output to the **FX Return**
3. Adjust FX Loop position in the signal chain via the REACTOR App
4. Adjust Send/Return levels via the REACTOR App

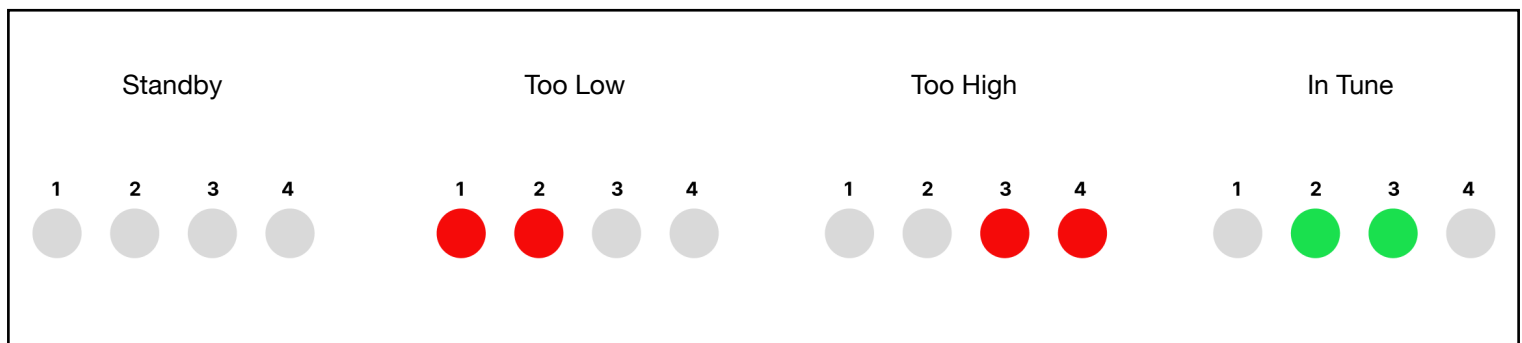
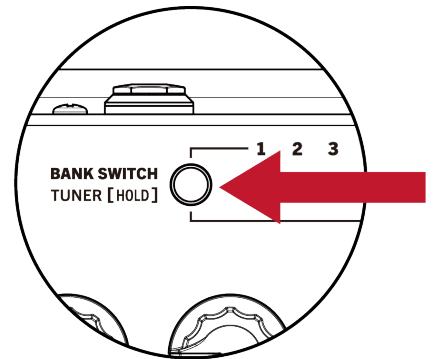
Power Amp Input — External Preamps

Use the REACTOR as a pure powered speaker:

1. Connect your external preamp or modeler to the **Power Amp Input (S)**
2. The signal bypasses all internal DSP
3. Adjust speaker volume with the **Output Volume (N)** knob

Tuner Mode

- Hold the BANK SWITCH/TUNER button to enter tuner mode.
- While in tuner mode, the 4 preset LEDs will display if the string being played is in tune.
- Note that the output of REACTOR will be muted while tuner mode is on.
- To exit tuner mode, press the BANK SWITCH/TUNER button again.



MIDI In Settings

REACTOR accepts MIDI messages via the MIDI In port (5-pin DIN). MIDI Command Chart is shown below.

Action	MIDI Type	Number	MIDI Channel
Noise Gate On/Off	Control Change	0	1
Compressor On/Off	Control Change	1	1
Drive On/Off	Control Change	2	1
Wah On/Off	Control Change	3	1
EQ On/Off	Control Change	4	1
Delay On/Off	Control Change	5	1
Mod On/Off	Control Change	6	1
Reverb On/Off	Control Change	7	1
Effect Loop On/Off	Control Change	10	1
Switch to AMP Slot 1 (Clean)	Control Change	21	1
Switch to AMP Slot 2 (Warm)	Control Change	22	1
Switch to AMP Slot 3 (Grit)	Control Change	23	1
Switch to AMP Slot 4 (Crunch)	Control Change	24	1
Switch to AMP Slot 5 (Hi-Gain)	Control Change	25	1
Switch to AMP Slot 6 (Extreme)	Control Change	26	1
Trigger Push	Control Change	27	1
Trigger Smooth	Control Change	28	1
Trigger Heat +	Control Change	12	1
Trigger Heat -	Control Change	13	1
Switch to Preset Slot 1 (Red 1)	Program Change	0	1
Switch to Preset Slot 2 (Red 2)	Program Change	1	1
Switch to Preset Slot 3 (Red 3)	Program Change	2	1
Switch to Preset Slot 4 (Red 4)	Program Change	3	1
Switch to Preset Slot 5 (Green 1)	Program Change	4	1
Switch to Preset Slot 6 (Green 2)	Program Change	5	1
Switch to Preset Slot 7 (Green 3)	Program Change	6	1
Switch to Preset Slot 8 (Green 4)	Program Change	7	1
Toggle Bank Button	Control Change	15	1
Output Volume	Control Change	30	1
Line Out Volume	Control Change	31	1
Send Volume	Control Change	32	1
Toggle Tuner	Control Change	35	1
Tap Tempo	Control Change	36	1

Firmware Update

Keep your REACTOR up to date for the latest amp models, effects, and improvements.

Option 1 — Via USB (Desktop):

1. Download the REACTOR updater from help.positivegrid.com
2. Connect the REACTOR to your computer via USB-C
3. Open the updater — it will detect your REACTOR and check for updates
4. Follow the on-screen instructions

Option 2 — Via Wi-Fi (OTA from App):

1. Open the REACTOR App while connected to your amplifier
2. The App will notify you if a firmware update is available
3. Follow the in-app instructions

WARNING: Do not unplug power or disconnect during a firmware update. If the update is interrupted, the REACTOR will automatically attempt to recover on the next power-up.

Factory Reset

Reset on the Amp

This process will reset all the presets stored on the REACTOR as well as Bluetooth settings.

1. Power off the REACTOR
2. Press and hold Reverb + TAP buttons simultaneously
3. While holding both buttons, power on the REACTOR
4. Continue holding until the **Status LEDs breath white** (2 seconds after power on), then release both buttons. At this point, short press TAP to cancel and exit Factory Reset (or simply power off to cancel)
5. To confirm, long press TAP — the reset will execute automatically once 3 seconds is reached
6. The amplifier will reset and restart

Reset with the REACTOR App

Three reset options available in Settings:

Option	What It Resets
Reset All	All presets + all settings to factory defaults
Reset Factory Presets	Presets only (settings preserved)
Reset Settings	Settings only (presets preserved)

For additional support and FAQ, visit: help.positivegrid.com

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