



1. AUX (default: tap)	11. Control port
2. AUX LED	12. Input (TRS)
3. Drive (input gain)	13. Sampling rate
4. Presets	14. Modulation rate
5. Filter cutoff	15. Modulation depth
6. Wet/dry mix	16. Modulation wave
7. USB	17. Envelope amount
8. 9V DC 250 mA	18. Envelope destination
9. Output (TRS)	19. Bypass indicator
10. Bit reduction	20. Bypass

PRESETS

Press the **PRESET** button to cycle through presets 1-4 and the live knob settings.

To save a preset, select the desired preset and hold the **PRESET** button for two seconds to store the current settings in that location. Bypass indicator will blink green.

127 presets are available via MIDI program change messages. To save a preset, hold down the **PRESET** button while sending a MIDI program change.

CONTROLS

MIX

Dry/wet blend.

CRUSH

Bit reduction from 24 bits to 1 bit.

FREQ

Sample rate reduction (aliasing), from 48 kHz to 110 Hz

FILTER

Lowpass filter cutoff. Resonance can be adjusted using the editor or MIDI and saved to a preset.

DRIVE

Adjusts the input gain from 0 to +40 dB. When the knob is moved, the **PRESET** and **WAVE** LEDs will temporarily display the signal level.

Adjust the **DRIVE** knob so that the “warning” LED blinks only occasionally to maximize the input range. Reduce it to make the signal sputter and cut out. Increase it for hard sustain and a more saturated sound.

POWER

Use an isolated, well-regulated 9V DC power supply that can deliver 250 mA or more. See our knowledge base for information about specific power supplies.

If the pedal detects a problem with the power supply, the bypass LED will turn magenta and switch to bypass.

CTRL PORT

The CTRL (control) port supports:

- expression pedal
- control voltage (0-3.3V)
- Red Panda Remote 4 (or DIY switches)
- Tap tempo (normally open)
- 1/4" MIDI (via 3rd-party adapters)

USB PORT

The Mini USB port supports:

- firmware updates
- MIDI

CONTROLS (CONT.)

WAVE

Press to cycle through modulation waves:

- Triangle LFO,
- Square wave LFO
- Random LFO
- Wavefolder
- Wave window
- Waveshaper

LFO waveforms modulate the **FREQ** control, but can be routed to **FILTER** or **MIX** using the editor or MIDI and saved to a preset.

RATE

LFO frequency. Also syncs to tap tempo or MIDI clock. (Use the editor to set divisions.)

DEPTH

Sets the modulation amount for LFO waves. Adjusts the foldover point, window level, or waveshaper curve. These are level dependent, and also affected by **DRIVE**.

ON

Bypass / effect switch. Hold for momentary effect. The ON LED blinks yellow for tap tempo and MIDI clock sync.

SPECS

Input impedance: 1 MΩ
 Output impedance: < 470 Ω
 Max. input: +8 dBu
 Power: 9V DC, center negative
 Current: 250 mA

EXPRESSION PEDAL

Use a pedal with a 10-25 kΩ linear pot.

- Hold right footswitch while plugging in exp.
- Move to heel position, adjust knobs.
- Move to toe position, adjust knobs.
- Hold right footswitch for 2 seconds to save.

Default assignment is **FREQ** knob, from minimum to knob position.

REMOTE 4

- Hold right footswitch while plugging in.
- Press footswitch for desired mode.
- Hold right footswitch for 2 seconds to save.

CONTROLS (CONT.)

ENV:DEST

Envelope modulation destination. The input signal envelope can modulate the **FREQ** knob (+/-) or **MIX** (towards wet). Can be routed to **MIX** (-) or filter cutoff using the editor or MIDI and saved to a preset.

ENV

Envelope modulation amount.

AUX

Multi-purpose footswitch that can be configured using the editor:

Tap (default) - tap tempo (hold to cancel).

Preset - cycles through presets.

Preset shift - jumps to next preset while held, returns when released. Use for emphasis or bursts of noise.

Wave on/off - disables LFO or waveshaping.

LFO hold - freezes LFO at current output value (momentary or latching).

RESOURCES

Owner's Manual:
www.redpandalab.com/downloads

Firmware updates:
www.redpandalab.com/downloads

Web-based editor (requires Chrome):
www.redpandalab.com/web-editor

Knowledge base and support:
www.redpandalab.com/support