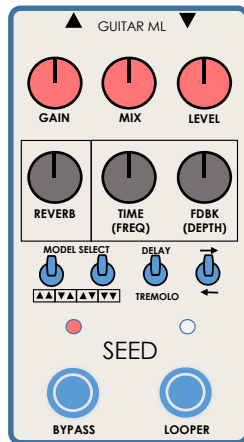## SEED Pedal - Overview

GUITAR ML

SEED is a digital multi-effects pedal with neural modeling at its' heart. It features Reverb, Delay, and Tremolo to further modify your sound. A five minute reversible looper rounds out this pedalboard-in-a-box for practice, performance, and musical experimentation.
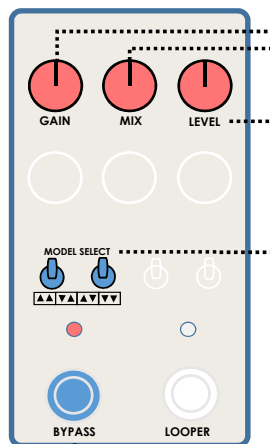
- Power – 9v DC, center negative
- Input/Output – ¼" Mono Jack

Neural Modeling is a technique that uses neural networks to replicate the sound of real analog devices. Seed uses this technology to recreate three classic amplifiers and one overdrive pedal. Much of the tech used to power the Seed pedal is open source and free to use. Visit GuitarML.com to learn more.

Controls – Neural Model / Routing

GUITAR ML

GAIN
Controls the signal gain prior to the neural model.

MIX
Dry/Wet mix, where dry is the neural model output, and wet is the Reverb and Delay output. (Tremolo Depth is a separate control that affects the overall mix.) Left is full dry, right is full wet.

LEVEL
Level is the overall output volume of the pedal, excluding the Looper output.

MODEL SELECT Switches (1st and 2nd switches from left)
Selects which of the 4 available neural models are active by using the 4 possible combinations of these two switches.
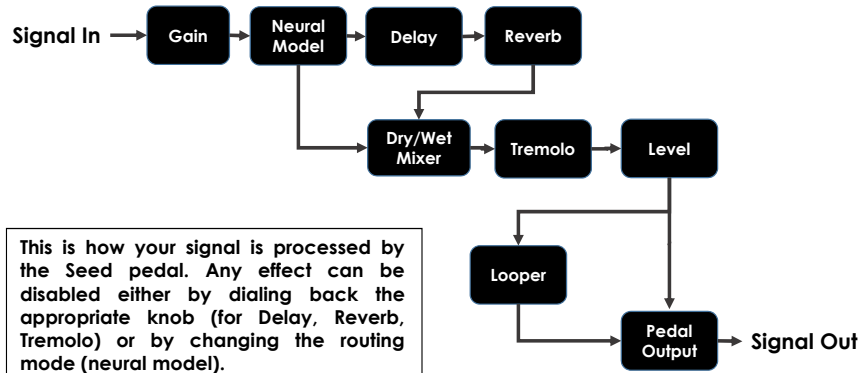
1. Up/Up   : *Fender '57 Deluxe*   3. Up/Down   : *Klon style pedal*
2. Down/Up : *Matchless SC30*   4. Down/Down : *Mesa IIc+ Amp*

BYPASS FOOTSWITCH

Single Press: Engages / Disengages the effect. LED will be off when bypassed, and on when engaged. Digital Bypass.

Hold for 1 second or more: Toggles *Effects Only Mode* (neural model disabled). This will be indicated by a pulsing left LED. Hold again while not in bypass mode to re-enable the neural model.

Effects Order

Signal In → Gain → Neural Model → Delay → Reverb

Neural Model → Dry/Wet Mixer ← Reverb

Dry/Wet Mixer → Tremolo → Level

Level → Looper

Looper → Pedal Output

Level → Pedal Output → Signal Out

This is how your signal is processed by the Seed pedal. Any effect can be disabled either by dialing back the appropriate knob (for Delay, Reverb, Tremolo) or by changing the routing mode (neural model).

Controls – Time Based Effects

REVERB The feedback of the reverb module, full left is no reverb, middle is a small room, full right is endless reverb.

DELAY
TIME The delay time. Full left turns the delay off, then from 50ms to 2 seconds.
FDBK (Feedback) The feedback of the delay module. Full left is no feedback (1 repeat), full right is never-ending feedback.

TREMOLO
FREQ (Frequency) The tremolo frequency. Range is 0.5 to 12 Hz.

Depth The tremolo depth. Full left is no Tremolo, full right is 100% depth. The tremolo effect is applied to the entire mix, after the dry/wet mixer.

DELAY / TREMOLO Switch (3rd switch from left)
Selects which controls are active for the lower right two knobs, either Delay or Tremolo. When switched, the current knob settings are immediately applied.

LOOPER FOOTSWITCH
5-minute-max looper with unlimited overdubs. Press once to begin recording (pulsing LED), press again to stop recording and start playback (solid LED). Press again to overdub. Double click to pause playback (blinking LED), and double click again to resume playback. Hold footswitch to delete the loop.

LOOP REVERSE (4th switch from left)
Up is normal playback. Down will begin playing the loop in reverse. If you record while in reversed mode, it will record to the loop buffer in reverse. Combine forward and backward loops to create interesting sequences in time.

Knob labels: REVERB, TIME (FREQ), FDBK (DEPTH)
Switch labels: DELAY, TREMOLO
LOOPER