

KNIV

A utilitarian Swiss Army Knife. KNIV is a powerful active signal router consisting of a bypass looper with clean blend, and a feedbacker with expression pedal capability. The circuit utilizes a charge pump to increase the supply to 17V, in turn increasing the headroom.

CONTROLS

- LOOP:** Level of the FX-loop (SND/RCV) signal. From silence to +13.5dB.
- DRY:** Level of your dry, direct signal. From silence to +13.5dB.
- DRY O/Ø:** Inverts the dry signal phase in the 'Ø'-position. This is useful to avoid, or create, phase cancellation for instance when adding clean blend to a pedal that inverts the direct signals phase.
- LOOP Footswitch:** Relay based true bypass. Activates the FX-loop and the clean blend. Holding down the footswitch will momentarily flip the bypass state.
- FEED Footswitch:** Activates the feedback loop through analog relay based switching. Holding down the footswitch will momentarily flip the feedback state.
- Feedback:
(big knob)** The amount of feedback applied to the loop. From no feedback to a +14dB boost. The max available feedback can be set by an internal trimmer. Keep in mind that the volume knob on any device in the loop can be used to trim the feedback amount.
- FEED O/Ø:** Chose between positive ('O') and negative ('Ø') feedback. Typically time-based modulation effects and reverbs will produce different textures depending on the feedback phase. When adding feedback to something like a fuzz or distortion the switch is useful to avoid phase cancellation.
- EXP:** Enables expression pedal control of the feedback parameter. With an expression pedal engaged the feedback knob sets the max available feedback. KNIV is designed to be combined with the Moog EP-3. Connect the EP-3 and adjust its trimmer to the max position. Other 3-terminal expression pedals may be utilized, but your results may vary. Does not work with CV input.
- IN/OUT:** Guitar to 'IN', 'OUT' to Amp.
- S/R:** Send/Receive-loop. 'S' to Effects, Effects to 'R'. When not in use 'S' and 'R' are internally connected.
- Clipping:** Clipping diodes can be added to both pedal outputs (OUT and SND) by setting the internal DIP switches to the ON positions (OUT is "OUT", SND is "LOOP"). The purpose here is circuit protection for your amplifier and the pedals in the FX-loop. The clipping diodes will limit your outputs to approximately 1.5Vpp. KNIV ships with the diodes disabled. Protect your ears!

ADDITIONAL USES

KNIV can be used for other purposes than bypassing and to add feedback. Below are a few obvious and less so functions it can perform.

- Clean blend:** With effects in the loop. Simply turn up the DRY knob. Great for bass.
- Boost/Dampen:** Unused loop. Dial in DRY and LOOP to anything from silence to a ~20dB boost.
- Amp selector:** Amp 1 to OUT, Amp 2 to S, DRY at min. Toggle the bypass.
- Signal splitter:** Similar to amp selector. OUT to Output 1, S to Output 2. DRY sets volume of Output 1.
- Input selector:** Input 1 to IN, Input 2 to R, DRY at min, LOOP set to taste. Toggle bypass.
- Signal mixer:** Similar to input selector. Input 1 to IN, Input 2 to R. Set DRY and LOOP to get the right balance.
- Dry signal cut:** Effect in loop, D/Ø set for cancellation (depends on pedal), LOOP sets volume. Set DRY according to LOOP as to removes direct signal component. Sometimes its interesting to remove the dry signal component from a pedal. For instance removing the dry from a chorus will leave you with a vibrato!
Might not work with all pedals.
- Delay feedback EXP ctrl:** Delay pedal in loop with 100% wet mix capability, EXP pedal connected. Set LOOP and DRY to get the intended effect mix. Adjusting the EXP pedal adds repeats. *Might not work with all pedals.*

Technical Specs

- Input/Receive Impedance: 1 MΩ
Output/Send Impedance: <1 kΩ
Voltage: 9 VDC center negative (Boss/Ibanez/1Spot type)
Does not support battery operation
Current Draw: 50mA
Dimensions: 122mm x 70mm x 65mm
Weight: 360g