## Limited warranty

This product is guaranteed to be free of functional defects for a period of 1 year from original purchase date. Proof of purchase is required for any warranty claim. Return shipping costs are covered by Boredbrain Music within the first 30 days of purchase only. Products with obvious signs of abuse or that have been modified by the end user, may not be covered under this warranty, at the discretion of Boredbrain Music.

## service & inquiries

If you experience a problem with your Boredbrain product, or just want to share something interesting with us, please contact us at the link below and be sure to include your name, original purchase date, and a description of the problem you are experiencing. Then just hold tight, as we return most inquiries within 48 hours. We want to work with you to resolve your issue as soon as possible. Thanks.

boredbrainmusic.com/contact

Designed and Built in Richmond, VA USA





# patch tips

### Feedback Modulation

Patch a signal through the 3.5 mm **IN** and **OUT**, and a guitar pedal to the 1/4-inch jacks. Put the switch into **EUROFX** mode. Patch a CV with negative going voltages into the **MIX** CV input, and set the knob so that effect feedback comes in and out to taste. This patch is especially interesting using reverb effects.

# boredbrain unifx

UniFX is a compact and flexible effects interface that interconnects guitar pedals and electronic instruments with eurorack synthesizers. The module re-scales audio levels, offers voltage-control over the dry/wet mix, and uniquely allows for the primary and effects signals to swap sources.

- Single-channel effects loop with bi-directional level conversion
- Routes eurorack thru pedals or instrument thru eurorack
- Effects mix crossfader with CV input
- Feedback capable and functional as VCA

## technical specs

- Width: 6 HP

- **Depth:** 1.06 in (27 mm) - **Weight:** 2.3 oz (65 g)

- CV Range: ± 5 V (10 Vpp)

- Power: +12 V 16 mA, -12 V 16 mA





# USER GUIDE



#### **Effects Loop**

UniFX makes it easy to process eurorack audio signals with pedals, or to process external instruments with eurorack modules. Essentially, it is a level-scaling effects loop. The module has two pairs of mono IN and OUT jacks for signals—3.5 mm at eurorack-level and 1/4-inch at pedal-level. The slide switch labeled PEDALS-EUROFX swaps which jacks are used as the primary input/output and which are the effects send/return.

To process eurorack audio signals with guitar pedals or outboard gear, use **PEDALS** mode. The eurorack source signal is patched thru the 3.5 mm **IN** and **OUT** jacks, while any pedals are connected to the 1/4-inch **IN** and **OUT** jacks.

To process line-level instruments or guitar with eurorack modules, use **EUROFX** mode. The line source signal is patched thru the 1/4-inch **IN** and **OUT** jacks, while any effect/filter/etc modules are connected to the 3.5 mm **IN** and **OUT** jacks.

Audio level scaling is approximately  $\pm$  12 dB, appropriate for most applications.

#### **Mix Control**

The **FX MIX** parameter is a variable crossfader controlling the dry/wet balance of the input and effects return signals. The amount of effects mix is indicated by the **WHITE LED**. With the knob turned all the way down, only the input signal is heard from the **OUT** jack and the LED is off. Alternately, with the knob turned all the way up, only the effects return signal is heard and the LED is fully illuminated. The center position produces a 50/50 mix.

This parameter may also be automated using the CV input labeled **MIX**, wherein the knob position is used to bias the incoming control voltage. The full range of the parameter is 10 Vpp, so a typical LFO of  $\pm$  5 V will fully sweep the **FX MIX** up and down if the knob is in the center position.

## VCA & Feedback Effects

Because the circuit is VCA-based and DC-coupled, UniFX may also be used like a typical VCA module for both audio and control voltages. The only difference is that the CV input works in reverse—as the voltage is increased, the signal is reduced. Simply run the primary signal through the 3.5mm IN and OUT jacks, connect nothing to the 1/4-inch jacks, and select PEDALS mode using the switch. Turn the FX MIX all the way up to have no dry signal, and apply a negative going control voltage to the MIX CV input.

Additionally, due to UniFX's switching effects loop topology, feedback effects can be easily achieved. Just slide the switch into the "wrong" mode, and turn the **FX MIX** parameter down to increase the amount of the effects return being fed back into the effects send. The **MIX CV** input can also be used for experimental voltage-controlled feedback effects..

