

# 2hp Lo-Fi

## Analog/Digital Degradation Emulator


### ANALOG MODE

Toggle to LEFT

*\*Digital Mode on page 2*


**Audio Input** —   
Range: 10Vpp

**Wow & Flutter CV Input** —   
Range: -5V to +5V

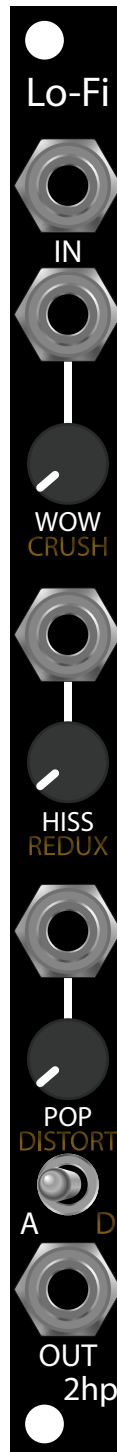
**Wow & Flutter** —   
Controls the variation and amount of tape speed modulation, resulting in undulating pitch fluctuations and dips.

The effect is off when the knob is fully counter clockwise.

**Pops & Crackles CV Input** —   
Range: -5V to +5V

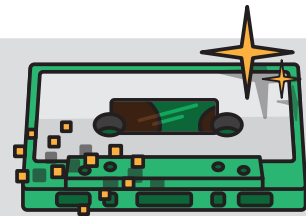
**Pops & Crackles** —   
Controls the amount of pops, crackles, and dropouts on the audio signal. The last 1/3 of the knob introduces soft tape saturation to the signal.

The effect is off when the knob is fully counter clockwise.



### Tech Specs

Width: 2HP  
Depth: 45mm  
Power Consumption:  
+12V=85mA, -12V=7mA,  
+5V=0mA



**Watch The Demo**

— **Hiss CV Input**  
Range: -5V to +5V

— **Hiss**  
Controls the amount of tape noise emulation. This effect is a combination of noise, amplitude modulation, and dynamic filtering.

The effect is off when the knob is fully counter clockwise.

— **Mode Toggle**  
Toggles between Analog and Digital modes.

— **Audio Output**  
Range: 10Vpp

# DIGITAL MODE

*Toggle to RIGHT*

## Audio Input

Range: 10Vpp

## Bitcrusher

## CV Input

Range: -5V to +5V

## Bitcrusher

Controls the amount of bit-depth reduction on the audio signal, from 32-bit to 1-bit.

The effect is off when the knob is fully counter clockwise.

## Distortion

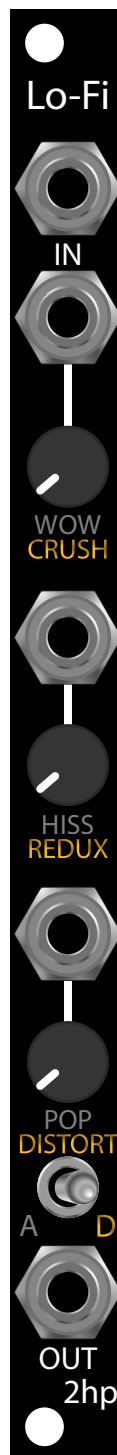
## CV Input

Range: -5V to +5V

## Distortion

Controls the amount of distortion on the audio signal. Maximum distortion is fully clockwise.

The effect is off when the knob is fully counter clockwise.



## Reduction CV Input

Range: -5V to +5V

## Reduction

Controls the amount of sample-rate reduction on the audio signal. Maximum reduction is fully clockwise.

The effect is at 48kHz when the knob is fully counter clockwise.

## Mode Toggle

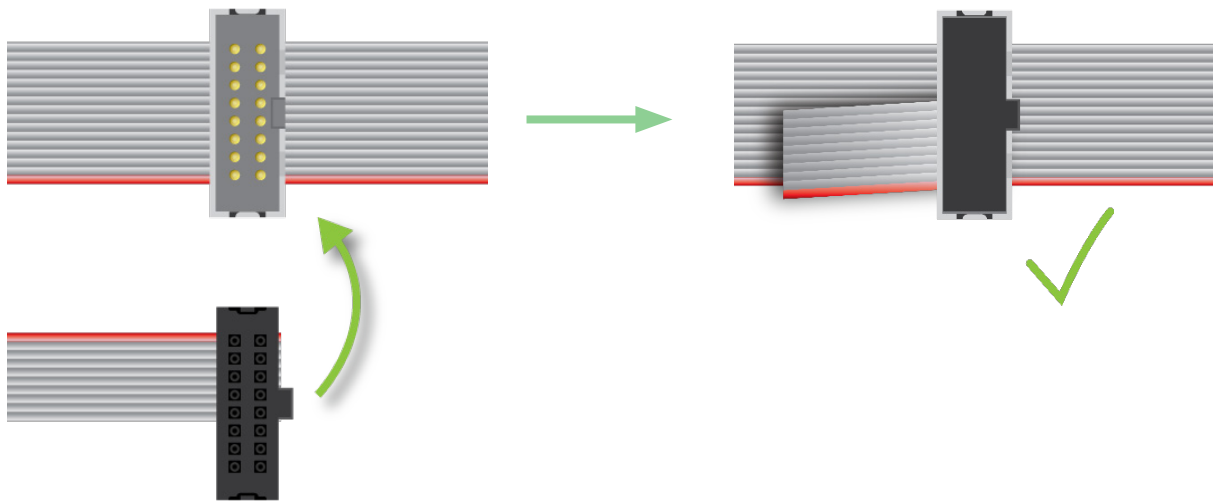
Toggles between Analog and Digital modes.

## Audio Output

Range: 10Vpp

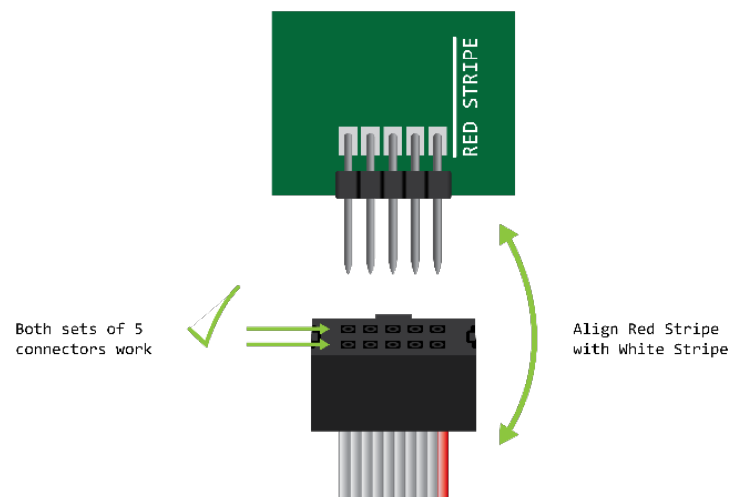
# Module Installation

- To install your 2hp module, locate a space with the appropriate HP in your rack for installation.
- Next, connect the module's power cable to your power supply. The cables on this end are keyed, though you should make sure to align the red stripes on both connectors to ensure safe and proper connection. Our illustration uses a flying bus cable, though the same action applies for busboards/alternate power solutions. See the figure below for reference:



- Next, make sure your module's power cable is properly connected to your module. For 2hp modules, confirm that your cable's red stripe aligns with the white marker line on the module's PCB, just above the power header. You may notice that even though there is only 1 row of 5 pins on your 2hp module, but 2 rows on the power cable. You can use either row of 5 pin connectors on the cable with your module, so long as the red stripe is properly aligned. See figure below for reference:

- Finally, mount your module to the rails using 2.5mm mounting screws and the included sliding mounting nuts. Your module is now ready to be powered on and patched!



# Module Pairings

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Lo-Fi is a great complement to any single sound source, but here are a few considerations from our line up that we think work great with Lo-Fi!



## Swarm

Our latest super-sawtooth oscillator makes a perfect pairing with Lo-Fi.

Crunch up your swarming saws with the digital mode, or patch together a wobbly, vintage sawtooth synth melody with the analog mode.

## Play

Take any sample, whether it's ambient guitar or a hip-hop beat, and make it lo-fi.



## MMF

Dial in the exact type and amount of filtering you are looking for in your Lo-Fi sound by pairing it with MMF, our analog multi-mode filter.

With its simultaneous LP, HP, and BP outputs, you can mix an assortment of tape timbres together, or blend them into something entirely new!

## Loop

Build a tape looper in 4HP! Loop can provide high-fidelity on its own.

But, if you are looking for the endearing qualities of tape SOS looping, Lo-Fi is the perfect end of chain effect for your modular looping experiments!

