# **2hp Pitch**

#### Time Domain Pitch Shifter w/ Wow&Flutter

## **Audio Input**

Range: 10Vpp

#### **W&F CV Input**

Range: ±5V

#### **W&F Knob**

Controls the fluctuation of the pitch shifted signal. When the knob is fully CCW, no fluctuation in the signal is present. When the knob is fully CW, random wow and flutter are introduced to fluctuate the pitch shifted signal.

## **1V/OCT Input**

Range: ±5V Tracks 1 octave further than the knob in either direction.

#### **Pitch Knobs**

Transposes the signal up/down 2 octaves. No transposition applied when the knob is at the 12 o'clock position.



#### **Tech Specs**

Width: 2HP
Depth: 45mm
Power Consumption:
+12V=78mA, -12V=9mA,
+5V=0mA

#### What is W&F?

Wow and flutter is a wavering tone or group of tones that is caused by irregularities in turntable or tape drive speed during recording, duplication, or reproduction.

## **Mix CV Input**

Range: ±5V

#### **Mix Knob**

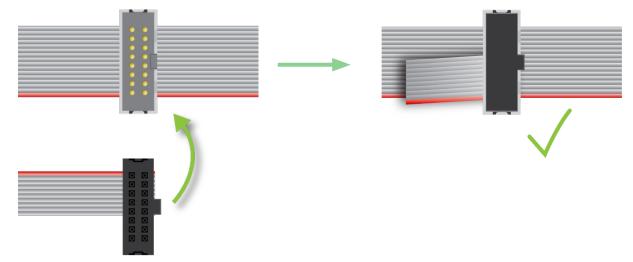
Mixes between the dry and wet signal. When the knob is fully CCW, only the dry signal is present. When the knob is fully CW, only the wet signal is present.

**Audio Out** 

Range: 10Vpp

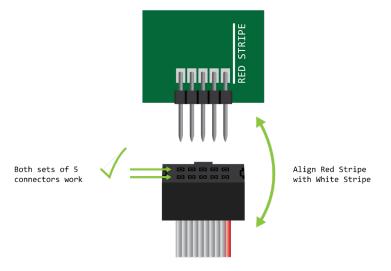
## Module Installation

- 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**

Pitch 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 Pitch!



#### VCO

Turn your one oscillator into two by pitch shifting VCO! Perfect for introducing harmonics to add complexity to your sound. With VCO's multiple outputs, you can quickly make multi timbral voices in no time.

#### Loop

Pitch makes a great companion to loop, either before or after in the patch. Give your looper a tape like sound with Pitch's W&F effect, or build complex harmonies with the recording buffer from a single voice.





#### Play

Pitch Shifting various samples can lead to unexpected and beautiful sounds and timbres that can't be found otherwise.
Send drum loops, glitch textures, vocal samples, and more through Pitch using Play!

#### **Freez**

Pitch and Freez make the ultimate lo-fi combo in a small package of two 2hp modules. Balance Freez's S.Rate and Pitch's W&F to find some great sweet spots. Incorporate pitch shifting and freezing, and the modulatable possibilities will seem endless.

