

# 2hp Tune

## Voltage Quantizer

### Tech Specs

Width: 2HP  
 Depth: 45mm  
 Power Consumption:  
 +12V=40mA, -12V=3mA, +5V=0mA

**Input**  
 CV signal input to be quantized.  
 Range: 0V to +5V

**Scale LEDs**  
 Visually indicates which scale is selected.

**Scale Knob**  
 Selects the quantized scale, indicated by the LEDs.

**Bias Knob**  
 Adjusts the base voltage level diatonically.

**Bias CV Input**  
 Unpolar positive control voltage input for Bias. Range: 0v to +5V.

**Output**  
 Quantized V/Oct output.  
 Range: 0V to +5V



### Scales

Below are the available scales and their LED indications:

- 1. **Chromatic:** All LEDs
- 2. **Major:** MAJ
- 3. **Major Pentatonic:** MAJ,\*
- 4. **Minor:** MIN
- 5. **Minor Pentatonic:** MIN,\*
- 6. **Harmonic Minor:** HRM
- 7. **Egyptian Minor:** HRM,\*
- 8. **Whole Tone:** WHL
- 9. **Octatonic (0, 2):** WHL,\*
- 10. **Diminished:** DIM
- 11. **Octatonic (0,1):** DIM,\*

### Bias

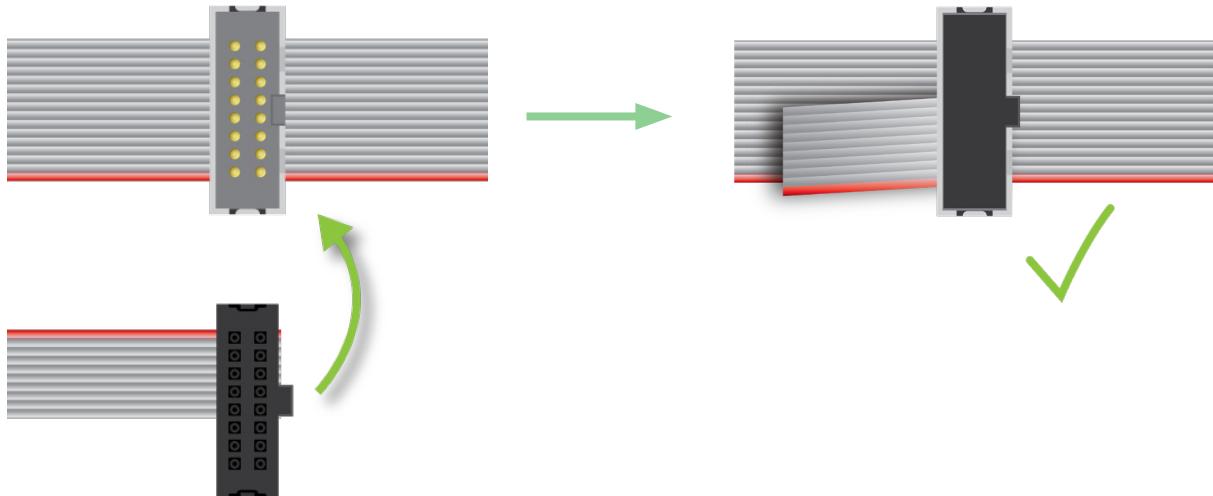
The Bias control adjusts the range of notes which Tune will quantize to, diatonically within the selected scale.

When the knob is fully left, the currently selected scale will not be biased.

When the knob is fully right, the last note of the scale will be the starting point at which the scale begins.

# 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 appropriate mounting screws. Your module is now ready to be powered on and patched!

