

# 2hp – Pitch

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- [Manual PDF](#)

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[2hp Pitch Manual PDF](#)

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## 2hp Pitch – Cheat Sheet

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### Overview

**2hp Pitch** is a compact Time Domain Pitch Shifter module for Eurorack with built-in Wow & Flutter modulation. It allows shifting of pitch ( $\pm 2$  octaves), modulation of pitch "instability," and wet/dry mixing. Ideal for creative audio processing, lo-fi effects, and harmonization.

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### Inputs, Outputs & Parameter Summary

Name	Type	Voltage Range	Description
Audio Input	IN	10Vpp	Main audio signal input (patch audio here to be pitch shifted).
Audio Output	OUT	-	Main processed audio signal output.
W&F CV Input	CV IN	+5V	Voltage control for Wow & Flutter depth (modulates instability).
		+5V	Voltage control for dry/wet blend.

Name	Type	Voltage Range	Description
<b>Mix CV Input</b>	CV IN		
<b>1V/OCT Input</b>	CV IN	+5V	Standard 1V/oct pitch input; extends pitch shift control externally.

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## Knob / Control Summary

Name	Position	Function
<b>W&amp;F Knob</b>	Fully CCW → CW	Controls wow & flutter random modulation depth. CCW = none, CW = maximum.
<b>Mix Knob</b>	Fully CCW → CW	Mixes between dry (CCW) and wet (CW) signal. Any blend allowed in-between.
<b>Pitch Knob</b>	CCW, Noon, CW	Shifts pitch -2 octaves (CCW) to +2 octaves (CW). Noon = no transposition.

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## Performance Tips

- **Combine VCO:** Create harmonies from a single oscillator by pitch shifting and mixing both.
- **Layer with Loop:** Add tape-style warble to loopers or harmonize sampled material.
- **Use with Play:** Send in drum loops/samples, pitch shift for unexpected timbral changes.
- **Lo-fi Combo with Freez:** Combine Freez and Pitch for ultra-lo-fi, modulate both for unique artifacts.

# Voltage Reference

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- **W&F CV Input:** 0–+5V
- **Mix CV Input:** 0–+5V
- **1V/Oct Input:** 0–+5V (tracks one octave further than the knob range in either direction)
- **Audio Input:** ±5V (10Vpp typical Eurorack synth audio levels)

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## Installation Notes

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- Align red stripe of power cable with white marker on PCB.
- Module width: 2HP. Depth: 45mm.
- Power: +12V 78mA, -12V 9mA

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## What is Wow & Flutter?

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- **Wow & Flutter** is a modulation effect simulating pitch instability due to tape/turntable irregularities, lending warmth or 'lo-fi' character.

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**More info:** [twohp.com/modules/pitch](http://twohp.com/modules/pitch)

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**Generated With Eurorack Processor**