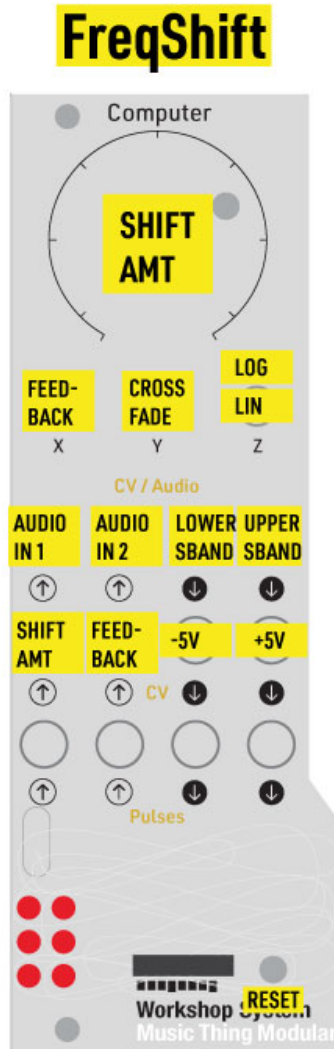


# Frequency Shifter

This frequency shifter is designed for feedback patching and experimental use, similar to



the Red Panda 'Radius' pedal.

## Controls

- **Main** : frequency shift amount (center = 0 Hz)
- **Switch** : **Up** : wide, log-scaled bipolar range (+/- 7000 Hz) **Middle** : narrower bipolar linear range (+/- 440 Hz)
- **X** : internal feedback amount

- **Y** : crossfade audio inputs

## Inputs

- **AudioIn1** : primary audio input
- **AudioIn2** : secondary audio input
- **CVIn1** : shift modulation (added to Main)
- **CVIn2** : combined feedback path blend (down/up balance)

## Outputs

- **AudioOut1** : low sideband output
- **AudioOut2** : high sideband output
- **CVOut1** : -5V (helpful for CVIn2)
- **CVOut2** : +5V (helpful for CVIn2)

## LEDs

- **0 / 1** : input / output level
- **2 / 3** : positive / negative shift
- **4 / 5** : upper / lower sideband

## Examples

Example track using this card in feedback at:  
<https://benregnier.bandcamp.com/track/freqshift>

This is the patch used in the track:

### FreqShift - 1

Feedback patch with possibilities! Play with any and all controls on computer, oscillator frequencies, feedback amount in Amplified, and the filters and slopes. If you turn the filters up it can be piercing - you are forewarned!

## Notes

- Includes a RP2040 overclock request to 250 MHz for extra DSP headroom.