

AI Synthesis ALO22 Harmonic Mixer

User's Manual

This is the Manual for the [ALO22 Harmonic Mixer](#) you can purchase it by going to:

<https://aisynthesis.com/product/harmonic-cp3-style-mixer/>.

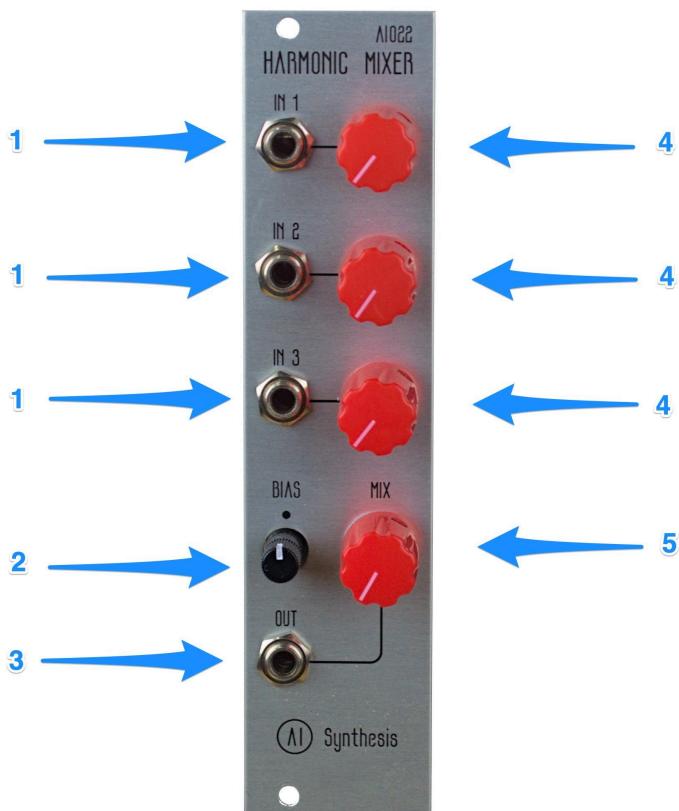
1. About the ALO22 Harmonic Mixer

The ALO22 Harmonic Mixer is a discreet mixer using no ICs. As gain increases harmonics and analog warmth are added. As gain increases more, distortion and phasing is added, creating new waveforms from old ones.

The ALO22 takes inspiration from the legendary Moog Modular CP3 style mixer, but updates it for eurorack and allows for user customization of the circuit. Many Moog Modular users attribute the CP3 mixer module to providing much of the warmth of the Moog Modular sound.

An exposed Bias knob allows abuse of the circuit, and allows for faithful replication of incoming audio, or radical analog wave shaping and distortion. It is also possible to use the Bias knob to adjust a +/- 5V signal into a o/+ or o/- signal.

2. AIO22 Controls



1. Mono Inputs. These inputs accept mono audio or voltage signals.

2. Bias Knob. This knob adjusts the voltage bias of the circuit. Turning this knob can change the offset of incoming audio or control voltage and cause analog wave shaping.

3. Mix Out. This is the primary voltage output.

4. Input Volume. The position of these knobs control the volume of each input. These knobs are passive attenuators. As volume increases more harmonic distortion is added.

5. Master Volume. The position of this knob controls the volume of audio and or voltage of the Mix Out. As volume increases more harmonic distortion is added.

3. Power

The AIO22 uses a shrouded header to prevent the cable being plugged in the wrong way. The unit draws 9 mA on the positive rail, and 9 mA on the negative side.