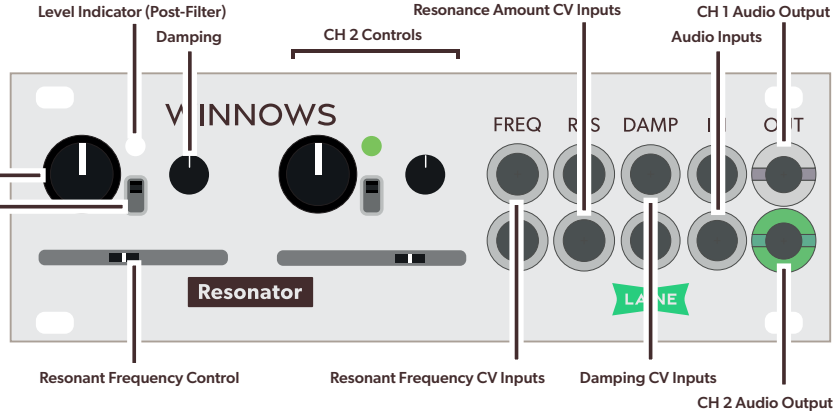
LAINE

WINNOWS

Quick Start Guide

Dual Resonator



Winnows brings many possibilities for creative resonant shaping, from gentle waves to sharp spikes and vowel filtering.

Operation

Each channel filters and boosts around a central resonant cutoff frequency, with variable steepness, damped by low pass filters. The audio inputs can be routed to give a wide or steep response depending on how many filter poles they pass through.

Pole Routing Switches

Wide Response
Switch in the lower position
2-Pole BP + 3-Pole Resonance damped by 1-Pole LP

Steep Response
Switch in the upper position
Wide response into 2-Pole BP + 2-Pole Resonance damped by 1-Pole LP

Central Frequency

The central resonant frequency of the band-pass filters for each channel are controlled by horizontal slide potentiometers.
The damping cutoff is independant to these and can be used to control any harshness from the band-pass filtering.

Resonance

The resonance (or Q) amount can be adjusted by the larger round channel potentiometer, with the highest resonance occuring at the fully clock-wise position. Self-oscillation with up to a one second decay envelope will occur near this point.

CV input levels are 0-8V, Audio inputs expect 10VPP

Latest user manual and product support: www.laine.uk