Dual Voltage Controlled Amplifier

Operation

This module is a dual voltage controlled amplifier, which can be configured either for linear or exponential response. The two VCAs are labelled as A and B.

Knobs

- Gain_{A,B}: controls the initial gain.
- $CV_{A,B}$: attenuates the $CV_{A,B}$ inputs.

Inputs

- $\mathbf{In}_{\mathbf{A},\mathbf{B}}$: VCA signal inputs.
- $\mathbf{CV}_{\mathbf{A},\mathbf{B}}$: VCA control voltage inputs. For a 0V input, no signal passes through. For a 5V input, the VCA reaches maximum (unity) gain, if the $\mathbf{CV}_{\mathbf{A},\mathbf{B}}$ knob is turned all the way to the right.

Outputs

• $In_{A,B}$: VCA signal outputs.

Configuration

Jumpers

- **JP1:** this controls whether VCA A has a linear (default position) or exponential response.
- **JP2:** this controls whether VCA B has a linear (default position) or exponential response.



Figure 1: Jumper (in their default position) and trimmer location

Trimmers

- \bullet RV1: this trimmer nulls out the DC offset on $\mathbf{Out}_\mathbf{A}$
- $\bullet~\mathbf{RV2:}$ this trimmer nulls out the DC offset on $\mathbf{Out_B}$

Warnings

- Do not apply power to the module with reverse polarity. Follow the markings on the board's silkscren to know which way is -12V.
- Do not patch two outputs together, neither within this module nor between this and other module.
- Do not apply voltages beyond the supply rails $(\pm 12V)$ to any inputs.