

CV EXPERT QUICK START GUIDE

CV EXPERT is a dual polarizer with offset and gain, featuring an internal LFO designed for precise customization of your control voltage.

CONTROLS

- 1. PLRZR.** The polarizer control functions as both an attenuator and inverter. Clockwise rotation allows the original voltage to pass through like an attenuator. Counterclockwise rotation inverts the signal, transforming positive signals into negative ones. At the midpoint, the signal is nullified.
- 2. OFFSET** adds or subtracts voltage from/to the passing signal. In the center position, there is no voltage offset. Turning the control to the right shifts the voltage to the positive range, while turning it to the left shifts it to the negative range.
- 3. GAIN.** Amplifies the signal with a gain of 2 at the control's maximum position, effectively doubling the applied voltage (e.g., +1V becomes +2V, +3V becomes +6V, or +4V becomes +8V). The voltage is capped at a maximum of +/-10V.
- 4. LFO RATE.** Turn this knob to the right to increase the rate of the internal LFO. The LFO is internally connected to both inputs (A).

INPUTS & OUTPUTS

A. Voltage input (DC coupled). Connect any control voltage source here that is to be processed by the polarizer, offset or gain controllers. The internal LFO is connected to this input, which is automatically interrupted when an external CV is inserted. You can choose whether you want to send a triangular or square waveform to the input, which can be selected with a jumper on the back of the module.

B. Voltage output. Take the modified voltage from this jack and connect it to the CV inputs of other modules.

CALIBRATION

WAVE_SEL1 & WAVE_SEL2. Each of the two inputs has a special wave selection jumper on the back of the module. Set the jumper for the respective input to TRI to route a triangular waveform and set it to SQU to connect a square wave.

USE CASES

- My LFO only cycles from -3V to +3V, but I need it to cycle from -1V to +5V → use the offset to add the desired voltage.
- My control voltage is in the positive range, but I need to bring it into the negative range → use the polarizer and turn the knob to the left until you get the desired negative voltage level.
- My current LFO is too weak to sample the entire range of playback points of my ganular sampler → use gain to increase the voltage level until you can control the entire sample playback range.
- My envelope doesn't fully open the filter I'm controlling → add gain to increase the voltage.
- I want to control two module parameters simultaneously with slightly different voltage levels. Use Cve's internal LFO and take the signals from both outputs. Adjust each one individually to suit your needs.
- I have a small case with low HP count and I need an LFO and a CV processing tool → use Cve which is only 4HP wide
- I need a clock/gate signal with at least +5V → use the Cve internal square wave LFO and add gain until you reach the desired voltage level.

QUESTIONS?

Please go to www.st-modular.de and post your question in the forum.

