WP CVs

WP CVs is an expander module for Wave Packets that significantly enhances CV control. It provides 4 CV inputs, which can be assigned to various parameters using the LED matrix. With a many-to-many mapping approach, each CV can control one or multiple parameters, and each parameter can receive input from one or multiple CVs. This added CV power unlocks a wealth of new possibilities, such as, applying V/OCT control on individual target frequencies, enveloping the glide, modulating specific sections of the contour function with an LFO, or externally controlling stage times.

MODULE OVERVIEW

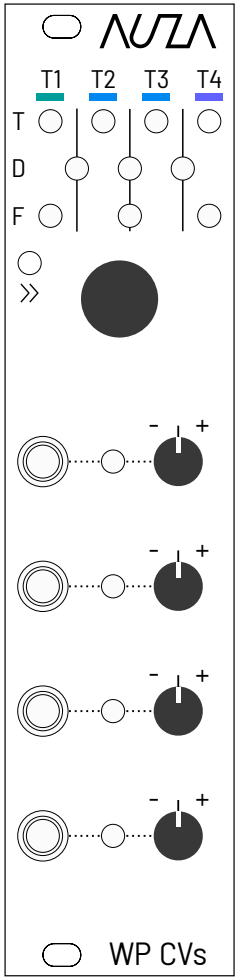
LED MATRIX

A set of LEDs which represent the modulatable parameters on Wave Packets. The T, D and F parameters are laid out on a grid, corresponding to the parameter positionings on WP. An additional glide (>>) parameter is available. Each CV can be mapped to one or multiple parameters.

4x CV INPUTS

Each CV input channel includes a LED, attenuverter and jack with a ±8V range. The LED illuminated shows the currently selected CV. Turning the ENCODER in VIEW mode will flick through the current CV in view, and plugging in a cable will switch the current CV in view to the channel the cable went in to.

If a CV input is mapped to an F parameter, the CV input will modulate the frequency at 1V per octave when the attenuverter is turned fully clockwise.



ENCODER

In VIEW mode:

- Turning the encoder flicks through the CV INPUTS. The mappings for each CV input will display on the LED MATRIX.
- Holding down the encoder while moving a knob or slider on Wave Packets "quick" assigns or unassigns that parameter to the current CV.
- Tapping on the encoder will put the module in to MANUAL ASSIGN mode for the current CV.

In MANUAL ASSIGN mode:

- Turning the encoder flicks through the parameters on the LED MATRIX.
- Pressing the encoder assigns or unassigns the current parameter to the CV.
- Holding the encoder for a few seconds will save the mappings and put the module back in to VIEW mode.

ADDITIONAL INFORMATION

MODULE INSTALLATION

Update Wave Packets Firmware

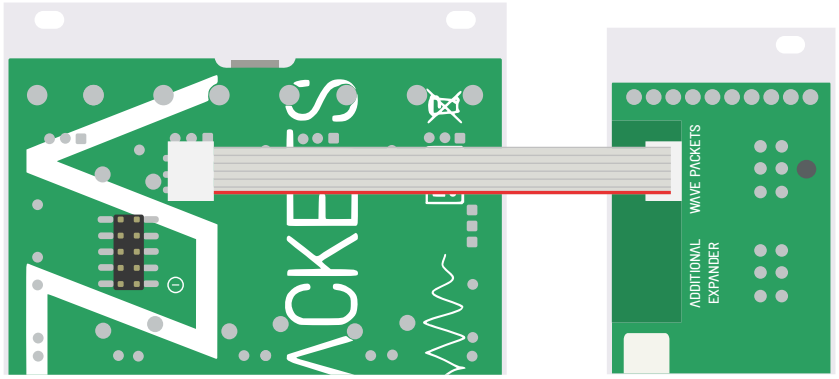
IMPORTANT: The firmware on your original Wave Packets module needs to be updated (to at least V1.1.0) before WP CVs can communicate with it. Follow the instructions here: **firmware.auzaaudio.com**

Power

WP CVs requires a standard 12V/-12V Eurorack power supply. The supplied ribbon cable must be used with both Wave Packets and WP CVs. The single 2x8 pin header connects to your power supply, and the two 2x5 pin headers connect to the 10-pin headers on Wave Packets and WP CVs. On WP CVs, the red stripe of the ribbon cable (-12V side) must align with the "RED STRIPE" labelling on the PCB. Only ever connect or disconnect the module with your power supply completely switched off and powered down.

Data Connection to Wave Packets

The 6 pin ribbon cable is used to send data from WP CVs to Wave Packets. While your power supply is off, connect the 2 modules together as below:



Daisy Chaining Multiple WP CVs

In case 4 additional CV inputs isn't enough, WP CVs can be daisy chained together, meaning you can connect an unlimited number of WP CVs! For each additional module, connect the 6 pin ribbon cable from the "WAVE PACKETS" header to the "ADDITIONAL EXPANDER" header of the previous module.

CALIBRATION

Wave Packets CVs comes factory calibrated, however due to variances in systems and to account for differences in pitch CV sources, you may wish to recalibrate the inputs with your own pitch CV source:

1) Position all 4 attenuverters in the counterclockwise (most left) position and hold the ENCODER for 8 secs.
2) The left F LED and Input 1 LED will blink.
3) Send 1.000V from your pitch source in to Input 1. Press the ENCODER. Repeat for the other 3 inputs.
4) The middle F LED and Input 1 LED will blink.
5) Send 3.000V from your pitch source in to Input 1. Press the ENCODER. Repeat for the other 3 inputs.
6) Your module is now calibrated to your source.

FIRMWARE UPDATES

In addition to a required firmware update for Wave Packets, firmware updates for WP CVs may be issued. Check at **firmware.auzaaudio.com**

The module has a USB C port, but a USB C to USB A cable MUST be used. It can be used in conjunction with USB C adapters. If your WP CVs is PCB version 1.03, you must use a supplied purple cable, with the cable orientated so the black dot marking on the USB C port faces the side of the PCB serial number.

SPECIFICATIONS

- 6 HP width, 28 mm depth
- Current draw: 30mA on +12V rail, 10mA on the -12V rail
- ARM Cortex-M4 architecture, with 32-bit floating point internal processing
- 4 CV Inputs: +/-8V input range, 13-bit, 48 KHz (1 KHz if connected to WP PCB version 1.01)
- 100K input impedance on all inputs

WARRANTY

A one-year limited warranty is provided from the date of manufacture to the first owner. The warranty covers the repair or replacement of the module only and is limited to manufacturing defects. Return shipping is to be paid by the customer and the choice of repair or replacement is to be solely determined by Auza upon inspection of the returned module. The warranty does not cover any damages resulting from incorrect use, or any damages or costs beyond the repair or replacement of the module. Examples of incorrect use include but are not limited to: physical damage as a result of the use of excessive force or misuse, dropping or submerging the module; exposure to moisture or liquid; damage caused by incorrect power conditions, excessive or poorly regulated voltages; overexposure to heat or direct sunlight; placement of the module in conditions that do not facilitate good heat dispersion or are in any way comburant; the use of unofficial firmware. No responsibility for harm to persons or property caused by use of this module is implied or accepted. If you suspect your module to be faulty, you must immediately power off the module and contact team@auzaaudio.com for assistance. Please do not attempt to return a module without express consent and instruction from us.