BABY, YOU MAKE ME WISH I HAD THREE HANDS!

Endorphines

TOTAL RECALL
EURORACK PRESET MANAGER / MACRO CONTROLLER

- 6 HP width, 3x CV preset manager/multistage and macro controller for Eurorack
- 3 channel control voltage generator/attenuator/attenuverter
- 8 preset CV manager with two banks: bipolar -5...+5V and unipolar 0...+5V
- Instant, slewed or continuous change between stored CV values
- 3-channel macro CV generator with smooth min./max. control via CV, trigger or manually
- CV acquisition: 16 bits SDADC, CV outputs: 12 bits
- Depth: 30 mm (with plugged ribbon cable)
- Power requirements: +12V: 55mA, -12V: 15mA

Video manual: https://youtu.be/NlUps_QvSGw

-12V / red stripe polarity marking

bottom/rear side of the module

EUROCRACK CONNECTOR

connect to the module from the back side

connect with the 16-pin side into the power buss board
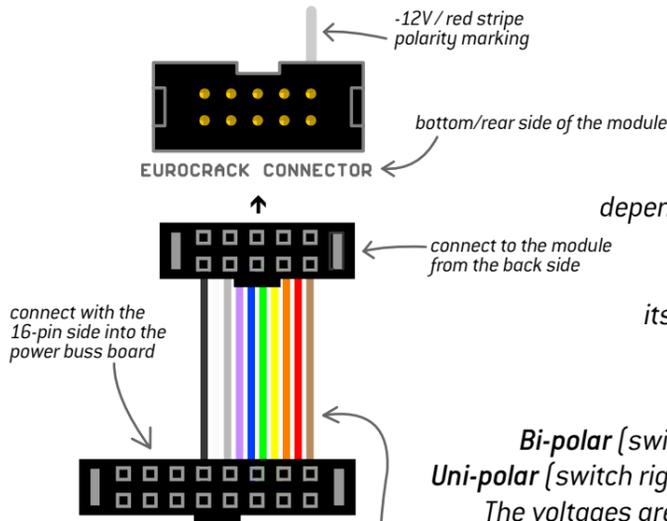
POWER CONNECTION

red/brown pair or wires correspond to negative -12V power connector

FIRMWARE UPDATE:

Download latest firmware for TOTAL RECALL here: https://www.endorphin.es

Power OFF you modular system:

launch
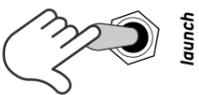
Hold SAMPLE while powering again:

sample + launch

You will see the preset I LED slowly blink:

V / I
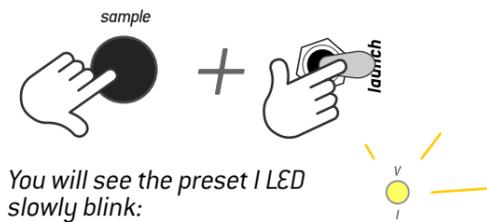
Connect the headphone output of your computer to the META CV IN input of the module with a simple mono or stereo cable.

meta/macro cv in/trig in → WAV ♪
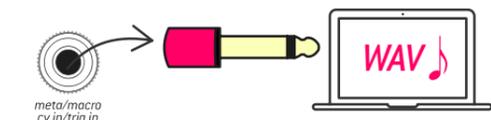
Press PLAY and wait 1+ minutes. All 4 preset LEDs will quickly blink and CV LEDs will be blue. The module will reboot automatically.

Don't play any other sounds on your computer during update process. When all LEDs flash RED, the signal is too low or too high. Just reset the firmware update process by pressing SAMPLE once and regulate the signal level with RATE knob (full CCW: 1x amplification, full CW: 10x amplification)

Video update guide: https://youtu.be/WKt7FdRGRYI

3x control voltage **outputs**

Preset LEDs, depending on the MODE they show either selected preset (modes 1 and 2) or selecting the channel to adjust its min./max. levels (modes 3 and 4)

Bi-polar (switch to the left/-5...+5V output) and **Uni-polar** (switch right/0...+5V output) voltage setting. The voltages are stored separately in each setting.

Manual CV knobs define the voltage value in the selected state. Act as attenuator in uni-polar setting or attenuverter in bi-polar setting, if external CV is applied to the corresponding CV IN jack. In macro modes 3 and 4, knobs 2 and 1 define min. and max. states for the macro morphing — knob 3 acting as macro, morphing from min. (CCW) to max. (CW).

Multimode **SAMPLE** button: Depending on the mode it either toggles the next preset (modes 1 and 2) or selects the channel (1-3) to set min./max. voltage (modes 3 and 4)

Endorphines

cv out 1   cv out 2   cv out 3

V VI ◐ VII VIII
I   II △ III IV
        ☀   macro

← bi-polar   smooth →

preset 1 / macro max.

cv in

preset 2 / macro min.

cv in

cv in   preset 3 / macro all

sample / macro sel.

meta/macro cv in/trig in / hold 1s. for strobe / 3s. for macro

TOTAL RECALL

LED indicators showing each output voltage:
-5V = red
0V = dimmed
+5V = blue

SMOOTH switch to the right enables fixed 100ms slew when switching between stored CV values (states) instead of instantly jumping from one value to another. In macro mode this enables smooth or instant morph between min./max. states.

CV inputs for channels 1-3. If no patch cable is applied, that channel has fixed CV per preset. If cable with CV is inserted, then the knob defines incoming signal attenuation (uni-polar setting) or attenuvertion (bi-polar setting)

Multimode **meta CV/trigger input**: Depending on the MODE it either works as meta CV input (modes 1 and 3) to morph between the voltage states or as meta TRIGGER (a.k.a. STROBE) input (modes 2 and 4) to switch to the next state with trigger input.

MODES EXPLAINED:

1. Preset manager with meta CV scan over the presets

V VI ◐ VII VIII
I   II △ III IV
        ☀   macro

sample — short press engages to the next preset

One LED lights up at a time, showing currently selected preset (LED is fully on for presets I-IV, semi lit for presets V-VIII). Applying CV (0...5V) into META CV will scan thru the presets. Depending on SMOOTH switch the morphing will either be instant or continuous.
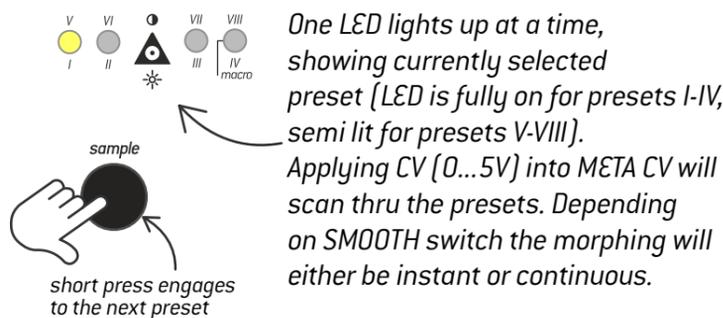
2. Preset manager with meta TRIGGER (strobe)

V VI ◐ VII VIII
I   II △ III IV
        ☀   macro

sample

LEDs indication is similar as in mode 1, but inverted. Applying trigger into META will switch to the next preset. Depending on SMOOTH switch the change will be either instant or slewed by 100ms

1 sec. press to enter mode 2 from mode 1 or 3 sec.+ press to enter modes 3/4
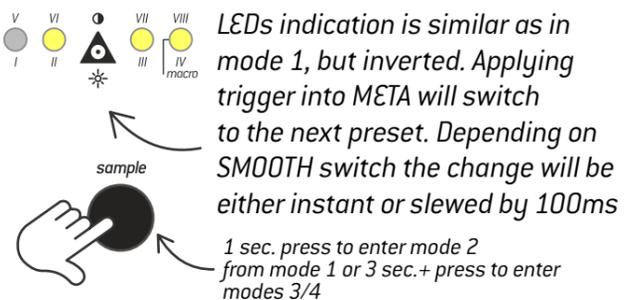
3. Macro CV generator with meta CV min.-max. morph

V VI ◐ VII VIII
I   II △ III IV
        ☀   macro

sample

sample — 3 sec.+ press to enter mode 3 from modes 1/2

LED 4 is constantly fully lit indicating macro CV mode. With short MODE press we select CV channel 1-3 to define its min/max values with the knobs 2 and 1 respectively. Applying CV into META CV will morph between min. and max. states
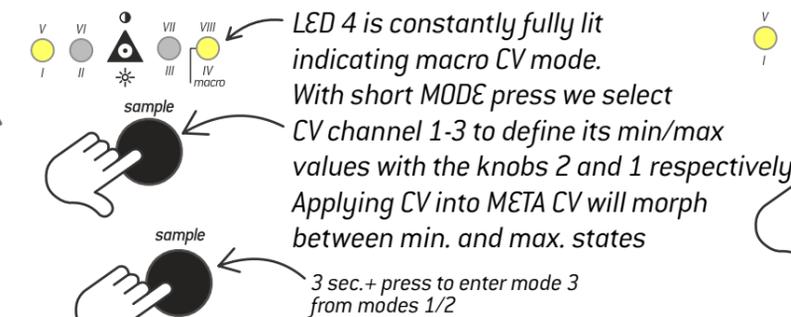
4. Macro CV generator with meta TRIGGER (strobe)

V VI ◐ VII VIII
I   II △ III IV
        ☀   macro

sample — 1 sec. press to enter mode 4 from mode 3 or back

LEDs indication is similar as in mode 3, but LED 4 is now semi-lit. Applying a single trigger to META CV will jump from min. to max. like flip-flop function. Depending on SMOOTH switch the change will either be instant or slewed by 100ms.

ENDORPHIN.ES® – TOTAL RECALL
Module design by Andreas Zhukovsky
Collection Spring / Summer 2022
Endorphin.es are made in Barcelona, Spain
Follow, like, post and tag us at instagram:
@endorphin.es

WARRANTY

RTFM – be so kind and read the manual. It will provide you with the information you need to fully indulge the module you just purchased – for which we like to thank you.
Enjoy your sound experiences, dear sonic traveller. Beginning from the product's purchase date a 1-year warranty is guaranteed for each product in case of any manufacturing errors or other functional deficiencies during runtime.
The warranty does not apply in case of: • damage caused by misuse • mechanical damage arising from careless treatment (dropping, vigorous shaking, mishandling, etc.) • damage caused by liquids or powders penetrating the device • heat damage caused by overexposure to sunlight or heating • electric damage caused by improper connecting
The warranty covers replacement or repair, as decided by us. Please contact us via email for a return authorization before sending anything. Shipping costs of sending a module back for servicing is paid by the customer. Device complies with all EU regulations concerning RoHS lead-free manufacturing and WEEE disposal