



LISTEN TO THE HEART BEAT CAREFULLY

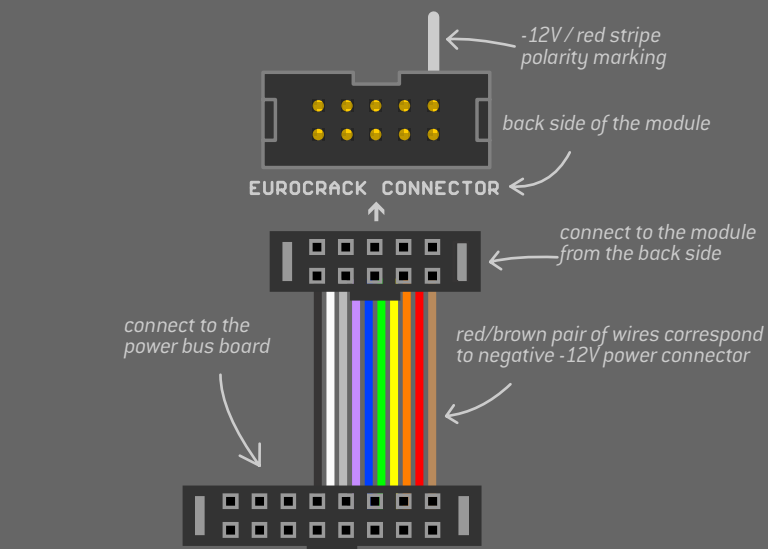
- 6 HP wide, 2-track trigger generator
- Zero-jitter clock generation: less than 50 microseconds internal clock jitter
- 101-style 16th note input mode (step/rest) with manual or CV controllable amount of trigger repeats after the active trigger step happens.
- Euclidean mode enabled for each track, set total length and the number of fills inside the Euclidean circle. Fill amount is also CV controllable.
- Individual reset inputs per track, reset for track 1 is normalised to reset of track 2
- Clock divider for incoming external clock allows to quickly obtain various musical divisions on the fly incl. triplets of course, but more importantly tuplet mode lets you stretch the desired amount of trigger repeats into a single bar.
- Dedicated mute buttons for each track
- 8 patterns of trigger sequences stored in the module and will be recalled on each power cycle.

Depth: 30 mm (with plugged in ribbon cable)
Power requirements: +12V: 30 mA, -12V: 10 mA

LED indicator:

- blinking to BPM in blue in live mode;
- lights up red in step recording,
- fuchsia in euclidean recording

track I and II trigger outputs,
trigger output length: 10 msec
Output range: 0...+10V



Output POWER CONNECTION

- internal clock out jack: 30...300 BPM in 16th notes (PPQN24 ÷ 6) when no external clock applied;
 - external clock output in 16th notes after divider;
- Output range 0...+10V

FIRMWARE UPDATE

download latest firmware for RUNNING ORDER:

<http://airways.endorphin.es>

power OFF your modular system:

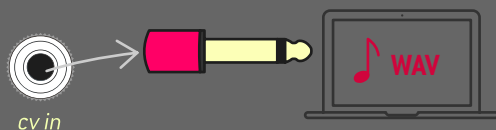


hold STEP while powering your system again:



you will see the illuminati LED slowly blink **BLUE**:

with simple mono or stereo cable connect audio output from your computer headphones output to REPEAT 1 CV IN input of the module



Press PLAY and wait 2+ minutes. Illuminati LED will quickly blink **BLUE**.

The module will reboot automatically blinking **FUCHSIA** LED after new firmware is installed

Disable alarms and notifications during the update process as they will most likely interrupt the update procedure, flight mode on phones is recommended.

When Illuminati LED flashes **RED** that means signal is too low or too high: Just reset the firmware update process by pressing REST once and regulating the signal level with RATE knob: full CCW: 1x amplification, full CW: 10x amplification).

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

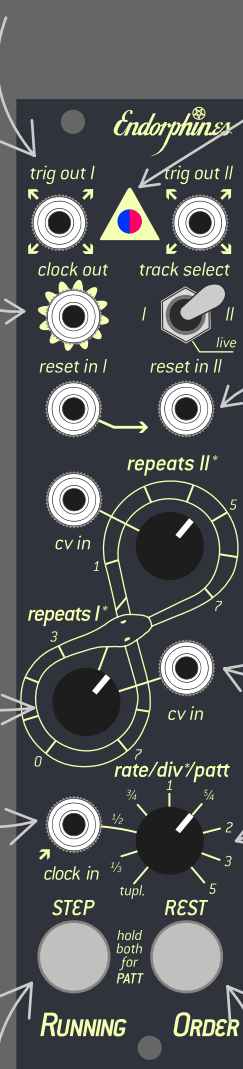
Clock output:
Repeats I/II : manual knobs with CV inputs. Set amount of active trigger repeats or Euclidean trigger fills

External clock input, 16th notes clock expected (PPQN24 ÷ 6) (0...+5V or +10V, 0.65V threshold)

- If in live mode, the buttons are individual Track I and II MUTE buttons.

- If in step record mode, the buttons are used for adding steps and rests.

- If in Euclidean record mode, the buttons set the length of the Euclidean circle (+1 step pressing STEP and +16 steps by pressing REST)



Track selector switch:

- record a trigger sequence or set the Euclidean length by switching to the left (track I) or right (track II);
- playback live mode in the middle

Reset/synchronization trigger inputs.

Each trigger applied resets a certain track's sequence to its first step. 'Reset in I' is normalised to 'reset in II', if no cable is inserted into 'reset in II'.

When a CV cable is inserted, each Repeats knob acts as CV attenuator; expected CV range: 0...+5V

Rate/divider knob:

- if no clock cable is inserted, then this knob sets the speed of the internal clock in BPM, from 30 to 300;
- if clock is inserted via cable, this knob sets the speed of dividers/tuplets for the repeats.

ENDORPHIN.ES® – RUNNING ORDER

Module design by Andreas Zhukovsky

Collection Spring/Summer 2021

Endorphin.es are made in Barcelona, Spain

Follow, like, post and tag us at instagram:

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<https://www.instagram.com/endorphin.es/>

For technical requests: support@endorphin.es

For general requests: info@endorphin.es

FURTH BARCELONA, S.L.

VAT ID: ES B66836487

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

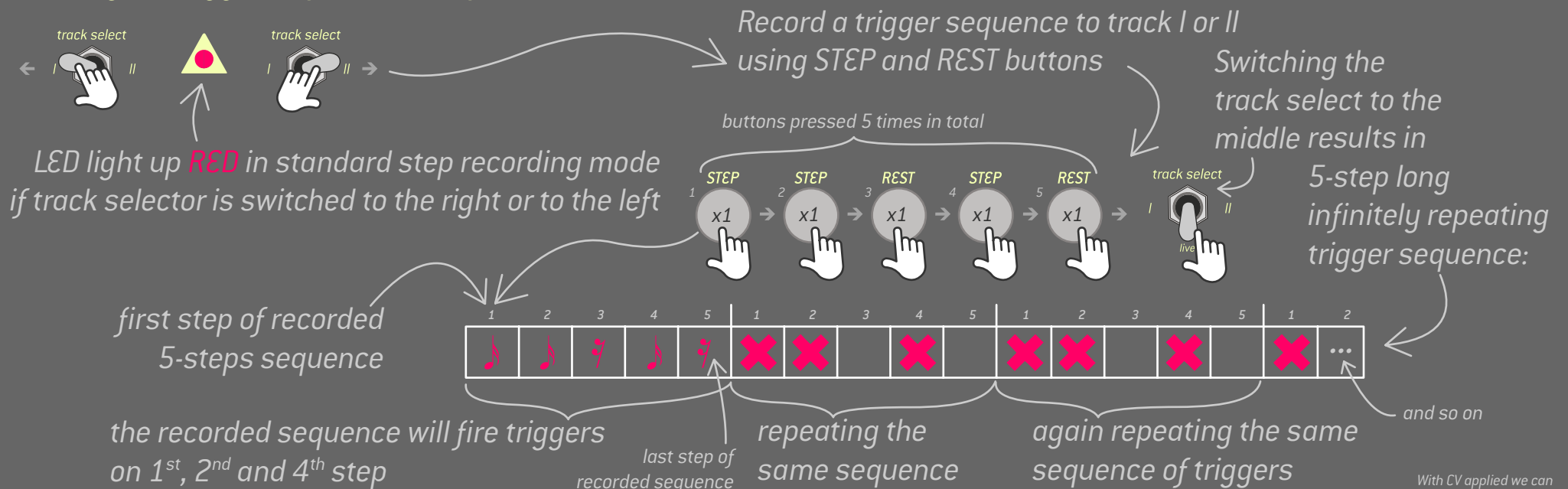
The warranty covers replacement or repair, as decided by us. Please contact us via email for a return authorization before sending anything. Shipping costs of sending a module back for servicing is paid by the customer. Device complies with all EU regulations concerning RoHS lead-free manufacturing and WEEE disposal

OPERATING MODES

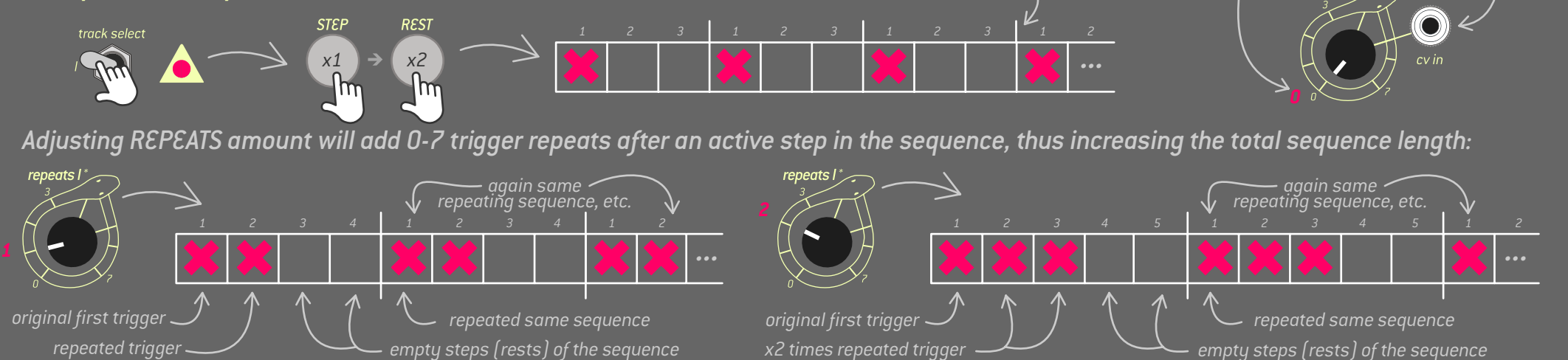


1.0 Step a.k.a. 'standard' mode

1.1 Recording the trigger sequence in step mode:

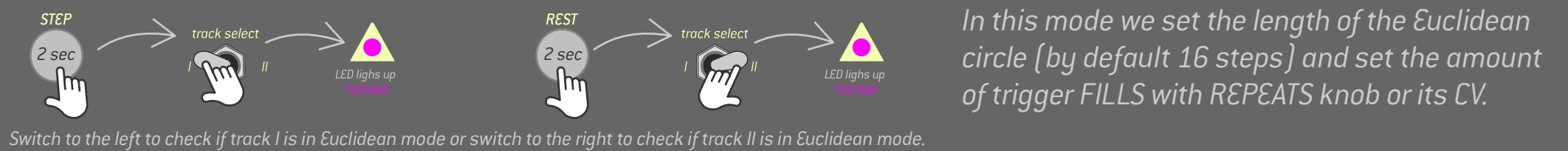


1.2 Repeats in step mode

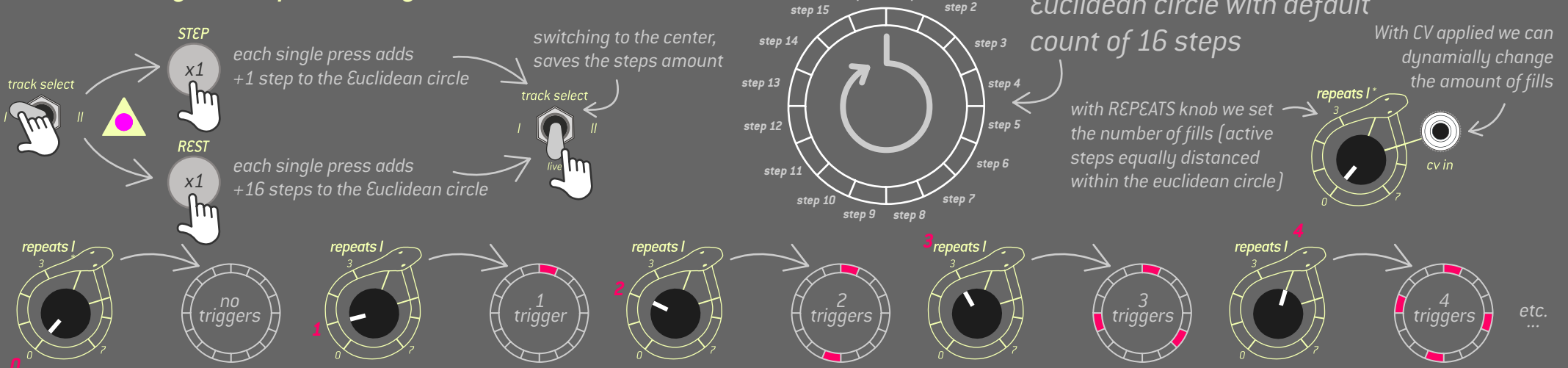


2.0 Euclidean mode

Holding STEP (for track 1) or REST (for track 2) button for 2 seconds will enable (or disable) Euclidean mode:

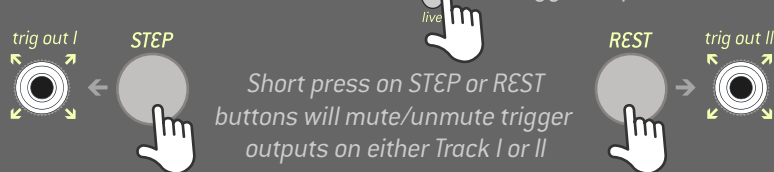


2.1. Recording the sequence length in Euclidean mode:



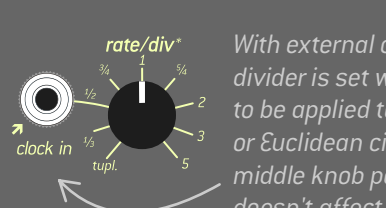
3. Live mode

In live mode both tracks infinitely repeat their trigger sequences.



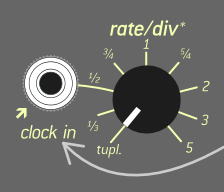
4. Clock divider

With external clock applied, the divider is set with rate/div knob to be applied to trigger repeats or Euclidean circle speed; middle knob position (x1) doesn't affect the clock divider.



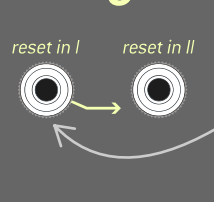
5. Triplets

In TUPLET mode (div knob fully CCW) the number of trigger repeats is stretched into one bar. Some particular cases of using triplets are triplets and – if used creatively – becomes ratcheting.



6. Synchronization

Triggers applied to reset I or II reset the according trigger sequence to the first step. Reset in I is normalised to reset in II. I.e. a reset is applied to both tracks, if a signal is sent to reset in I only and no cable is plugged into reset in II.



7. Patterns

Each track has 8 patterns selected by pressing both the STEP and the REST button and rotating the REPEATS (I or II) knob at the same time. Patterns can be combined and are selected separately for track I and II. Pattern sequences and last patterns selected are recalled on next power cycle.

