



# MILKY WAY

## CHASING THE MILKY WAY

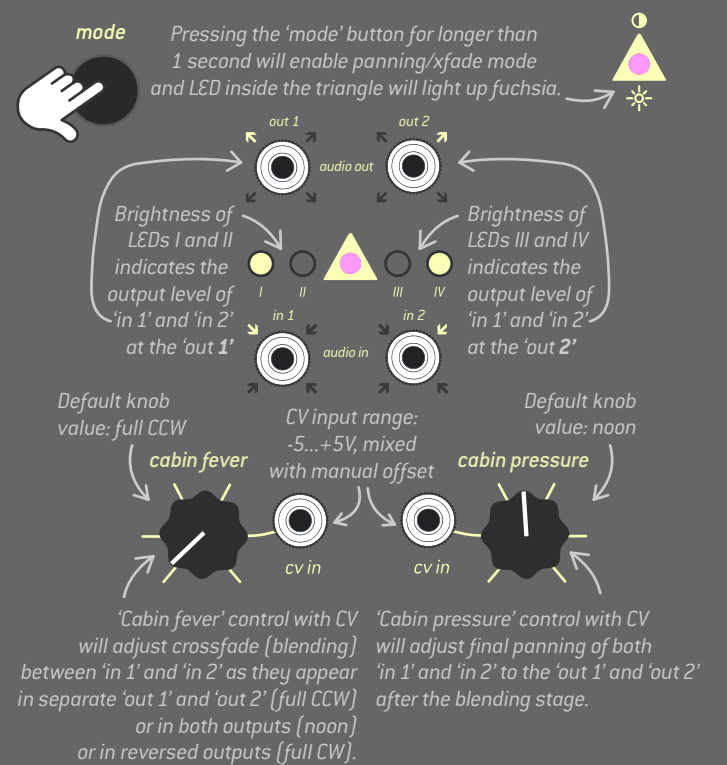
- Simple and effective 6hp stereo effect module
- Comes with 16 types of effects, organized in two banks of 8
- Meta cv effect scanning and VCA
- 48 kHz 16 bit digital audio stereo processing

Depth: 30mm (with plugged ribbon cable)

Power requirements: +12V: 120 mA  
-12V: 15 mA



## SPATIAL MOVEMENT



## 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.

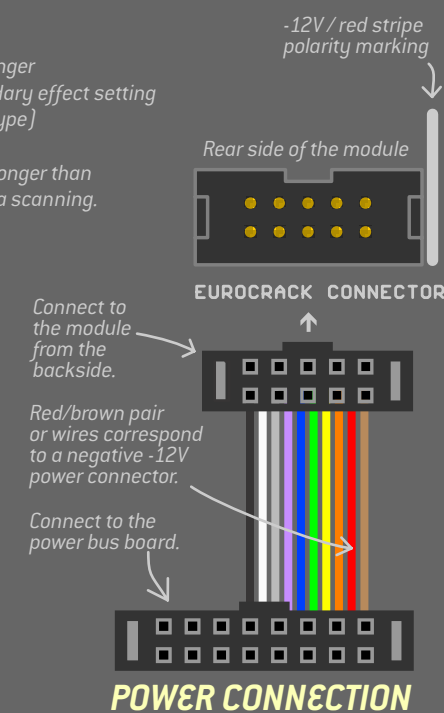
The warranty does not apply in case of:

- 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.

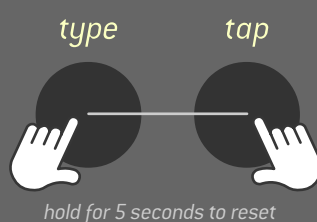
Device complies with all EU regulations concerning RoHS lead-free manufacturing and WEEE disposal

Endorphin.es are made in Barcelona, Spain



## RESET THE MODULE

The soft reset that adjusts all parameters to their default values. This also clears all effect memories. Press both 'type' and 'tap' buttons simultaneously and hold for more than 5 seconds. You may hear a short blip and then you will see the effect will be set to the first one.



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

Drop us a line:

- [info@endorphin.es](mailto:info@endorphin.es)
- FURTH BARCELONA, S.L.
- VAT ID:ES B66836487

## FIRMWARE UPDATE

download latest firmware/bank when available from:  
<http://airways.endorphin.es>

Power OFF your modular system:



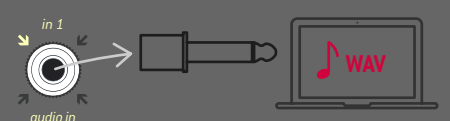
Hold 'mode' while powering your system again:



You will see status LED will blink blue:



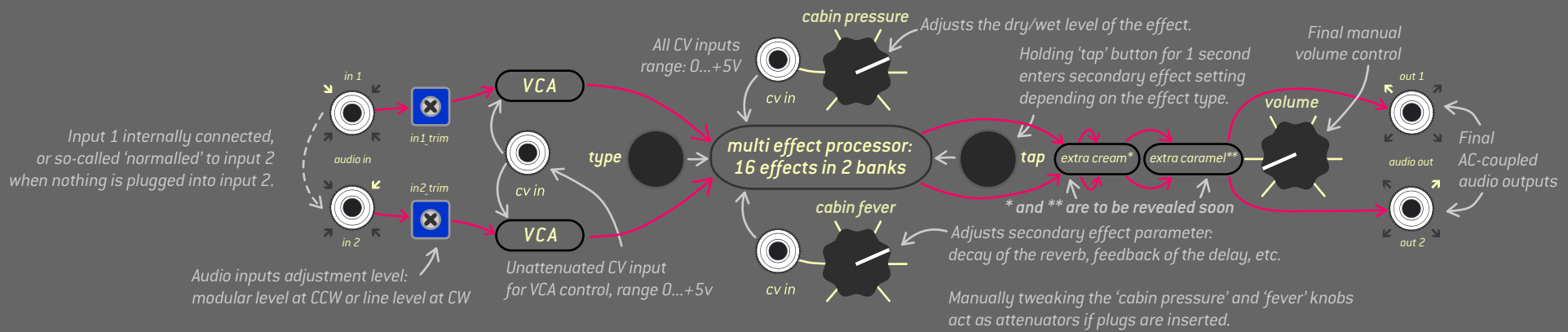
Connect the audio output from your computer headphones output to one of the audio inputs of the module with simple mono or stereo cable.



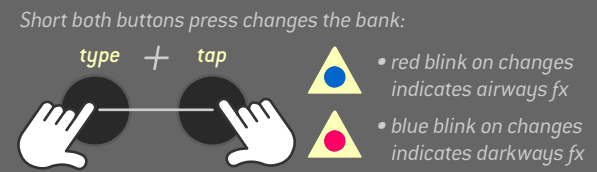
Press PLAY and wait 1.5 minutes. The module will reboot automatically after the new firmware was installed



Make sure you don't input any extra sounds during update process (reminder signals from your calendar, etc.). When status LED flashes RED – that means signal is too low or too high – just reset the firmware acquire process by pressing MODE once.



## EFFECT TYPES



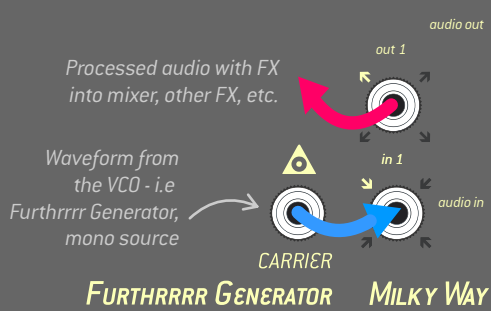
## AIRWAYS BANK ▲

- I HALL REVERB:** 'Cabin fever' knob defines the decay of the reverb or hall size. Holding 'tap' for longer than 1 second enables the secondary function for 'cabin fever': fixed hi-pass filter to cut off low frequencies and have more 'air' in the final output.
- II SHIMMER REVERB** is a variation of the hall reverb with a pitch shifter to create choir-like, huge and unrealistic spaces. The primary 'cabin fever' function defines the decay and the secondary function defines the amount of pitch-shifter mixed into original reverb.
- III STEREO ROOM REVERB** recreates a sort of stereo room ambience. Primary 'cabin fever' parameter defines room size and the secondary defines the stereo spread of the reverb, from mono up to a huge stereo spread.
- IV PLATE REVERB.** The primary 'cabin fever' defines the decay of the reverb. In real life equivalent this is the distance from the pickups to the metal plate which is how long the tail of the reverb is present. Secondary parameter defines the amount of pre-delay to distant sounds in ambience.
- V SPRING REVERB.** The primary 'cabin fever' defines the decay of the reverb. With the 'tap' button you can simulate a sound as if you pluck the real spring with your finger. The secondary function is tied to the 'tap' button's 'pluck the spring' feature and defines the decay of how fast the spring will calm down after manually plucking it.
- VI PING-PONG DELAY** is a stereo clocked delay. A 'tap' is usually three or more short clicks on the 'tap' button. The primary 'cabin fever' parameter defines the feedback of the delay or repeats. The secondary defines the clock division of the incoming tap/clock: 1, 3/4, 2/3, 1/2, 1/3, 1/4, 1/8
- VII TAPE ECHO** is a delay with 3 fixed playback heads. Primary 'cabin fever' parameter defines the delay repeat rate which is the speed of tape. The 'tap' button works in a limited frequency range of manual tapping and defines the amount of feedback. The secondary works as a divider for the incoming clock.
- VIII CHORUS:** Primary 'cabin fever' knob defines the feedback amount. In average amounts, it creates typical unison effect however in full CW it goes to an infinite feedback resulting unrealistic ambient. Secondary parameter defines the modulation depth, which is 'full on' by default.

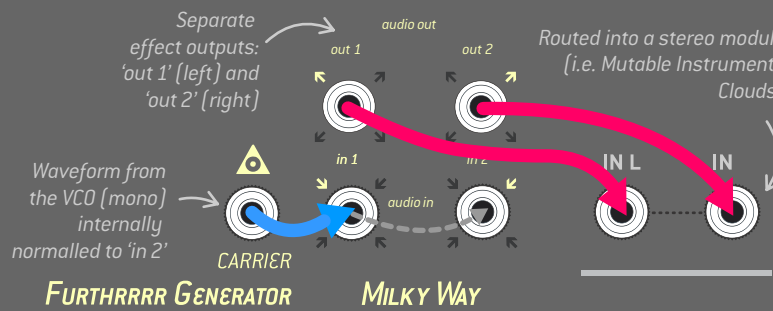
## DARKWAVES BANK ▲

- I GATED REVERB** is based around plate reverb with noise gate. The primary 'cabin fever' defines the reverb decay, but the secondary defines the threshold of the noise gate. Noise gate's attack and decay are fixed and chosen experimentally to fit most musical styles.
- II SPRING REVERB:** The primary 'cabin fever' defines the decay of the reverb. With the 'tap' button you can simulate a sound as if you pluck the real spring with your finger. The secondary function is tied to the 'tap' button's 'pluck the spring' feature and defines the DECAY of how fast the spring will calm down after manually plucking it.
- III PING-PONG DELAY** is a stereo clocked delay. A 'tap' is usually three or more short clicks on the 'tap' button. The primary 'cabin fever' defines the feedback of the delay or repeats. The secondary defines the clock division of the incoming tap/clock: 1, 3/4, 2/3, 1/2, 1/3, 1/4, 1/8
- IV FLANGER:** The 'cabin pressure' knob sets the amount of delay. With primary 'cabin fever' we set the LFO speed. The secondary defines the feedback. Playing with that three parameters allows to achieve sweeping, airplane engine alike sound with a pretty wide range.
- V RING MODULATOR** multiplies the signal with an internal sine wave oscillator. 'Cabin pressure' defines the amount of modulation and 'cabin fever' defines the speed of the oscillator. Secret ingredient – feedback! Its amount is controlled by the secondary 'cabin fever' and brings special dirtiness to the sounds.
- VI OVERDRIVE:** 'Cabin pressure' knob adjusts the drive amount with volume compensation, while 'cabin fever' defines the tone control as usually found in guitar pedals. The 'tap' button makes the effect active or bypassed, like the switch on a guitar pedal – and so does 'cabin fever' latching trigger CV input.
- VII PEAK COMPRESSOR:** 'Cabin pressure' knob defines the threshold from -90dB to 0dB (fully CW). Primary 'cabin fever' sets the amount of gain reduction (ratio) from 1 to 25. Secondary parameter defines the attack, from 1 to 200 msec. Release is always 'auto'. 'C. fever' CV input is an unattenuated side-chain input.
- VIII FREEZER/LOOPER:** When 'tap' is pressed (or 'cabin fever' CV gate is ON), the audio is looped by the grain length defined by the 'cabin fever' knob – and with the speed – defined by 'cabin pressure' knob or CV – applied.

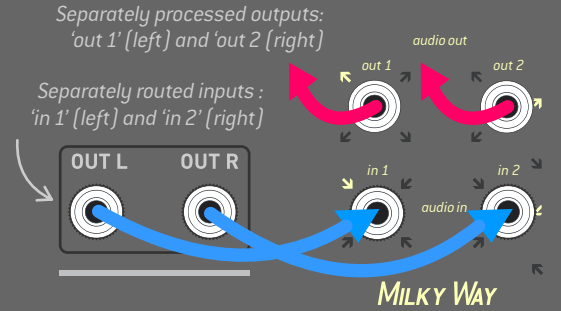
### SIMPLE MONO OPERATION



### MONO TO STEREO OPERATION



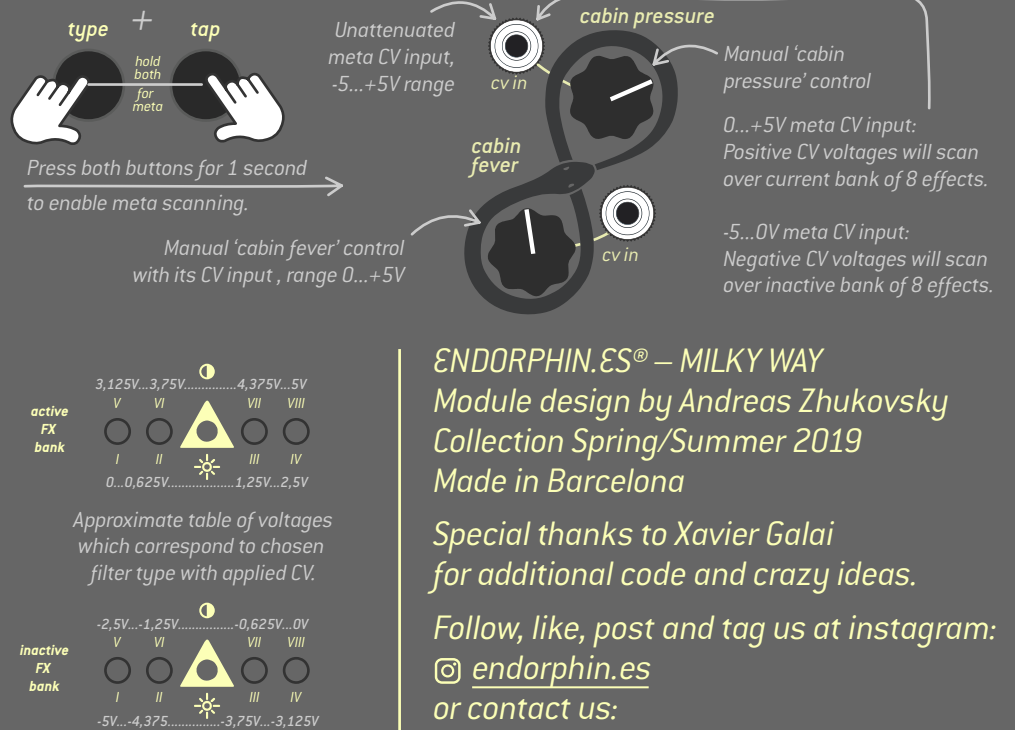
### TRUE STEREO OPERATION



### MILKY WAY QUICK PATCH EXAMPLE



### META META META META META META META META



ENDORPHIN.ES® – MILKY WAY  
Module design by Andreas Zhukovsky  
Collection Spring/Summer 2019  
Made in Barcelona

Special thanks to Xavier Galai for additional code and crazy ideas.

Follow, like, post and tag us at instagram:  
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or contact us:  
info@endorphin.es