

## **BLACK MODULATOR**

### THANK YOU FOR PURCHASING ERICA SYNTHS BLACK SERIES MODULE!

Erica Black Series include high-end, unique functionality and superior quality modules. Only the best, highest quality components are used, all inputs and outputs are protected against undesired overvoltage. When designing Black Series, we put design and usability superior. Big knobs are assigned to key functions of the module, which makes Black Series ideal for live performances. Enjoy!

**Erica Synths Black Modulator** is fully analogue modulation and noise source. It consists of LFO/audio frequency oscillator with three simultaneous waveform outputs, Zener diode-based noise generator with three noise flavours and clockable S&H circuit.

#### FEATURES:

LFO with sine, triangle and pulse outputs LFO/Audio range switch Zener diode-based noise generator for massive, full spectrum white noise Pink noise filter Noise crush knob and crushed noise output – fade from 1 bit noise to individual random trigger bursts Clockable sample and hold circuit. S&H circuit based on rare, high quality S&H chip S&H CV and clock inputs

#### **TECHNICAL SPECIFICATIONS:**

LFO frequency	0,2Hz - 25Hz
Audio rate frequency	18Hz - 750Hz
LFO output level	5V - +5V
Noise output level	10Vptp
S&H CV input level	up to 20Vptp
Power consumption	+34mA, -28mA
Module width	10HP
Module depth	25mm

LED gives visual feedback \_\_\_\_ on LFO frequency.

Choose between LFO and audio rates.

This knob attenuates S&H input level. S&H input is normalled to the white noise output, so, if nothing is plugged in CV IN jack, ≈ it will adjust S&H output amplitude. To get 10Vptp on S&H output, set the knob full clockwise.

This is S&H circuit input. Apply CVs or audio signals here and turn them into stepped CVs or bitcrushed/ringmodulated audio signals on the S&H output. S&H frequency is defined by RATE knob setting, or incoming clock frequency, and it can go into audio range, as well.

These are LFO outputs.



Use this knob to set LFO and/or S&H clock frequency.

Use this knob to control crushed noise flavour – from 1 bit noise to few trigger bursts per second.

This is external S&H clock input. If nothing is patched here, it's normalled to the LFO.

These are noise outputs.

This is S&H output.

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### SAFETY INSTRUCTIONS



Please follow the instructions for use of this Erica Synths module below, 'cause only this will guarantee proper operation of the module and ensure warranty from Erica Synths.

Water is lethal for most of the electric devices, unless they are made waterproof. Erica
Synths module is NOT intended for use in a humid or wet environment. No liquids or other conducting substances must get into the module. Should this happen, the module should be disconnected from mains power immediately, dried, examined and cleaned by a qualified technician.



Do not expose the module to temperatures above +50°C or below -20°C.



Transport the instrument with modules installed carefully, never let it drop or fall over. Warranty does not apply to modules with visual damages.



The module has to be shipped in the original packaging only. Any module shipped to us for return, exchange and/or warranty repair has to be in its original packaging. All other deliveries will be rejected and returned to you. Make sure you keep the original packaging and technical documentation. You will find Erica Synths terms of warranty at http://ericasynths.lv/en/terms/

Items for return, exchange and/or warranty repair have to be sent to: Erica Synths, Andrejostas Str.12, Riga, Latvia, LV-1045

#### DISPOSAL

This device complies to the EU guidelines and is manufactured RoHS conforming without use of led, mercury, cadmium and chrome. Nevertheless, this device is special waste and disposal in household waste is not recommended.

Designed and made in Latvia. User manual by Girts Ozolins@Erica Synths. Design by Baiba Stelle.

Copying, distribution or any commercial use in any way is prohibited and needs the written permission by Erica Synths.

Specifications are subject to change without notice.

In case of any questions feel free to contact us via e-mail info@ericasynths.lv

Check out other Erica Synths modules & devices at www.ericasynths.lv