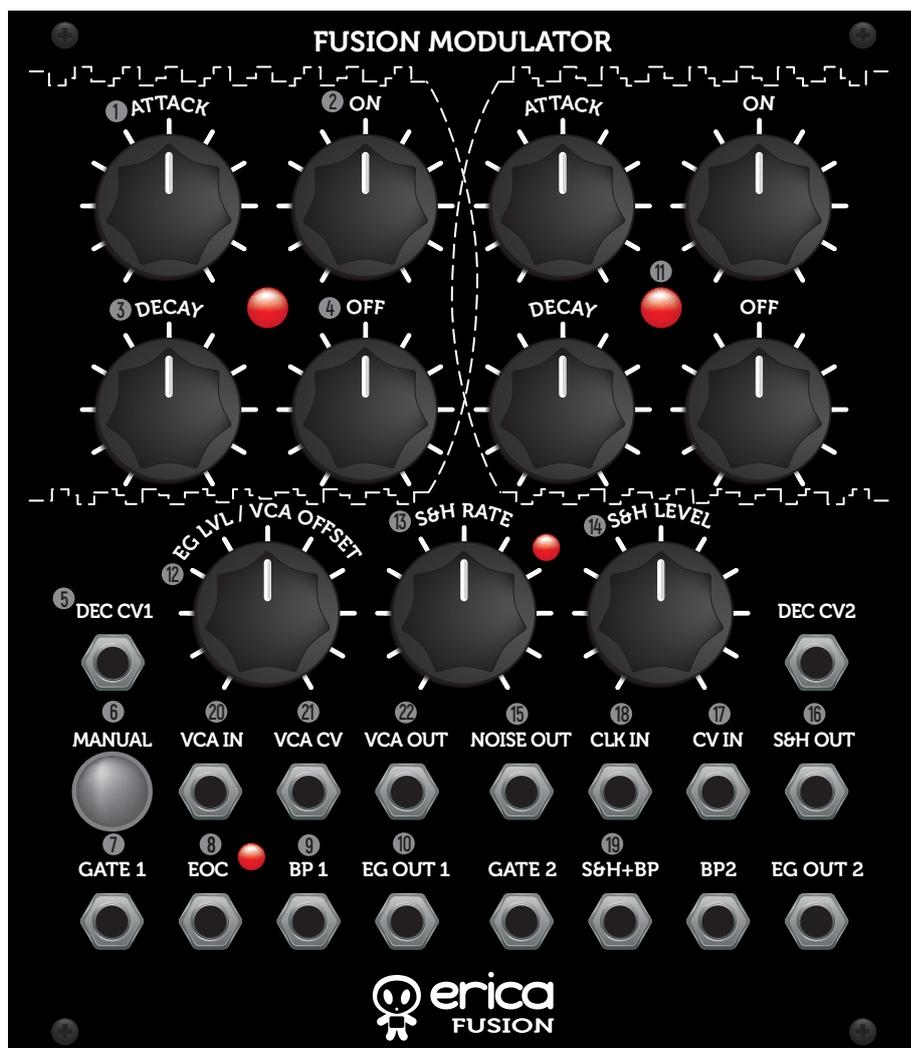




THANK YOU FOR ORDERING ERICA FUSION MODULATOR!

The Erica Synths Fusion series modules are designed combining vacuum tubes and semiconductors therefore they bring warm, powerful sound and overdrive possibilities of vacuum tubes into your modular system. Erica Fusion series consist of range of modules used in sound shaping circuit – two types of VCO, Mixer, real Ringmodulator using audio transformers and germanium diode ring, VCF, VCA, Analogue Delay/- Flanger, Palsma Drive and others. Also Erica Fusion Systems are available.

Fusion Modulator is complex, all analogue modulation source with lots of distinct features. It consists of several blocks – two EMS Synthi functionality inspired looping envelope generators with simultaneous unipolar (0V-10V) and bipolar (-5V-+5V), VCA, Noise generator and Sample&Hold. This makes Fusion Modulator a versatile modulation source for advanced modular setups, especially drone music oriented ones. Set looping envelope generators to high frequencies and have two sub bass sound sources, use VCA to control the amplitude of the envelope signal, modulate the decay time by random voltages from S&H circuit and get ever evolving sonic awesomeness!



- 1 Set the desired attack time!
- 2 This is very specific looping envelope generator – you can adjust attack and decay time like on regular looping EGs, as well as ON time and OFF time, which simulate gate on and off. Please, refer to the envelope shape diagram below!
- 3 Adjust the Decay time manually! The Decay time is also CV controlled, and the CV is added to the knob setting.
- 4 Adjust the OFF time! If you wish to use the envelope generator with external gates only, set the OFF knob to rightmost position and the looping will stop! The large LED gives visual feedback on the envelope status
- 5 This is the Decay CV input. The CV is added to the knob setting
- 6 This is the Manual Gate button, it sets the ON stage of the envelope high. When released, envelope will continue looping, unless the loop is off (OFF knob at 5PM). The manual button has an effect on the left envelope generator only
- 7 This is an external Gate input. It works the same as manual button.
- 8 This is End Of Cycle output – it outputs +5V signal when the envelope is in OFF stage
- 9 This is bipolar (-5V - +5V) envelope output, meaning, you can use the envelope generator as the LFO
- 10 This is the unipolar (0- +10V) envelope output
- 11 Most of controls on the right side of the module are identical to the left one
- 12 The module has built-in VCA for both audio and CV signals. Use EG LVL/VCA OFFSET knob to adjust VCA CV offset, essentially VCA output level!
- 13 Adjust the internal S&H clock rate! If an external clock is connected, it automatically disconnects the internal one. The LED gives visual feedback on the clock rate.
- 14 This is the S&H input CV attenuator. By default it's normaled to the internal noise generator.
- 15 This is the white noise output. The module has Zener diode based noise generator that provides nice, full spectrum white noise
- 16 This is the S&H random voltage output
- 17 This is the external CV input for S&H circuit. The external CV automatically disconnects the internal white noise form the input.
- 18 This is the external S&H clock input! Try patching the EOC signal here!
- 19 This is super-random CV output – a sum of bipolar envelope generator output and S&H output
- 20 This is the VCA input; it accepts both audio and CV signals. The input is normaled to the bipolar output of the left envelope generator, so you can use the EG LVL knob to control the LFO (bipolar envelope generator output) signal level manually and VCA CV input to control the LFO level via CV
- 21 This is VCA CV input, it's added to the CV is added to the VCA offset knob setting
- 22 This is the VCA output. If nothing is patched into VCA IN, you will get the LFO signal with adjustable amplitude here.

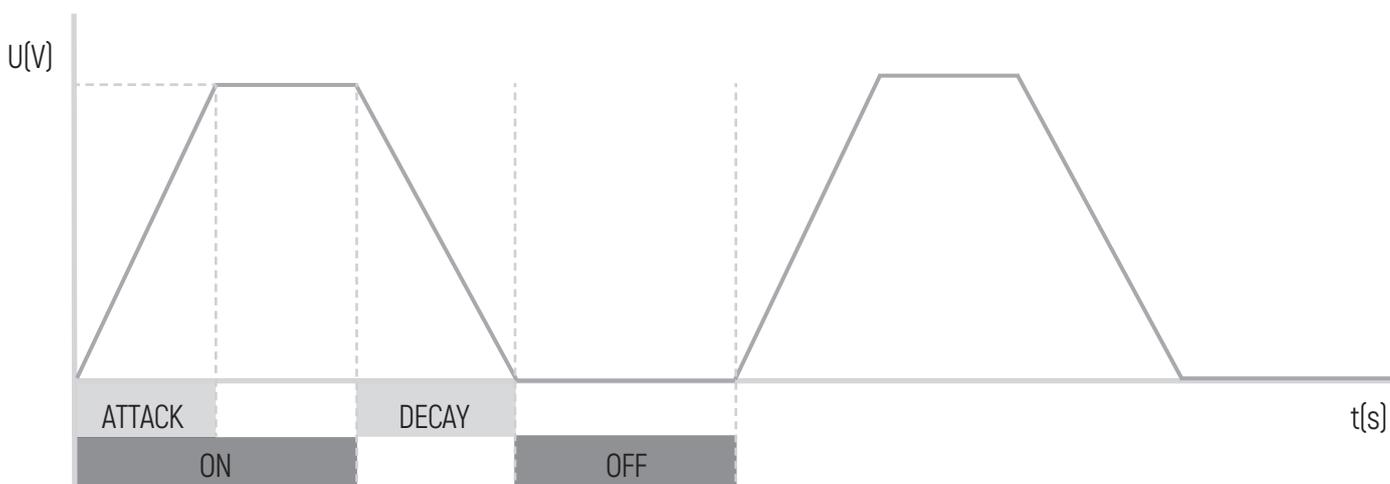
FEATURES:

Full analogue design
Two lopping envelope generators with Attack, On, Decay and Off time control
CV control over Decay time
Simultaneous unipolar (0V-10V) and bipolar (-5V - +5V) envelope outputs
Manual trigger button
End of Cycle output
VCA with the offset control
Zener diode based white noise source
Sample&Hold circuit with internal and external clock source

TECHNICAL SPECIFICATIONS:

Attack time	6ms – 850ms
On time	0-1,5s
Decay time	16ms – 2s
Off time	14ms – 1,3s
Sustain level	+10V
Panel width	22HP
Module depth:	36mm
Power consumption	125mA@+12V, 74mA@-12V

FUSION MODULATOR ENVELOPE SHAPE



SAFETY INSTRUCTIONS

Please follow the instructions for use of the 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. This 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. If you have transported module in extreme low temperatures, leave it in room temperature for an hour before plugging it in.



Transport the instrument 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.



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

User manual by Girts Ozolins@Erica Synths.

Design by Ineta Briede@Black8.

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 through www.ericasyths.lv.

You will find Erica Synths terms of warranty at www.ericasyths.lv. Items for return, exchange and/or warranty repair have to be sent to:

Erica Synths
Andrejostas Str. 43
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Latvia
LV-1045

