

THANK YOU FOR ORDERING ERICA FUSION VCF MODULE!

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 – VCO, Mixer, real Ringmodulator using audio transformers and germanium diode ring, VCF, VCA and Analogue Delay/Flanger.

24dB/12dB Fusion VCF is our take on the four pole lowpass filters. Each side of double triode drives signal between 2nd and 3rd stage of the filter, while germanium diodes are used to limit output signal. Result ultimately deep sounding VCF with unique character. Ingenious resonance volume compensation circuit and filter slope selection make this filter ideal for live performances. Bonus feature – 3 input mixer with dedicated mixer output. Try patching the MIX OUT into one of mixer inputs, increase input level until the mixer goes into self-oscillation and use the filter to alter the drone, you have! The Fusion VCF is an instrument on it's own!

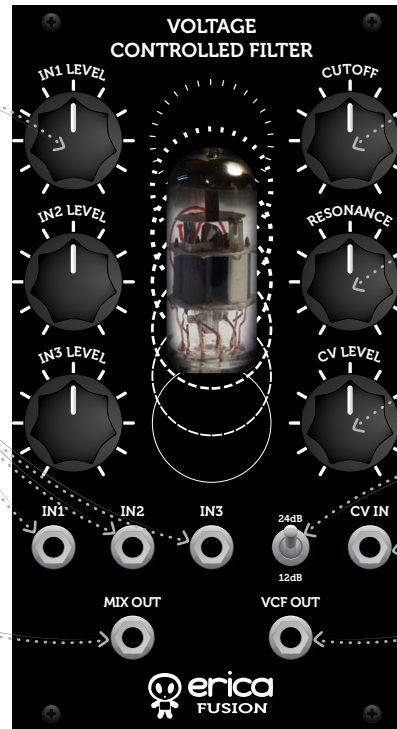
FEATURES:

- 4 pole lowpass resonant VCF with tube drive between stages
- Three input signal mixer
- Selectable 24db/12dB filter slope
- Signal drop compensation, when resonance is increased
- Germanium diode based output signal limiter

Set desired audio input levels!

These are audio mixer inputs! For better performance they are independently buffered

Bonus feature – dedicated mixer output – you may want to patch mixed signal to other modules. Try patching the MIX OUT into one of mixer inputs, increase input level until the mixer goes into self-oscillation and use the filter to alter the drone, you have!



This is VCF cutoff control

Set desired resonance level! The VCF self-oscillates, therefore you can have pretty crazy sonic results

Adjust cutoff CV level here

Select filter slope!

This is cutoff CV input

This is VCF output, obviously

TECHNICAL SPECIFICATIONS:

Audio input level: up to 20V ptp
 CV input level (full cutoff span): -10V - +10V
 Panel width: 14HP
 Module depth: 35mm
 Power supply: bipolar +-12V, eurorack standard and/or Erica Synths 6VAC PSU
 Power consumption:
 Tube heater PSU configuration: 35mA@+12V, 20mA@-12V, 300mA@6VAC
 Eurorack PSU configuration: 35mA@+12V, 170mA@-12V
 (NB – start-up power consumption for few seconds is -250mA)

You can configure Erica Fusion modules for two PSU options.

1. When used with easy to install 6VAC Erica Tube heater PSU, Fusion modules have insignificant (max 35 mA) power consumption from eurorack PSU. Erica Fusion 6VAC PSU is designed to power up to 7 Erica Fusion modules, but your eurorack case needs 220VAC or 110VAC routed inside the case (this is typical for most Doepfer cases and some other producers that use switching PSU). Latest Erica Synths cases have Fusion tube heater connectors on integrated PSU boards.
2. When configured to work with standard $\pm 12V$ eurorack PSU, power consumption is about $35mA@+12V$ and $170mA@-12V$, and you do not need to install Fusion PSU. This configuration is the best for Make Noise and similar PSU systems that route only $+12V$ in the case and use switching ICs to generate $\pm 12V$. THIS IS OUR DEFAULT PSU CONFIGURATION.

For $\pm 12V$ operation install 2 jumpers on the Fusion PSU connector on the left side as shown on the picture!
 For 6VAC operation from the Fusion PSU, install jumpers on the right side. Also, you can refer to small 12V or 6V notes next to jumpers



For $\pm 12V$ operation install 2 jumpers on the Fusion PSU connector as shown on the picture. If you use this module with the Erica Fusion PSU, no need to install these jumpers. You connect Fusion PSU ribbon cable here.

ERICA FUSION 6VAC PSU INSTALLATION

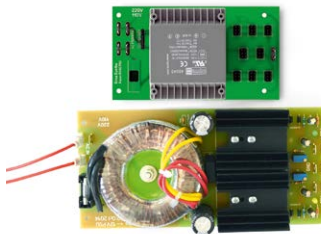


It is advised that installation is performed by person, who has experience working with 220/110V voltages. Before installing the PSU, make sure your modular system is turned off and disconnected from wall power socket.

Follow simple instructions below, and you will not go wrong with the installation!

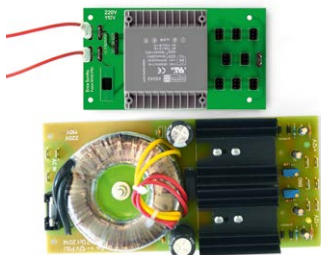


Use spacers and screws supplied with the Erica Fusion PSU kit to fix it in your modular case next to the eurorack power supply unit!



Disconnect 220/110V wires from eurorack PSU!

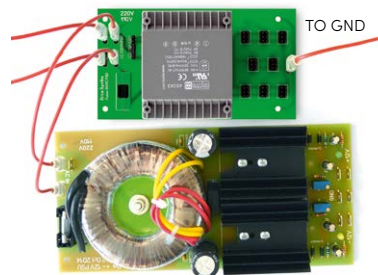
Connect 220/110V wires to relevant lugs of Erica Fusion PSU!



Use wires supplied with the Erica Fusion PSU kit to connect eurorack PSU to relevant lugs on the Fusion PSU module!



One side of Erica Fusion PSU 6VAC output has to be connected to the GND of your modular system. Use the wire supplied with the kit to do so. Since 6VAC circuit is isolated, if you connect this wire somewhere incorrectly. But that may affect quality of sound of Erica Fusion models.



Congratulations, you have completed installation of Erica Fusion 6VAC PSU! Now you can try modules!

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://ericasyths.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@ericasyths.lv

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