MATRIX MIXER

THANK YOU FOR PURCHASING THE ERICA SYNTHS MATRIX MIXER!

As Eurorack users may know, it can be challenging to change a patch radically during a performance, therefore diverse performances require large systems or they end up being extremely experimental. But what if you could repatch your system with the push of a single button? The Erica Synths Matrix Mixer is a 16 - input, 16 - output desktop patch matrix – it can route and mix signals with high precision, create buffered multiples and random patches. It can also interface external instruments with your Eurorack system, and – it's not limited to Eurorack! You can use the Matrix Mixer with semi-modular synthesizers, as well as through adapter cards with the EMS Synthi and Buchla Music Easel. Thanks to simple patch changes via panel buttons or MIDI program change messages, the Matrix Mixer will be particularly useful in performances that combine Eurorack and other performance instruments, such as drums, guitars, wind instruments, etc. Make your modular performance stand out and enjoy the Matrix Mixer!

FEATURES

16 buffered, DC coupled inputs
16 independent, buffered, DC coupled outputs
256 connections, each with 3 attenuation levels
"Piano" mode
Random pattern mode with definable randomization area and density
254 pattern memory
Pattern change via MIDI program change messages
32 3,5mm jack sockets
4 6,3mm jack sockets

SPECS:

Audio level	10Vptp
Attenuation level	1, 0.7, 0.3
Power supply	12VDC (a universal AC/DC converter included)
Size of the instrument	225 x 226 x 44mm
Net mass	1.25kg
Size of the packaging	315x295x95
Mass with the packaging	

SAFETY INSTRUCTIONS

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

Use the Matrix Mixer exclusively with the power supply unit (PSU) supplied with the system. Powering it with other PSU units may cause permanent damage to the device.

Water is lethal for most electric devices unless they have been rendered waterproof. The Matrix Mixer is NOT intended for use in a humid or wet environment. No liquids or other conducting substances should be allowed 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 instrument to temperatures above +50° C or below -20° C. If you have transported the instrument in extremely low temperatures, leave it at room temperature for an hour before plugging it in.

Transport the instrument carefully. Never let it drop or fall over. The Warranty does not apply to instruments with visual damage.

Matrix Mixer must be shipped in the original packaging only. Any instrument shipped to us for return, exchange and/or warranty repair must be in its original packaging. All other deliveries will be rejected and returned to you. Ensure that you keep the original packaging and technical documentation.

DISPOSAL

This device complies with EU guidelines and is manufactured and confront RoHS without the use of lead, mercury, cadmium or 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 of Erica Synths.

The specifications are subject to change without notice.
If you have any questions, feel free to contact us on SUPPORT section on www.ericasynths.lv

You will find the Erica Synths terms of warranty at **www.ericasynths.lv**

Items for return, exchange and/or warranty repair should be sent us according to the guidelines on SUPPORT section on **www.ericasynths.lv**

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U S E R   M A N U A L

Power the Matrix Mixer exclusively with the external PSU, supplied with the instrument. Using other power supply units may permanently damage the instrument.

Use standard 3,5mm Eurorack patch cables to connect modules or instruments to the matrix. The matrix is unidirectional, meaning, the signal will pass from the Inputs on the left to the Outputs on top. You can send a signal from one input to several outputs simultaneously and likewise – you can mix several inputs to one output.
On the back of the Matrix Mixer, you'll find two 6,3mm input and two 6,3mm output sockets. These duplicate Input 1, Input 2, Output A and Output B, respectively. The 3,5mm sockets are prioritized– if something is patched in a 3,5mm socket, the 6,3mm one is automatically disconnected.
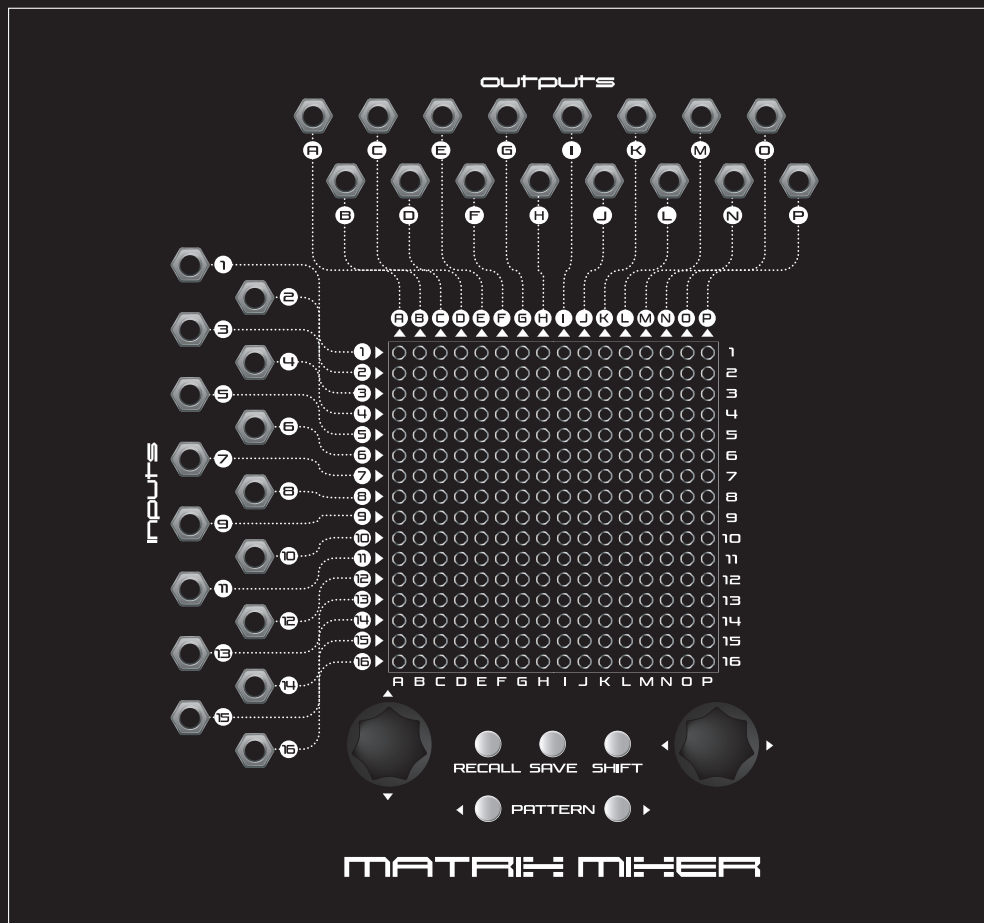
The PATCH MATRIX has 256 possible patch points, each with three levels of attenuation, and it has a memory of 254 patches.

CONFIGURATION SETTINGS.
Push and hold the SHIFT button and push both PATTERN buttons simultaneously to access the configuration settings. There are four configuration options, each represented on the top four rows. Use the encoders to navigate a blinking patch point through the settings and push the left encoder to confirm a selection.
▶   The first row represents a MIDI channel for patch changes. The leftmost point (column A on the matrix) represents MIDI channel 1, column B – channel 2, etc.
▶   The second row sets randomization "density" – how many connections appear simultaneously when the Random mode is selected. A patch point in column A represents 5% density (~5% of all patch points are activated in the random patch), and each next column adds another 5% density. Column P represents 80% density. We think more density in a random patch doesn't make sense.
▶   You might want to randomize a specific area of the matrix (X columns by Y rows), while another part of the matrix remains unaltered by randomization, therefore a user defined randomization area is implemented. The top left corner (patch point A1) is the reference point and the third row in the configuration settings sets the number of columns for the randomization area.
▶   The fourth row sets the number of rows in the randomization area.

TO BUILD A PATCH, navigate the matrix via the X and Y encoders and select a patch point. The left encoder allows you to make attenuated connections. Push the encoder to make a connection. The first push, makes a connection with a gain value of 1, the second – 0,7, the third – 0,3, and the fourth turns the connection off, and so on. The right encoder makes a connection with a gain value of 1 and pushing it a second time turns the connection off – basically, it works as a shortcut.

CONNECTION PREVIEW/LIVE
performance (the equivalent of making experimental sounds on the EMS Synthi by sticking a pin into the matrix and removing it) – navigate to the desired connection point, push and hold SHIFT and push either one of the encoders. While the encoder is pushed, the connection is active.

RANDOM PATCHES.
Push and hold the SHIFT button and push the right PATTERN button - the Matrix Mixer will generate a random patch based on randomization density and randomization area settings.

SAVING PATCHES.
Once you are happy with the patch, push the SAVE button, and access the "saved patches" view. Use the X/Y encoders to navigate to a desired position and push either one of the encoders to save the patch. **NB!** Top left and bottom right positions (half dimmed) are reserved, and you can't access them. If you change your mind, and do not want to save the patch, just push SAVE or SHIFT to exit to the patch building mode. The matrix automatically saves the last patch every 30" and after power cycling it will remember the last active patch.

RECALLING PATCHES.
Push the RECALL button to access the "saved patches" mode. Use the encoders to navigate to one of the saved patches and push either one of the encoders to recall it.

DELETING PATCHES.
Push the SAVE button. Use the encoders to navigate to the patch you wish to delete. Push and hold RECALL for more than 5" and the LED with the patch name will turn off.

INSTANT PATCH CHANGE.
You can navigate through saved patches sequentially by pushing PATTERN buttons. This is particularly useful during performances, when you need to change patches instantly.

PATCH CHANGE VIA MIDI.
To change a patch via MIDI you need to send Program Change messages. Bank 1 Program 1 to 128 will change the patches 1 to 128 and Bank 2 program 1 to 128 will change the patches from 128 to 254. For example, if you want to access patch number 1 you need to send a "Bank 1, Program 1" MIDI message and if you want to access patch number 300 you need to send a "Bank 2, Program 44" MIDI message. **NB!** Take note that the first patch is located in the 1-B slot and the last patch is located in the 16-O slot because the 1-A and 16-P slots are reserved for displaying when you are in the Patch Recall screen!

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12V DC   OFF / ON   MIDI IN   OUT2   OUT1   IN2   IN1

outputs

inputs

RECALL   SAVE   SHIFT

PATTERN

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