



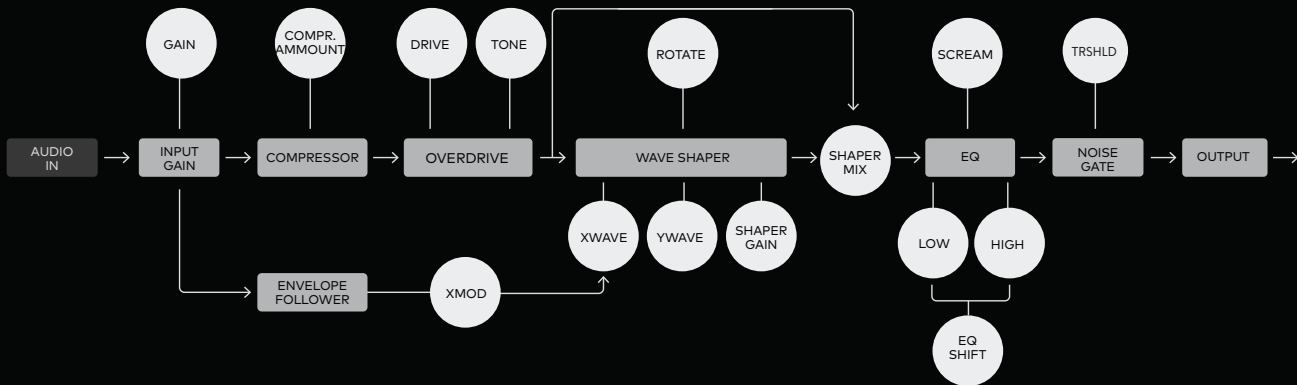
erica synths × 112dB

XENODRIVE

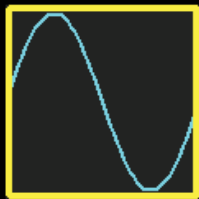
Thank you for purchasing
the Erica Synths Xenodrive!

A unique stereo distortion/overdrive/waveshaper FX unit with an algorithm developed by 112db.com and Erica Synths, the Xenodrive is a hands-on tool for shaping your sounds in the studio or during live shows – from nuanced harmonic enhancement to total sonic destruction. Featuring 12 parameters for detailed sound design, save/recall functions for all parameters, MIDI control over all parameters and a sleek aluminium case to match our lineup of compact desktop units, the Xenodrive will elevate your sound in any live show, studio or sonic experiment.

The Xenodrive combines several "modules" for audio processing with the aim of radically altering the harmonic content of the incoming signal. The signal path starts with an audio GAIN STAGE that boosts the incoming signal (up to +24dB), meaning it can also act as an analogue overdrive via this parameter alone. The signal is then split into the COMPRESSOR and ENVELOPE FOLLOWER. The audio signal is processed by a germanium diode OVERDRIVE emulation with drive and tone controls. It then enters the wavetable-based WAVESHAPER (16x16 carefully selected waves) that alters the incoming audio signal by wrapping it into the selected wave and, depending on the shaper GAIN SETTING, additionally folding it (see the example below). The envelope follower controls the wave selection on the X axis of the wavetable. The signal then passes through the EQUALIZER and NOISE GATE and finally, into the BALANCED OUTPUT stage.



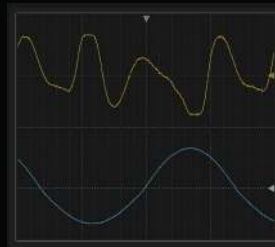
► Waveshaper and wavefolder in action



Waveshaper wave



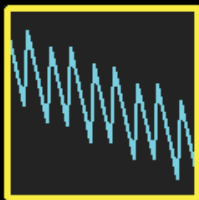
Waveshaper gain
setting at min



Waveshaper gain
setting at 12:00



Waveshaper gain
setting at max



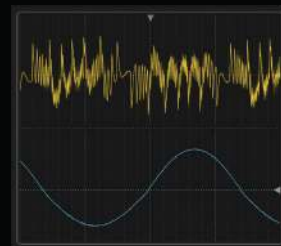
Waveshaper wave



Waveshaper gain
setting at min



Waveshaper gain
setting at 12:00



Waveshaper gain
setting at max

The Xenodrive features a built-in compressor, and this control sets the compression amount

The OLED display indicates the presets and provides access to configuration settings, as well as indicates shaper waveforms.

The DATA encoder is for saving presets and accessing the configuration settings and other menus of the Xenodrive.

Controls the output volume of the Xenodrive.

Brings the menu one step back and exits the wave display after wave is shown.

When the button is lit, extra resonance is added to the equalizer cutoff frequency.

Shifts the center frequency of the equalizer.

Applies envelope follower modulation to the X wave. At 12:00 there is no modulation, when turned clockwise, a positive envelope is applied, when turned counterclockwise, an inverted envelope is applied.

Adjusts the input gain of the Xenodrive. It ranges from guitar to line levels.

Sets the intensity of the waveshaper and adds extra waveshaping.

Push the button to bypass the effect. In bypass mode the GAIN and VOLUME settings will still have an effect, only the FX patch is bypassed.

Sets the amount of pre-drive, a germanium diode overdrive emulation.

Selects the waveshaper wave on the X axis of the wavetable. As soon you rotate the X WAVE knob, the OLED will indicate the wave used in the shaper. Push the BACK button to return to the main screen.

Adjusts the tone of the pre-drive – it is essentially a bandpass filter with an adjustable center frequency.

Shifts the phase of the current waveshaper wave.

Selects the waveshaper wave on the Y axis of the wavetable. As soon you rotate the Y WAVE knob, the OLED will indicate the wave used in the shaper. Push the BACK button to return to the main screen.

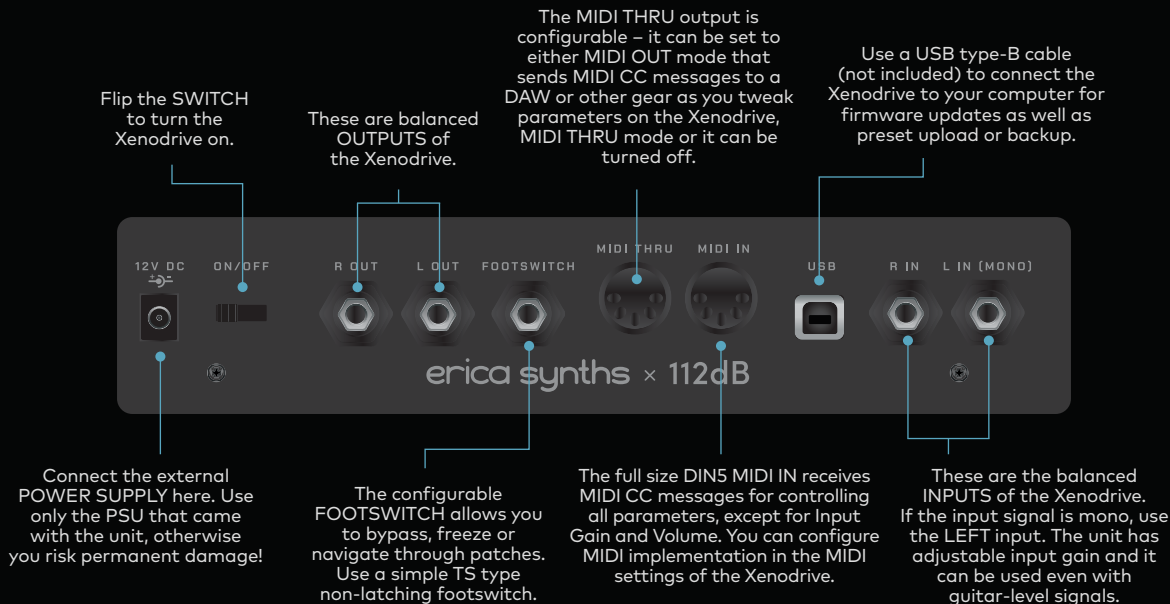
Controls the mix between the shaped signal

Boosts or damps low frequencies of the signal.

Boosts or damps high frequencies of the signal.



► Connections



▶ A bit of menu diving

Even though most of the controls of the Xenodrive are hands-on, there are some features that are accessible through the OLED display via the DATA encoder.

01 HCWILLNEVERD

As you turn the Xenodrive on, the display indicates a list of presets. The Xenodrive comes with 42 factory presets and you can save up to 60 user presets. Rotate the DATA encoder to navigate through the presets and click the encoder to activate a preset. The presets can be backed up to your computer and you can load presets from other other Xenodrive users – refer to the SYSTEM settings below.

PATCH

Push the BACK button to access the main MENU. Use the DATA encoder to navigate through the menu and push it to confirm. The first section of the menu is for PATCH (preset) management.

SAVE AS RENAME

In order to SAVE a preset, select the SAVE AS option and push the encoder to confirm saving. The preset naming menu will appear.



In order to NAME the patch, push and hold the DATA encoder until the symbol selection appears on the bottom of the display. Use the DATA encoder to select symbols and push it to dial in a name for the preset. Once happy, push and hold the DATA encoder –this will bring you back to the preset naming screen. Select SAVE and push the DATA encoder to confirm saving. Here you can also CLEAR the preset name and generate random preset names (MAGIC) – simply rotate the DATA encoder to navigate to the relevant section of the menu on the bottom of the display.

PATCH

Another feature in the PATCH management section is called MAGIC. Once you click the DATA encoder to confirm MAGIC, the Xenodrive will generate a new preset – a random combination of all parameter settings. If you are happy with how it sounds, you can SAVE the preset.



In the PATCH menu you can also SORT the presets. This is a useful feature if you want to use a footswitch to navigate through the presets. Push the DATA encoder to activate the SORT function.



In order to SORT the presets, rotate the DATA encoder to select the preset you wish to move and push the encoder. The selected preset will become "sticky" and you can rotate the encoder to move it to another slot. Once happy, push the DATA encoder to confirm the new slot of the preset. In order to exit the PATCH menu, push the BACK button.



In the EFFECT section you can configure the DSP behaviour of the Xenodrive. All settings in the EFFECT menu are per-preset, meaning that they are saved with the presets.



Xenodrive might create very aggressive and noisy distortion therefore there is a noise gate at the end of the signal path. Threshold sets the level at which the gate opens to let your signal trough or mutes it.



Next setting allows yo to adjust the Noise Gate release time. It determines how gradually the noise gate closes after the input signal drops below the threshold thus controlling the fade-out time, ensuring a smoother, more natural decay of sound.



Dry/Wet (SHAPER MIX) on the front panel only adjusts the waveshaper gain. Therefore we added dry/wet mix in the effect menu as in some cases you might want to parallely mix in also the incoming signal. By default is always on WET as its distortion effect which acts as ON/OFF effect instead of effect send. But this unlocks new ways to make loud patched which can be mixed in carefully in parallel with the incoming signal.



By default DRY and WET are similar amplitude, but you can customize a balance between the incoming signal and the distorted one by reducing amplitude of the WET signal. Therefore you can create very aggressive patch which level can be set to sound good when suddenly turned on. Push the DATA encoder to enter FX level menu and rotate it to adjust relative amplitude of the WET signal to your taste and push the encoder to confirm a selection.



This sets the Envelope Follower release time. Push the DATA encoder to enter the EF RELEASE menu and rotate it to adjust the envelope follower release time.



In order to save the DRY/WET knob position, the Xenodrive uses analogue VCAs to fade between dry and wet (processed with the distortion and waveshaper) signals. You can omit the analogue VCAs and use the digital DRY/WET mix instead. To do so, push the DATA encoder to select ANALOG MIX and then rotate it to select OFF. Push the encoder again to confirm this selection.



Another distinct feature of the Xenodrive is preset MORPHING. Instead of an instant preset change, you can set a fade-in time for the next preset. Push the DATA encoder to select the MORPH option and rotate the encoder to set the preset fade-in time in seconds. Available options are: 0.1", 0.2", 0.5", 1", 1.5", 2", 3", 4", 5", 7.5" and 10". In order to exit the EFFECT menu, push the BACK button.



In the MIDI menu you can configure the Xenodrive MIDI implementation.



The first submenu here is for setting the MIDI channel. Push the encoder to activate the MIDI channel selection and rotate it to select a channel. The selected channel will be the same for MIDI IN and MIDI OUT.



Next, we have the MIDI output configuration. Push the DATA encoder to access the MIDI output configuration and rotate it to select one of the options. The MIDI output can be set to MIDI OUT mode that sends MIDI CC messages to your DAW or other gear as you tweak parameters on the Xenodrive, MIDI THRU mode or can be turned off.



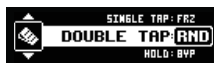
As you scroll down the MIDI menu, you can assign custom MIDI CC messages to all Xenodrive parameters. See the default MIDI CC implementation on the page 10 of this manual. For example, by default the CC message for the SHAPER GAIN parameter is 70, but you can push the DATA encoder and rotate it to change it to a different CC. In order to exit the MIDI menu, push the BACK button.



In the FOOTSWITCH section you can configure the footswitch behaviour of the Xenodrive.



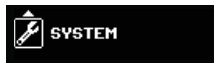
For a SINGLE TAP you can select the following options: OFF – the footswitch will not react on the single tap, BYPASS, SCREAM, FWD – each tap of the footswitch advances to the next preset in the list, BWD – each tap of the footswitch advances to the previous preset in the list, RND – each tap of the footswitch initiates a random preset from the list, MGC (MAGIC) – each tap on the footswitch generates a random combination of parameter settings. Rotate the DATA encoder to select an option and push the encoder to confirm the selection.



For DOUBLE TAP you have a selection of the same options as for single tap.



For a footswitch HOLD (2") you can select the following options: OFF – the footswitch will not react on hold, BYPASS and SCREAM. Rotate the DATA encoder to select an option and push the encoder to confirm the selection. In order to exit the FOOTSWITCH menu, push the BACK button.



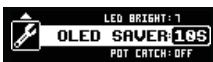
In the SYSTEM menu you will find general configuration settings of the Xenodrive as well as options for backing up the patches.



The last section on the SYSTEM menu shows the firmware version. You can subscribe to the Erica Synths mailing list, social media or check www.ericasynts.lv for firmware update announcements!



The first setting here is for OLED DISPLAY BRIGHTNESS. Push the DATA encoder to select the brightness setting, rotate it to set the desired brightness level and push the encoder to confirm. The second selection allows you to adjust LED BRIGHTNESS. Push the DATA encoder to select the brightness setting, rotate it to set desired brightness level and push the encoder to confirm.



Next, we have the OLED DISPLAY SCREENSAVER. Push the DATA encoder to select the OLED SAVER setting, rotate it to set the desired screensaver time and push the encoder to confirm. You can also turn ON and adjust OLED DIMMING time - after the preset time the OLED brightness will dim thus increasing lifespan of the OLED.



The POT CATCH option turns the potentiometer position memory ON or OFF when you change the presets. Each preset has specific potentiometer positions and when you change the preset, in most cases these positions will be different. With POT CATCH set to ON, you need to rotate the relevant potentiometer through the previously saved position before it starts altering the parameter, thus ensuring gradual transitions in sound when altering parameters. With POT CATCH set to OFF, rotating the relevant potentiometer will immediately change the position and have an effect on the sound. There is a third setting – POP, which turns pot catch ON and displays a handy pop-up when adjusting a parameter to see where the locked position is that has to be matched in order to alter the parameter.



If LOAD LAST is set to ON, when power cycling the Xenodrive, it will load the last preset that was active before powering the unit off. If this is set to OFF, the Xenodrive will initiate the first preset in the list.



The SHOW WAVE setting allows you to turn ON or OFF the visualization of the currently selected wave on the OLED. Push the encoder to enter SHOW WAVE setting, rotate it to make your selection and push the encoder to confirm.



In USB MANAGE mode you can add/remove individual patch presets. Connect the Xenodrive to your computer via a USB cable and push the DATA encoder to begin. The Xenodrive will appear as an external drive on your computer – open it and you will see a directory with the preset .nvp files – you can add new ones or remove/back up individual patches to your computer. Push the BACK button on the Xenodrive to eject it from your computer.

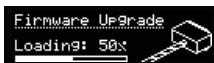


In USB BACKUP mode, you can back up all current patches of the Xenodrive (only patches and their order, not settings). Connect the Xenodrive to your computer via a USB cable and push the DATA encoder to begin. The Xenodrive will appear as an external drive on your computer – open it and you will see a directory with a single backup.nvb file – you can save a copy of this on your computer or replace it with another backup.nvb file to load a different backup. NB! When loading a different backup, it will completely overwrite the existing patches and their order.



You can perform a FACTORY RESET of the Xenodrive. Push the DATA encoder and follow instructions on the OLED screen.

► Firmware upgrade



In order to upgrade the firmware of the Xenodrive, power it off and connect it to your computer via a USB cable. Then, power it on while pushing and holding both the DATA ENCODER and the SCREAM button – a firmware upgrade display will appear. The Xenodrive will appear as an external drive on your computer – open it and you will find an empty directory with an INFO.txt file in it. Simply drag and drop the .uf2 firmware file into the directory – It will immediately upload and the display will quickly show FINISHED! – the Xenodrive will then restart itself into normal operation mode and it will no longer be visible as a drive on your computer (you can then remove the USB cable) – the firmware has been successfully installed!

► Default MIDI CC implementation

PARAMETER	MIDI CC	RANGE
Shaper gain	70	0-127
Drive	71	0-127
X wave	72	0-127
Tone	73	0-127
Rotate	74	0-127
Y wave	75	0-127
Compressor	76	0-127
Shaper mix	77	0-127
X mod	78	0-127
Low EQ	79	0-127
High EQ	80	0-127
EQ Shift	81	0-127
Scream	82	ON/OFF
DRY/WET	83	0-127

► Factory presets by Eraldo Bernocci

These patches are developed for various instruments; therefore the sound of the presets depends greatly on the adjustment of the input GAIN, DRIVE, and TONE controls. A patch can react in a completely different way just by slightly changing these settings, but overall adjust the GAIN setting so that about 2/3 of output level LEDs are lit. The golden rule is to experiment for yourself and consider these factory presets as a guideline. Be careful with the VOLUME level!

- 1 2 IN 1 (DISTORTION & SHAPER)** – Distortion and wave shaper. Process anything; use the COMPRESSOR to shape the sound. Works great on drums. Play with SCREAM, but be careful.
- 2 50/50 (EXPERIMENTAL / TEXTURAL)** – Halfway to destruction. Everything changes when you use GAIN. Add some violence with SCREAM; be careful.
- 3 ADD (EXPERIMENTAL / TEXTURAL)** – Like an old radio gone forever. Perfect for long samples and drones. Adds saturation to anything. Use DRIVE and ROTATE.
- 4 BASS IN (BASS & GUITAR)** – Use with bass. Slowly turn the Y WAVE to find your perfect spot.
- 5 BASS ME (BASS & GUITAR)** – Punish bass saturator.
- 6 BEAT TRF 1 (DRUMS & PERCUSSION)** – Groove destroyer. Play with TONE and ROTATE.
- 7 BEAT TRF 2 (DRUMS & PERCUSSION)** – Groove destroyer. Play with TONE and ROTATE.
- 8 BEAT TRF 3 (DRUMS & PERCUSSION)** – Groove destroyer. Play with GAIN to overload it.
- 9 BS DIST (BASS & GUITAR)** – For electric bass. Careful with EQ; it's a mega overloaded preset.
- 10 BS DIST 2 (BASS & GUITAR)** – For electric bass. Less distorted.
- 11 CYMB DESTROY (DRUMS & PERCUSSION)** – A cymbal destroyer.
- 12 DIRTY PAIN (DISTORTION & SHAPER)** – Disturbing frequency shift. Use the SHAPER MIX; experiment with DRIVE and EQ.
- 13 DOOMER 2 (BASS & GUITAR)** – Dark and heavy guitar/bass tone.
- 14 DOMMER (BASS & GUITAR)** – Similar to DOOMER 2, but with wave shaper on top.
- 15 ELECTRIC BS (BASS & GUITAR)** – Use GAIN to find the right input level. Adjust EQ SHIFT to taste.
- 16 ELECTRIC BS2 (BASS & GUITAR)** – Double the bass sound with a hint of distortion. Adjust tones to taste.
- 17 GATED BT (DRUMS & PERCUSSION)** – Play with EQ SHIFT to enhance the kick root frequency. Overfeed it and see.
- 18 GT DIST (BASS & GUITAR)** – Works with guitars, but you can feed anything. Use EQ and EQ SHIFT.

-
- 19 JMC GUIT (BASS & GUITAR)** – Feed an electric guitar and adjust DRIVE and SHAPER GAIN. Careful with SCREAM.
- 20 KICK ME01 (DRUMS & PERCUSSION)** – Wave shaper for kick and percussion. Use WAVE X/Y to find the hardest spot.
- 21 KICK ME02 (DRUMS & PERCUSSION)** – Another wave shaper for kick and percussion. Use WAVE X/Y to find the hardest spot.
- 22 KICK ME03 (DRUMS & PERCUSSION)** – Wave shaper for kick and percussion. Use TONE and ROTATE to find the hardest spot.
- 23 KICK ME04 (DRUMS & PERCUSSION)** – Anything you feed will feedback as soon as the noise gate opens.
- 24 MAD GEE (EXPERIMENTAL / TEXTURAL)** – Adjust ROTATE to create interferences. Better with fast material. The more you feed it, the more hidden melodies appear in the wall of noise. Play with SCREAM and WAVE.
- 25 MALFUNCTION (DISTORTION & SHAPER)** – Everything you throw at it will malfunction. Use the SHAPER GAIN.
- 26 MIX SATUR (EXPERIMENTAL / TEXTURAL)** – Full mix saturator. Play with EQ and COMPRESSOR.
- 27 MUFFLED (EXPERIMENTAL / TEXTURAL)** – Try it on a stringed instrument.
- 28 NOISE ADD (EXPERIMENTAL / TEXTURAL)** – Feed anything; it adds a cymbal-noise character or moving noise. Use SHAPER MIX and X WAVE to find the perfect spot.
- 29 OLD PEDAL (EXPERIMENTAL / TEXTURAL)** – A humming patch. Try it with drum loops. Use SCREAM.
- 30 SATURATOR (DISTORTION & SHAPER)** – As per the name. Use EQ SHIFT and TONE.
- 31 SCREAMER (DISTORTION & SHAPER)** – Use SCREAM and EQ SHIFT. It destroys everything.
- 32 SLOW MONSTER (DRUMS & PERCUSSION)** – Feed anything slow and adjust COMPRESSOR, SHAPER GAIN, and X-MOD. Also works as a drum/groove transformer. Use WAVES and DRIVE.

► Factory presets by Davide Puxeddu

These presets are designed for line level input signals from synthesizers or drum machines. In order to appreciate the presets as they were designed, make sure the GAIN setting on the Xenodrive is +6dB.

- 33 **CERBERUS** - Total destruction of your sound for a... powerful result!
- 34 **JUNKY GRIT** - Perfect with electronic drums to add a destructive edge
- 35 **BAD GUITAR** - A nasty distortion preset optimized for electric guitar. Make sure you have a suitable input. You can adjust it with the Gain knob
- 36 **VERTIGO** - Shape + Distortion that disintegrates the signal making it a pure distorted edge
- 37 **ACID FEEL** - A recreation of the famous distortion from the TB series. Perfect for acid grooves
- 38 **DR OIZO** - Shaper fx ideal for analog drums
- 39 **DRIVER: D\W** - Make your arpeggiator synths super mean with this preset
- 40 **BOLD BUZZ** - Shape + Distortion to create pure evil to your sound
- 41 **ACID CREAM** - Perfect preset to pair with your synth bass to generate a creamy 303-style sound
- 42 **BALROG** - Effect created for cinematic purposes. Apply it to your synths for an instant impact

► Safety instructions

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



Use The Xenodrive exclusively with the power supply unit (PSU) supplied with it. 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 Xenodrive is NOT intended for use in a humid or wet environment. No liquids or other conducting substances should reach the internals. Should this happen, the unit 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.



The Xenodrive 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 conforms to 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 & Majja Vitola@Black8.

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

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

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

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