



THANK YOU FOR PURCHASING NINJA TUNE ZEN DELAY!

Inspired by a trip to Berlin's trailblazing music hardware trade show Superbooth, Coldcut's Matt Black and longtime friend Dr Walker (Liquid Sky artist collective / Air Liquide) envisaged the exciting possibilities of a custom hardware effects unit. The result is the creation of the Zen Delay – the first-ever hardware effects unit produced in collaboration with an electronic music label. Bringing together the best of the digital and analogue worlds, the Zen Delay is a BPM-synced stereo delay line, combining extreme feedback ranges for dub and experimental effects with a multi-mode 24 dB synth filter and valve overdrive.

Created and manufactured by Erica Synths, the unit is housed in a metal case with Erica Synths' signature bakelite knobs and a valve circuit for extra analogue warmth. While sonically versatile, it is incredibly easy to use – each function has a physical knob that you can play around with without diving into manuals or scrolling through menus on a tiny screen.

Crafted in close collaboration with DJs and producers, the Zen Delay was uniquely developed with both live and studio use in mind and is suitable for many different performance situations, musical styles and instruments. While most delay devices are designed as 'stomp boxes' for guitarists, the device is equally powerful in the hands of electronic music producers, artists and DJs, adding a unique, warm and powerful sonic character to drum machines, loops, vocals, synths, samples or any other source. Even full tracks or a live stereo mix can be enhanced by the combination of analogue and digital circuitry, breathing new life into iPad performances and giving traditional digital synths and drum machines a huge kick.

FEATURES:

5 stereo Delay algorithms: Tape, Digital, Tape Ping-Pong, Digital Ping-Pong, Vintage
LP, BP, HP stereo filter
Delay off feature for use of filter alone
Tube overdrive
Versatile input level amplifier (line level to modular synths)
Stereo In/Out: 2x standard jack
MIDI In: standard DIN MIDI socket
Universal power supply unit (110-240VAC) with exchangeable connector

SPECS:

Delay time	1-5000ms (up to 20" in BPM sync)
Time divisions	1/4, 1/3, 1/2...x2, x3, x4 of clock/tap
Frequency range	5Hz-24kHz
Sampling frequency	48kHz, 24bit
Audio codecs	-108 dynamic range, -98dB THD+N
Dimensions of the case	210x150x76mm
Net mass of the unit	0.9kg
Dimensions of the packaging	343x172x98mm
Mass with the packaging	1.4kg
Power supply	12VDC, centre positive



CONTROLS

- 1 Connect the power supply here! Use only the PSU supplied with the unit!
- 2 Midi input detects the midi clock and uses it for BPM sync delays.
- 3 These are L and R audio inputs.
- 4 CTRL IN is a bypass/TAP footswitch (not included) connection to use the ZEN with guitars. The TIP of the connector is bypass momentary switch, the RING is tap tempo momentary switch. To use both functions simultaneously, you need a dedicated footswitch with separate momentary pushbuttons for tip and ring or 6.3mm stereo jack splitter that splits a stereo jack to two mono jacks, each for tip and ring.
- 5 These are L and R audio outputs.
- 6 Set delay time manually from super-short 3ms to 3s. The scale is designed so that you can play with feedback nuances at the short delays and, basically, you can use the module as an instrument on it's own. This control is also used for delay time BPM-sync divisions and multiplications in MIDI sync mode. At 12 o'clock delay time is equal to the BPM, turning the knob counter clockwise divisions /2, /3, /4 are available, turning the knob clockwise, multiplications x2, x3, x4 are available.
- 7 Adjust feedback level! In full CW setting the module will go to self oscillation.
- 8 Select one of 5 delay algorithms! In full CW setting the unit will start to self oscillate. Tape delay will introduce pitch shifting, when delay time is changed, digital delay changes the delay time without pitch shifting. Vintage delay is specific kind of the tape delay - it simultaneously bitcrushes the audio signal with the increasing delay time - use it for low-fi craziness! In the delay off setting you can use the ZEN as a filter/overdrive effects unit.
- 9 Use the TAP button to enter desired delay time. The built in LED will indicate the delay time. Rotate the Delay Time knob to reset the tap time. Push and hold the TAP button for 2" (until it blinks twice) to enter the midi sync mode. In this mode the delay time is synced to the midi clock, and the Delay Time knob becomes delay time divider or multiplier. To exit the midi sync mode, push and hold the TAP button for 2".
- 10 Adjust Dry/Wet balance! The Dry/Wet control is introduced AFTER the tube Drive, so even in the Dry setting you will be able to overdrive the audio signal.
- 11 Adjust audio signal input level! The extreme settings will result in the overdrive. The LED will indicate the DSP clipping - try avoiding it if you want a clean delay and filtering effects.
- 12 Adjust the filter resonance! In extreme clockwise settings the filter will start to self-oscillate!
- 13 This is the filter cutoff knob. As all knobs on the ZEN delay, it's solid and reliable. Don't hesitate to operate it!
- 14 This is tube overdrive control knob. It increases tube overdrive to quite a destructive madness. We have implemented the limiter that makes sure that overall sound volume does not increase with overdrive applied.
- 15 Select the filter mode!
- 16 The BYPASS knob LED on means the unit is active. LED off means, the FXes are bypassed.

FIRMWARE UPDATE

The ZEN delay comes with the latest firmware, and normally you do not need to update the firmware. But there can be occasions when you need to update it or replace with alternative firmwares, if such will be released. ZEN Delay features audio bootloader for firmware update. In order to update the firmware, follow instructions below!

1. Download the .wav file with the latest firmware version from our web page: www.ericasyntns.lv

2. Connect your computer's audio output to the Zen Delay's L IN.

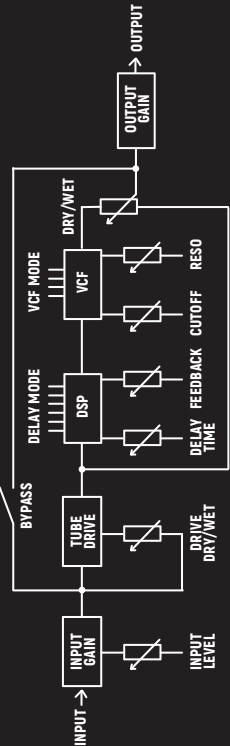
3. Push and hold the TAP button while powering on the unit (the button should be blinking fast which means that you have activated the bootloader mode).

4. Turn the IN LEVEL knob to 12 o'clock.

5. Open and play the .wav file on your computer and the uploading process will start automatically.

In case something goes wrong it will be indicated by shining yellow LED above the IN LEVEL knob and slowly blinking TAP button. In that case you have to push the TAP button again and play the audio file again.

It may happen that some players won't play back the file correctly so in case the firmware is not recognized by the unit please try to play back file with a different software or device.



The signal path of the ZEN Delay

- **The Zen Delay** is the analogue delay unit I've been waiting for. Stereo warmth, tone and texture. Perfect for live abuse, and studio madness... love it
/ The Bug /

- **The Zen** excels at the sort of extreme dub possibilities Coldcut love. Feed it back!
/ Matt Black, Ninja Tune /

- **For years** I have dreamed of a state-of-the-art stereo valve dub delay for my MPC that perfectly masters all sound aesthetics from "badass" to "psychedelic hypnotically trashed" – and now, have a look! There it is... the Zen Delay!
/ Dr Walker /

- **The Zen Delay** is a product of our expertise on vacuum tube designs, our powerful, custom DSP platform and the great sound of our filter ICs made and developed in Latvia. It by far exceeded expectations in terms of how it sounds and feels when played.
/ Ģirts Ozoliņš, Erica Synths /

SAFETY INSTRUCTIONS

Please follow the instructions for the use of the Erica Synths ZEN Delay below, because only this will guarantee proper operation of the unit and ensure the warranty from the manufacturer.



Use the Erica ZEN Delay exclusively with the power supply unit (PSU) supplied with the unit. 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 Erica ZEN Delay 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 module to temperatures above +50° C or below -20° C. If you have transported the system in extreme 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 modules with visual damages.



The unit has to be shipped in the original packaging only. Any unit 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. Ensure that you keep the original packaging and technical documentation.

ZEN Delay warranty is provided by the manufacturer Erica Synths. You will find the Erica Synths terms of warranty at www.ericasynths.lv. Items for return, exchange and/or warranty repair should be sent to:

Erica Synths
Andrejostas Str. 43
Riga
Latvia
LV-1045

DISPOSAL

This device complies with EU guidelines and is manufactured and RoHS conforming 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 Ģirts Ozoliņš@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 and Ninja Tune.

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



1 THE DELAY

This patch sets to unit to work as a delay, this will work the best with single shot sounds or synth patches. Play around with the Delay Time and Cutoff settings!



2 DRIVE & FILTER

This patch bypasses the delay and allows you to use just the filter and drive circuits of the unit. Play around with cutoff, resonance, drive and different filter modes!

NB! Watch out for that input level LED as with higher gain settings it might overload the filter circuit especially on BP and HP settings.



3 FLANGING LAYER

This patch adds nice flanging second layer to the input signal. Play around with Cutoff and short delay times!



4 SCRATCH!

This patch allows you to "scratch" the delay buffer with the Delay Time knob therefore creating interesting pitch shifting effects. Change the delay mode to digital to achieve interesting beat repeater like effects.