

# BLACK STEREO DELAY

## THANK YOU FOR PURCHASING THIS ERICA SYNTHS BLACK SERIES MODULE!

The Erica Black Series includes high-end, unique functionality and superior quality modules. Only the best, highest quality components are used, all inputs and outputs are protected against undesired overvoltage. When designing the Black Series, we prioritized usability. Big knobs are assigned to functions that make differences in the sound. The Black series consists of a range of modules that are needed to put together an entire synth. Enjoy!

**The Erica Synths Black Stereo Delay** is a hi-fi stereo delay with lot of unique features based on our custom DSP engine. Tape, BBD and digital delay emulations with three modes, each accompanied with delay time, feedback, feedback tone and stereo spread controls allow for designing extremely delicate effects. CV control over various parameters and the ability to save up to 10 presets will make this module an integral part of any performance rack.

The modules run on new Erica Synths DSP hardware and the effects are developed in collaboration with Dutch company 112.dB who make some of the most beautiful sounding effects.

### FEATURES:

- Tape, BBD and digital delay types
- Three modes for each type
- Tap and clock synchronization of delay time
- 10 preset patches
- CV control over delay time, feedback, tone, dry/wet mix and preset selection
- Adjustable stereo delay spread

### SPECS:

Max audio input level before clipping	16Vptp
CV input range (full span)	-5V - +5V
Sampling frequency	48kHz, 24bit
Delay time	3..3000ms
Audio codecs	-108 dynamic range, -98dB THD+N
Power consumption	120mA@+12V, 39mA@-12V
Module width	12HP
Module depth	35mm

### FIRMWARE UPDATE

The Black Stereo Delay2 module features an audio bootloader for firmware updates. In order to update the firmware:

1. Download the audio file to your computer.
2. Turn off your Eurorack system and connect the audio output (headphones out or audio output from a soundcard) to the L(MONO) IN of the Black Stereo Delay2 module. Set the TYPE switch to the D position (lowest)

### 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.

### TIME

Set the delay time manually from super-short 3ms to 3s long delay times. The scale is designed so that you can play with feedback nuances at shorter delay times and you can effectively use the module as an instrument on its own. The TIME CV is added to the position of the knob. When in SYNC mode, the TIME knob becomes a clock divider/multiplier – at 12:00 it follows the incoming clock, when turned clockwise, it multiplies the clock by 2, 3, 4, 5, 8, when turned counterclockwise, it divides the clock by 2, 3, 4, 5, 8. It is also used for selecting save/recall slots of presets

### TYPE

Select among Tape, BBD and Digital delay types

### TONE / SPRD

TONE/SPRD knob controls the tone of the delayed signals or the spread of delay taps across a stereo field

### TAP

Use this button for tapping in delay time and for saving patches

### SHIFT

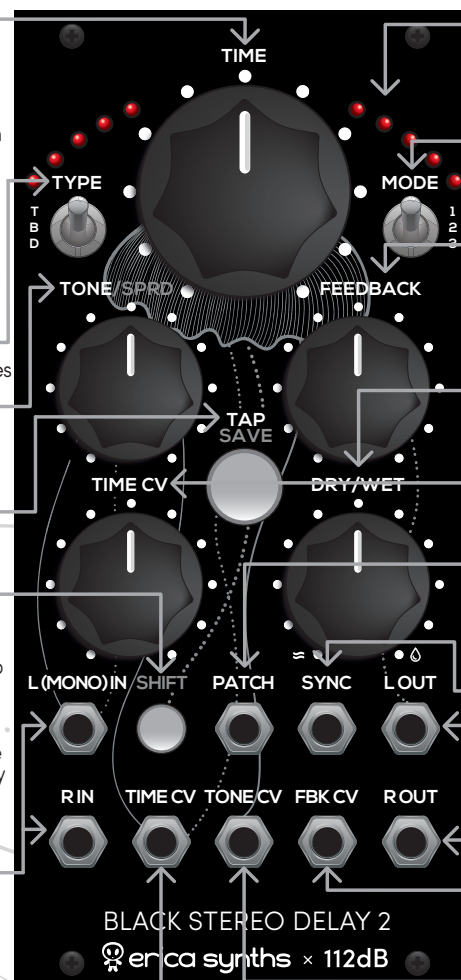
The SHIFT button adds extra functionality to the module: 1. In order to SAVE the preset patch, push and hold the SHIFT button and rotate the TIME knob to select one of 10 preset slots, represented by 10 LEDs, then push the TAP/SAVE button for 1 second. 2. In order to RECALL a patch, push and hold the SHIFT button and rotate the TIME knob to select one of 10 preset slots; now, push the TAP button promptly and the preset will be loaded. 3. Push and hold the SHIFT button and rotate the TONE/SPRD knob to adjust the delay spread across the stereo field

### MONO

These are audio inputs of the module. You can patch a mono signal into the L (MONO) input and it will be automatically routed to the R input

### TIME CV

This is the TIME CV input, the CV is added to the setting of the TIME knob



### LEDS

Normally, the 10 LEDs indicate audio level for the left and right channels, but they also represent 10 preset slots

### MODE

Each delay type has 3 MODES – Stereo, CrossFeed, Ping-pong

### FEEDBACK

Adjust the feedback level! In full CW setting, the module will go into self-oscillation. The Feedback CV is added to the position of the knob.

### DRY / WET

Adjust the Dry/Wet setting manually

### TIME CV

This is the TIME CV attenuator

### PATCH

This is the patch CV input – with a CV applied here, the module will switch among the 10 preset patches

### SYNC

A clock applied to the SYNC input will synchronize the delay time to the clock signal

### L OUT / R OUT

These are audio outputs of the module

### FBK CV

This is the FEEDBACK CV input, the CV is added to the setting of the FEEDBACK knob

### TONE CV

This is the TONE CV input, the CV is added to the setting of the TONE knob

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3. Push and hold the SHIFT and TAP buttons simultaneously and turn the Eurorack system on. The five LEDs on the right-hand side will start blinking, indicating that the firmware update mode is active.
4. Now, play the audio file from your computer. The left five LEDs will indicate the audio level of the incoming firmware file. At least 3 LEDs have to be illuminated for a sufficient audio level. If less than 3 LEDs are active, flip the TYPE switch to the B position to increase the audio level of the incoming signal.

5. The firmware update will take few minutes. During the firmware update a blinking TAP button indicates that the update is going well, a blinking SHIFT button indicates an error. In case of an error, retry the update from step 1.
6. Once the update is completed, restart your rack.

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You will find Erica Synths terms of warranty at [www.ericasynths.lv](http://www.ericasynths.lv)

Items for return, exchange and/or warranty repair have to be registered at SUPPORT on [www.ericasynths.lv](http://www.ericasynths.lv) and send back to us according to instructions in the support page.