Hampshire Electronics

Delay Module in Eurorack Format Instructions and Details



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Overview

The Hampshire Electronics Delay is a delay module in the popular Eurorack format.

The Delay uses the well known PT2399 IC to produce its signature sound.

The key details of the Delay are as follows:

- 8HP Wide Eurorack module with thin profile (20mm deep from faceplate)
- Controls designed and laid-out with performance in mind
- Tough yet light composite faceplate
- Diode protected power input
- Classic PT2399 delay, from 30ms to 340ms of clean delay and significantly more with lo-fi break-up
- The module will take the PT2399 as far as it will go in terms of delay length
- Delay time adjustment
- Feedback adjustment
- Wet/dry adjustment
- CV input for delay time in the standard 0v to 5v range
- 27ma @ +12v
- 8ma @ -12v

Installation

Power Availability

The Delay module draws the following current from your power supply:

27ma @ +12v

8ma @ -12v

You should first ensure that your power system has enough power capacity to drive the module before considering installation. If you are in doubt, please consult with your power supply manufacturer.

Connecting the Power

Refer to the writing on the back of the module next to the 16-pin power connector to ensure that you connect the power supply correctly. The +12v, -12v and ground (GND) pins will be clearly marked.

The power inputs are diode protected but damage may occur if the unit is connected incorrectly.

Fitment

Use the screws provided to firmly fit the module into your case. You should make sure that the module does not move when you insert and remove patch cables.

The Operation of the Delay Module

Introduction

The Delay module is very simple in its operation, requiring only a simple input and output signal to operate.

Input Signal

The input signal should be inserted into the in jack. The signal will commonly be an audio signal. Signals with more variation will give greater delay effect – a constant signal such as a plain un-gated oscillator output will not exhibit a particular strong effect.

Output Signal

The output signal should be taken from the out jack. This will be the input signal with the delay effect.

Delay Time

The delay time is controlled by the DELAY knob. The shortest delays are gained by turning the knob fully counter-clockwise. Turning the knob clockwise increases the delay time, through the high-quality delay times and into the extended, lo-fi times. Over a second of delay time at the lowest quality is possible.

If the knob is turned fully clockwise the effect may cut-out. This is because the longest delay time has been exceeded – this is configured purposefully so that the very longest delay times can be extracted.

Delay Time CV

The delay time can be controlled via a voltage inserted into the delay CV input – this will be added to the setting of the DELAY knob. To control the delay exclusively from the delay CV input the DELAY knob should be turned fully counter-clockwise.

Feedback

The delay feedback is adjusted using the FEEDBACK knob. This is the amount of the input signal fed back into the delay loop. The greater the feedback setting the more 'tail' the delay

has.

At high feedback settings the delay will self-oscillate, creating an ever-building wall of sound.

Wet/Dry Level

The wet/dry level of the effect is adjusted with the WET/DRY knob. Turning the knob counter-clockwise reduces the effect, with more of the original input signal being passed to the output. Turning the knob clockwise increases the effect, with less of the original input signal being passed to the output.