

# Little PrimalTap

Vintage Digital Delay

User's Guide

Version 5 : For Mac and Windows



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THE BASICS

Little PrimalTap - Version 5



Figure 1: Little PrimalTap's Control Panel

Meet Little PrimalTap, a digital delay plug-in with some serious analog attitude. Inspired by the classic Lexicon Prime Time Model 93 Digital Delay Processor (first introduced in 1978), Little PrimalTap brings the wonderfully odd sound of '70s-80s digital delay to your DAW. These early delays were (when they worked at least) incredibly flexible and sounded anything but sterile and digital. Think analog, lo-fi, gritty, and very very unique.

A large part of this uniqueness in the original hardware was due to the "Multiply" control, designed to allow for the previously set delay to be further copied by as many as 8 times. But, in the late 1970s digital technology was limited and memory was expensive, requiring manufacturers to come up with workarounds in order to create those long delay times. The manner in which this was accomplished in the Prime Time was by halving the sample rate to compensate for the extra needed processing power required each time the delay length was doubled. This meant that at the maximum 8X multiply setting the bandwidth was a very low-fi 1.5kHz. This resulted in a drastic tonal change as with each increase of the Multiply control, the narrowed bandwidth resulted in oddly pleasing lo-fi sonic content, especially on the longest 8X multiplied echoes.

Another key element pulled from the hardware is Little PrimalTap's wonderful Feedback capabilities, allowing for regeneration of the delay effect resulting in some truly luscious delays.

Little PrimalTap is more than just a static delay plug-in to lay across elements in your mix: it's a dynamic and inspiring tool meant to be played with and manipulated in relation to your source material. This manual is a great starting point to familiarize yourself Little PrimalTap's rather unique controls and modes. Let's get started!



Figure 2: The Little PrimalTap GUI

## TIME

The TIME knob is used to set the amount of delay time. This is an old-school control, so the setting is in milliseconds, and turning this knob while audio is playing will create audible glitches in the sound - just like the original. Deal with it.

The delay time is also affected (in very interesting ways) by the ADJUST and MULTIPLY knobs as described below.

## **ADJUST**

If you want smooth delay adjustment, use the ADJUST knob. The way this works is a little tricky - whatever TIME is set with the time knob is reduced by up to one-half by turning this knob. The cool thing is that this control is smooth - you'll hear an obvious pitch change as this is adjusted. This is even cooler if you've got a lot of feedback happening and have captured a snippet of audio.

What's going on is that the ADJUST control changes the sample-rate of the delay effect. Which, interestingly enough, is very similar to what a bucket-brigade pedal (think Memory Man or old MXR green pedal) does when you change the delay time.

#### **MULTIPLY**

The Multiply control is key to the unique sound of Little PrimalTap. This control increases the currently selected delay time time by either 2X, 4X, or 8X. Given the limitations of processing power when the original hardware was designed, this was accomplished by halving the sample rate each time the delay was doubled. This also brought into play some very steep anti-aliasing filters. Essentially, every time the delay control goes UP, the fidelity of the delay goes DOWN.

Similar to the Time control, changing the setting of the Multiply control while audio is being processed will result in audible anomalies and glitches. Adjusting or automating changes to the Multiply control especially with longer delay settings and Feedback dialed in will give you some pretty awesome sounding octave shifting.

#### IN

The IN slider controls the input gain. Use it a little to make things louder, or a lot, to drive the living crap out of the input stage. This is fun, and has an interesting, and unique saturation character.

#### FΒ

This is where things get even funner. FB (feedback) is used to control how much of the delayed signal is "fed back" to the input of the delay. This is also commonly called "Regen" or "Repeats". Turn this up a little to get a nice repeating echo vibe. Turn it up a lot (LOUDNESS WARNING) to create infinite, saturated, and possibly very loud loops. Now, tweak the ADJUST and MULTIPLY knobs. This is is how we amuse ourselves when we're tired of writing code.

#### MIX

The Mix control is used to adjust the wet/dry balance between the original source material and the processed sound from Little PrimalTap. At its highest position the signal will be 100% wet (processed) and conversely at the lowest slider position the audio coming out of Little PrimalTap will contain zero processed content.

#### SUPPORT INFORMATION

Now that you've taken the time to learn all about Little PrimalTap, have fun, experiment, and make greatness! If our plug-ins helped you take your production to the next level, let us know, we'd love to hear from you and what you were able to create with our software.

If along the way however you should run into any hiccups or anything unexpected, we offer free technical support for all registered users.

Our FAQ contains many helpful answers. you can find it at:

## http://support.soundtoys.com

If you need further support you can find our Customer Support contact form at:

# https://www.soundtoys.com/forms/support

You can also reach our support staff by e-mail at:

# support@soundtoys.com

If neither of those options work for you, our office can be reached via telephone at:

#### 1-800-COOL-EFX

Please have the following information available to help assist our support team:

- The product version and serial number
- The version number of your audio system (e.g ProTools 11.2.1, Cubase 8.0.5, Logic 10.2.0, Cakewalk Sonar X3)
- Your interface/hardware (e.g. Mbox Pro, Apogee Quartet, RME Fireface, etc.)
- Your computer and operating system info (e.g. MacPro OS X 10.9.5, Windows 7 SP1, Windows 8.1, etc.)
- A detailed description of the problem

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