Little Plate

Electromechanical Reverb

User's Guide

Version 5.2 : For Mac and Windows

soundtoys

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ABOUT LITTLE PLATE

We had two objectives when designing Little Plate: to create a lifelike reproduction of the classic EMT 140 plate reverb sound, and to extend its features in ways not possible in an analog effect. We hope you'll love using Little Plate as much as we loved making it.

It wasn't enough for us to just go to someone's studio and study an EMT 140 for a day or two. We went out and collected five of them so that we could live with them, tune them up, detune them, modify them, and study them extensively. Then we distilled what we learned into a plug-in that we think exemplifies classic plate reverb sound—dense, smooth, and a little bit dark.

Then we went farther by extending the maximum reverberation time to *infinity*. We also included modulation that creates subtle, lush movement within the reverb tail. Whether you're looking for an authentic recreation of classic plate reverb, or looking to go farther, we think you'll find that Little Plate is more than up to the task.

WHAT'S A PLATE REVERB?

The plate reverb is one of the most unlikely heroes in recording history, but it changed the sound of records forever. Simultaneously enormous and understated, the original wood-clad EMT 140 weighs in at about 600 pounds. It's not pretty. It's a piece of equipment that's essentially made to be hidden away in a utility closet far from the studio's loud live room. But despite it's humble, boxy exterior, the EMT 140 is undoubtedly the most iconic example of plate reverb, and remains a truly ingenious invention. Before the plate, when engineers wanted to add realistic reverberation to a recording they had to pipe sound into physical rooms or echo chambers. The EMT 140 instead uses a magnetic transducer to vibrate a massive sheet of metal, sending the result back to the engineer via a pickup that captures the resulting reverberation. While other early reverberation devices use springs, this tends to create a metallic and fluttery sound. The plate, however, is capable of dense and smooth reverberation unlike anything the world had heard. While it doesn't exactly sound like a real room, it has a beauty of its own, which is why plate reverb is still such a sought-after sound even many decades later. EMT 140s are getting hard to find though, and replacement parts even harder. Not to mention their sheer size and weight keep them out of reach of the average studio. But don't worry, we've done the heavy lifting for you. Little Plate faithfully recreates the 140 vibe right inside of your favorite DAW.

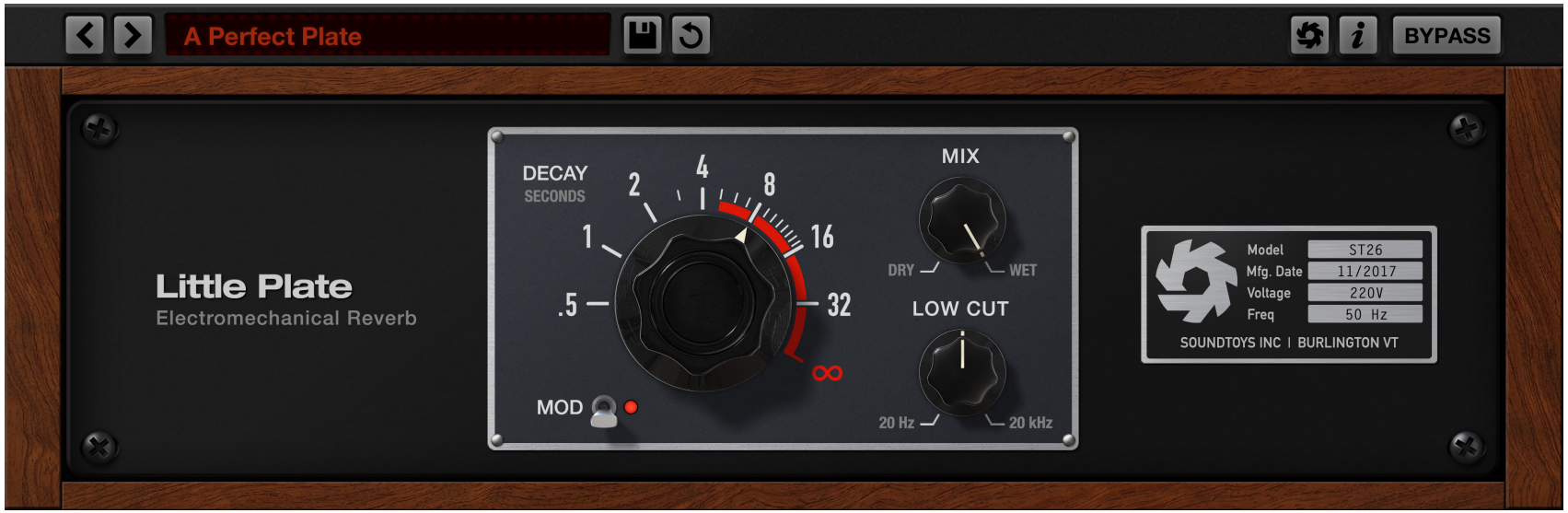

Figure 1: Little Plate's Control Panel

DECAY

The Decay Time control (shortened to Decay on the control panel) is the most important control in Little Plate. It affects how long it takes for a sound to fade away after entering the reverb. Changing the decay time will have a huge effect on how the reverb sounds, with short settings producing tighter, room like sounds, and very long settings producing huge, cavernous sounds.

In the hardware EMT 140, decay time is controlled by a damper, which has the effect of shortening reverberation time the closer it is moved to the vibrating metal plate. Even with the damper at its maximum distance from the plate, the physical EMT 140 is only capable of about five seconds of reverberation time (at 500 Hz). In Little Plate we've made it possible to get much longer extended decay times when you move into the red section of the Decay control range. The maximum (non-infinite) decay time setting is about one minute in length.

The decay times listed on the Decay knob are more specifically measurements of RT60 at 500 Hz. RT60 is a standard way of measuring reverberation time, and it indicates how long it takes a sound to decay by 60 decibels. We chose 500 Hz for our measurements because this is how decay time is listed on the EMT 140's control panel. The reason we need to specify a frequency is that decay times are frequency dependent in a plate reverb. This frequency dependent decay also depends on the damper (or decay knob in this case) position, giving each decay time its own unique tone. At all decay time settings, high frequencies fade away faster than everything else. The low end varies drastically with

decay time though, with shorter decay times creating a tight, controlled sound and longer decay times (four to five seconds) creating a warm, boomy sound that can be reined in with the Low Cut control.

INFINITE DECAY TIME

With Decay set to infinity (decay knob turned fully clockwise), the reverberating signal will not fade away. This allows sounds to reverberate for an indefinite amount of time. The sound of the reverberating audio will continue to change and darken over time, and new sound that enters the reverb will continue to influence its sound.

CAUTION: Be sure to watch your levels when using infinite decay. Playing sustained loud passages into the reverb can build up a large amount of energy inside the virtual plate (translation: it might get loud!).

TIPS:

- Experiment with automating the Decay control in your host application to smoothly turn infinite mode on and off to "hold" certain passages of audio in the reverb.
- Try playing into Little Plate live using infinite decay as a compositional tool.

LOW CUT

The Low Cut control will filter out low frequencies from the audio signal before they enter the reverb. Low Cut will not affect the dry, unprocessed audio signal.

TIP: Because low frequency signals can decay slower than high frequency signals in a plate reverb, there will tend to be a natural buildup of bass energy in the reverb tail. If you find the result of the reverb too muddy or boomy, increase the Low Cut amount to reduce the amount of bass being fed to the reverb.

MOD

The Mod switch introduces slight modulation within the reverb effect. This modulation creates subtle variations in the reverb, which can make the resulting sound thicker and smoother, especially at longer decay times. The sound of the modulation can best be heard on pitched instruments like keys, guitar, and voice as opposed to percussive instruments like drums. This creates subtle pitch-modulated sounds that simply aren't possible in a physical plate.

TIP: Try experimenting with Mod when you are using decay times that are very long, especially when using the infinite setting, for a rich, lush sound.

MIX

The Mix control blends the reverb signal with the unprocessed input signal. With the knob set to "Dry" there will be no reverb signal present in the output of the effect. With the knob set to "Wet," there will be only reverb signal in the output of the effect.

There was no mix control on physical plates. Instead, signal was tradition-

MIX (CONTINUED)

ally sent out to the plate via a mixer's auxiliary send, and blended back in on a return fader. This enabled engineers to send multiple sounds at differing levels into their plate simultaneously and control the overall reverb balance with a single fader. This creates the impression that all of those instruments are playing in the same space. This is how we recommend you use Little Plate - on an aux bus with the Mix knob at 100 percent wet.

However, you are free to use Little Plate however you wish, and we have included a specially-designed Mix knob for you should you wish to use Little Plate as an insert. The Mix knob differs from a typical mix knob in that when you start at 0 percent and fade up, it is mostly increasing the level of the reverb, and doing very little to the level of the dry signal, similar to how you would "bring up" the reverb on an aux send. As you pass about 70 percent, the dry signal will quickly and smoothly begin to drop until it is completely gone at 100 percent wet.

TIP: Use the Parameter Lock feature that is a part of all Soundtoys plugins to lock your Mix knob where you want it while auditioning presets. Our presets are almost all 100 percent wet. Hold *Control* + *Option* on Mac or *Control* + *Alt* on Windows to lock a parameter. It will turn red when it is locked. Parameters that are locked will not change when you switch presets.

SUPPORT INFORMATION

Now that you've taken the time to learn all about Little Plate, 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:

1-877-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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