boz⁻ⁿ
DIGITAL LABS

Liquid Tank

ReCoil
Spring Reverb

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PRE-DELAY
4ms

WET
-2.6dB

Slinky Clean

Algorithm

Springs **3**

Length	Tension
87.2%	100%

WIDTH
67%

DRY
0dB

Decay	Boing
92.8%	53%

Equalizer

HPF
187Hz

Mids
-8.2dB

Bright
4.3dB

LPF
12543Hz

ReCoil
Spring Reverb

Background

Thank you for purchasing ReCoil. This plugin is the result of way too many hours deep diving into why spring reverbs sound the way they do.

Spring reverbs have a very distinct sound, unlike any other reverb, and they have sort of solidified a place in our music as distinctly "vintage" sounding reverbs. But like most vintage gear, springs home with some pretty hefty limitations. Other than blend and EQ, spring reverb units don't give any control to the user. You have your springs and you don't get to adjust the decay or tension. Whatever they built in the factory is what you get.

This is where ReCoil comes in. ReCoil gives you the best of the digital and analog worlds. You get clean, noise free spring reverb and you get to control the nitty gritties of the springs.

- Boz Millar

System Requirements

Mac: 10.13 or higher
Windows: 7 or higher

RAM: 2GB

Hard Drive Space: 150mb

Available Formats

This plugin is available in 64 bit versions of each format. It is available in the following formats:

Mac	VST2, VST3, AU, AAX Native
Windows	VST2, VST3, AAX Native

Installation
Download and run the installer. During the installation, you can choose which formats you would like to install.

Registration

The first time you run ReCoil, it will ask you for your username and serial number. You can find this information in your downloads page. If you do not have a serial number and you would like to demo the plugin you can press "Continue Trial" to use the plugin in trial mode.

Downloads page URL: https://www.bozdigitallabs.com/my-account/downloads/

Trial Mode

When ReCoil is in trial mode, you can use all of the plugin's functionality. The only difference is that it will not save its settings when you close and reopen the plugin. The preset save function is also disabled, but the default presets will still load.

Top Bar

Presets

ReCoil comes equipped with its own preset menu. To save a preset, just hit the 'Save' icon next to the preset menu, type the name of the preset and hit *enter*. If you enter a name of an existing preset, the old preset will be overwritten.

Presets can be organized into sub menus by sorting them into folders in your finder/explorer window. Note that the preset menu only supports one layer of sub folders, so if you put presets inside a folder that is inside a folder, the preset scanner will not find them.

Presets are shareable across formats, computers and operating systems. This means that if you save a preset in your DAW in OSX, you can send that preset file to a friend who uses a different DAW on Windows and it will work exactly the same.

For convenience, you can scroll through the presets by hitting the next/previous buttons.

Default Settings: You can customize the default settings of the plugin. If you want to change the default settings of the plugin, right-click the "Save Preset" icon.

Undo/Redo

You can click the undo/redo buttons to step through the changes you have made to the plugin.

About

Open up the *About* page where you can access this user manual and other information about the plugin.

Notepad

This is a simple text box that lets you put notes for your plugin. In a complex mix, it's easy to forget why you added an effect. This lets you write a short description to keep your project organized.

Extended Notepad

Click the "down" arrow in the notepad header to expand a larger notepad where you can write more detailed notes if necessary. Click the "up" arrow to close this window.

Plugin Enable

This switch enables/bypasses the entire plugin.

The Controls

For quick reference, ReCoil provides a short description of each control when you hover your mouse over any knob or button. This manual will give you a more in depth understanding of what these controls do.

Wet
This controls the level of the reverb. Click on the light to enable/disable the wet sound.

Dry
This controls the level of the dry signal. Click on the light to enable/disable the dry sound.

Pre-Delay
This adds a delay to the reverb. A little bit of pre-delay can help separate the dry sound from the wet sound without sounding "delayed." Once the pre-delay value goes above about 100ms, it will start to sound like a delay.

Width
This adjusts the width of the reverb. Rather than using pseudo-widening algorithms to add width, ReCoil pans the separate springs in different directions. When the number of springs is set to "1" the width will have no effect on the sound because a single spring cannot have width. When the number of springs is set to 2 or greater, the width knob will control how wide those springs are panned. This provides a much more natural width sound, while maintaining the same character of the spring reverb model when summed to mono.

EQ Section

The EQ section lets you shape the tone of the reverb sound. The EQ is designed to be more of a tone shaping EQ to give quick character shaping adjustments rather than a precision eq. This makes it quick to adjust the broad tonal characteristics of the reverb.
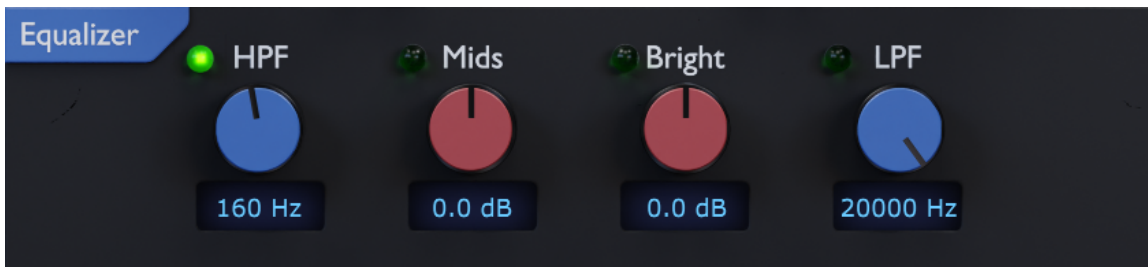
HPF

Use this to cut down on the low frequencies. Our models kept the original low frequency content of the spring units we measured. This low frequency content can easily build up, making the reverb sound cluttered and dense. Do not be afraid to use the high pass filter liberally. It's meant to be used in most situations.

LPF

Use this to cut out the high frequencies. Spring reverb can be a bit metallic (literally) and sometimes you just need to tone down the high frequencies to keep it from being too harsh.

Bright

This is a tilt filter that lets you adjust the brightness of the reverb. Turning to the left thickens the sound, turning to the right brightens it.

Mids

This band is designed to cut the "voice" sections out of the reverb. Sometimes you want the reverb loud, but don't want it to crowd the dry sound too much. Use this to carve some space so you can blast your reverb without hiding the dry sound.

Spring Selection

The springs in ReCoil come in 2 varieties: Algorithmic and Impulse. Each method has its pros and cons, so we included both to let you decide what works best for your music.

Springs

This lets you select the number of springs in your reverb. The more springs, the more diffuse the reverb will be.

Algorithmic

These springs are best if you want full control over the details of your spring reverb. These use a combination of filters, delays and all sorts of other behind the scenes tricks to create a spring reverb sound. We studied a huge array of springs to figure out what was going on that gave them their sound and created an algorithm that does just that. It doesn't sound *exactly* like the spring that it models, but it's pretty darn close, and you can adjust it to your heart's content.

Length

This controls how long it takes the sound to travel up and down the spring. Increasing the length

increases the time between each wave reflection on the spring.

Tension
This adjusts how tight the spring is pulled. As it's pulled tighter, it gets a bit brighter and and less boingy.

Decay
This adjusts how quickly the reverb decays.

Boing
This adjusts how boingy or diffuse the reverb is.

Impulse
These springs are like taking a snapshot of a real spring and applying it to your sound. They sound just like having the same physical spring reverbs we have here, but they are more limited in what adjustments can be made. If ultra-hyper-realistic spring reverb is what you are going for, then these are the springs you want to choose.

Quality
Choose between Low, Medium and High quality impulse. In High Quality mode, you get the entire reverb tail, but it will be harder on your CPU and you may experience crackling sounds, especially at low latency. As you decrease the quality, the reverb tail will be cut shorter, but it will be lighter on your CPU.

Length
This adjusts the speed of the impulse. Shortening the length will result in a shorter, brighter sounding reverb. Bringing it up will result in a darker longer reverb.
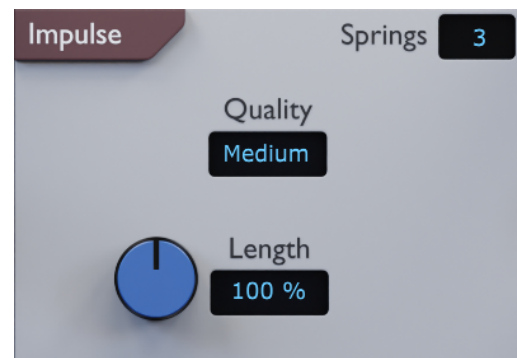
Credits

Plugin concept and design: Boz Millar
Graphic design: Boz Millar

Contact

If you ever run into issues or have any questions, you can send an email to
support@bozdigitallabs.com.