



catalinbread
MECHANISMS OF MUSIC

TOPANGA SPRING REVERB

Surf's up! And we're all headed to Topanga, our spring reverb pedal based on the legendary Fender 6G15 outboard spring reverb unit! We've captured all the drip, flutter, cluck, clang, and splash of the original tubes and springs unit in a small pedal format!

The outboard spring reverb unit is the sound of surf guitar as well as many other great guitar sounds from the sixties. Part of its magic, and how it differs from the internal spring reverb found in most Fender-style amps, is that it is run *in front* of the amp, causing the reverb signal to distort and get more intense than the internal circuit could. It also had a **Dwell** knob, which controlled how hard the springs were getting hit by the guitar signal, as well as a **Tone** knob that gave more control over the reverb sound. It was also essentially a tube preamp, so it would color the sound going into the amp. All this added up to a very distinctive reverb sound that is hard to replicate. But we here at Catalinbread had to try! And we think we got it!

Besides giving you the classic three knob control compliment of the original, we've also added a great discrete preamp that you can control via the **Volume** knob for a healthy amount of great clean boost when you want it.

QUICK START

Running the Topanga is pretty straightforward. Plug it in, twist some knobs, and go!

Dwell controls the intensity of the reverb - how hard the "springs" are being driven.

Tone controls the tone of the reverb only. Your dry signal is conditioned only by the discrete preamp. Tone ranges from full bright to a really warm reverb tone.

Mix goes from full dry to full wet. So you can use it in a wet/dry rig or you can use the preamp without the reverb for a great boost / tone enhancer.

Volume goes from slightly below unity gain all the way up to a nice healthy, punchy clean boost from the all-discrete preamp!



CONTROLS IN DETAIL

DWELL

The original Fender reverb unit's Dwell control was basically the volume control for its tube preamp (which is very similar to the preamp in all Fender amps). So the Dwell knob sets how hard the transformer and springs are being driven. The Topanga's Dwell knob works the same way, controlling how hard the virtual spring circuit is driven, from a very mellow reverb to the over-the-top reverb that made the original famous.

TONE

Essentially, this control is a low-pass filter for the reverb signal coming out of the spring tank. We've duplicated this architecture in the Topanga to give you the authentic sound. Most people run the Tone wide open but you can back off the control to obtain mellower background reverb sounds.

MIX

Full counter-clockwise is dry-signal only and full clockwise is reverb signal only. Just set to the amount of reverb you want. Do note though that if you hit an overdriven amp (or overdrive pedal) with the Topanga, you'll need to run the Mix control lower to obtain the same balance. This is true for the original unit too.

VOLUME

We've added the ability for you to control the overall output of the Topanga. The Volume knob controls both your dry signal's volume as well as the reverb and affects the output gain of the discrete preamp.



Under the Hood

There is an internal switch marked “Buff. T.B”. Set it to “T.B.” for true-bypass operation. Or set it to “Buff.” (also referred to as “trails” mode because you can hit bypass and the reverb tail will ring through without being cutoff). Another benefit of using “Buff.” mode is you can use the Volume knob to preset a great clean boost from the Topanga’s discrete preamp whether the reverb is on or not. Or you can set the Volume to unity for an always-on “buffer” for your signal chain so you’ll always have the benefit of the discrete preamp.

Amps

Topanga will enhance the sound of any good guitar amp. If your amp is set to an overdriven sound, you may want to back down on the **MIX**, **TONE**, and perhaps even **DWELL** controls. Or leave them up for great sonic mayhem!

Powering up the Topanga

Topanga runs from 9 to 18 volts using a standard DC center-negative power supply for pedals. Make sure you’re using a supply that provides at least 100mA. 9 volts will sound great all around. But if you want even more output and an even healthier boost to your dry signal with increased headroom, try all the way up to 18 volts! Oh, and Topanga does not run on batteries.



The Back Story

If you were a guitar player and a fan of 'Saturday Night Live' in the mid '80s to mid '90s you probably tuned in to see what epic vintage guitar SNL bandleader G.E. Smith was going to trot out each week as much as any skit - I know I did. Well maybe to see Phil Hartman's 'Unfrozen Caveman Lawyer' too but I digress...

Anyway, in addition to those amazing guitars G.E. also had some pretty incredible backline amps (usually a blonde Fender Bassman or Showman) - and there was always a blonde early '60s Fender 6G15 Reverb Unit sitting atop one of them. It killed me how he got that sound - so deep and rich, but bright and cutting too. How can a reverb sound so AGGRESSIVE? I had no idea what a 6G15 even was but the memory of that big white box sitting on top of his amp rig was burned into my brain. So when in 1988 I stumbled upon a black version from 1965 in my favorite shop you better believe I took that thing home despite it costing more than my amp!

It's such a compelling sound, outboard reverb - very different than built-in amp reverb. The feel of overdriving the pan when you dig in with your pick, that deep cavernous drip, the metallic crash and clang of the springs when you play staccato single notes or bend a double-stop - it's just so dynamically responsive. You play into it and it gives you something back. There's a LOT going on in that reflected sound - the textures of the decay are so complex! You can actually hear the components doing their thing. It's not a naturally occurring 'organic' reverb sound at all - it's 100% man-made and mechanical - very much an 'effect'. I fell in love with it immediately and all these years later it's still one of the most inspiring pieces of gear I've ever played.

Fast forward 24 years to 2012 and Nic and me talking about Catalinbread maybe trying to recreate the real deal in pedal form. He had already built himself a 6G15 clone from a kit and loved the sound of outboard reverb too so we decided to go for it. I mean, how hard could it be right?

"Hey - just how do you go about recreating the sound and feel of an electromechanical device that has tubes and springs and a resonating metal pan utilizing ones and zeros and caps and resistors anyway?" you may ask. Beats me - that's why I'm the Customer Service guy. But my brilliant and talented homies got to work documenting the tonal characteristics and idiosyncratic behaviors of my old 6G15 tank and after months of hard work Nic, Boris, and Howard managed to capture it in all its trashy lo-fi glory. Those guys are like magicians or something I swear.

So just to complete the circle, in 2014 Nic and I were lucky enough to be invited out to Woodstock, NY and attend a gig at Levon Helm's barn where we were able to put a Topanga in G.E.'s hand and thank him for inspiring us to do what we do. The smile on his face when he played through it made all the hard work worth it. We hope you think so too!

Mike 'erksin' Erickson