



#### **General Information**

A Gibbs spring reverb tank made in the early 70's, of the type commonly used in Hammond organs and various Fender equipment was used to make this reverb library for Nebula. It was sampled 14 different ways- some with the goal of capturing just the spring sound with little extra coloration, others with added flavor. The idea was to provide many variations of the spring reverb sound, giving several options for any situation requiring spring reverb.

Among the methods used- placing small objects on the springs (or wrapped around them), using the clamp to dampen the effect, adding different feedback paths, using different sources of amplification, using cassette tapes, and playing the tones through the setups at different speeds/sample rates to shift the frequency response up and down (a process I call 'bionic'). Check the program specific details later in the manual for more info on each program.

#### **Installation**

Just copy the .n2p files to your Nebula 'Programs' folder, and the .n2v files to the 'Vectors' folder. I would suggest testing that the programs load into the default Nebula, before trying to install the skins. In the default Nebula, the programs are found in the 'REV' category, then the 'CS4', 'CS5', 'CS8' and 'CS9' subcategories respectively, for 44.1khz, 48khz, 88.2khz, and 96khz versions.

To install the skins, everything you need is in the skins .zip file, which is contained in the .zip file for the programs. Inside the skins .zip file, is a .pdf guide that gives you step by step instructions for installing the skins, for both N3 and N4.

#### **Controls:**

**Dry-** this allows you to introduce some of the dry signal into the output. It's set fully counterclockwise which gives you no dry signal, by default. This is because I strongly recommend you use these programs on reverb send tracks in your DAW, instead of as inserts. You can however, use them as inserts and use this control to add the dry signal back in, if you like.

**Verb-** Adjusts the 'wet' signal level. This control also directly affects what you get from the sample dynamic behavior of these programs. If you boost the output level here, you will get the more hotly driven results that were sampled. If you lower it, you will get the less driven samples. If you adjust this control to get the kind of drive results you like, you can then adjust the channel volume for the send track in your DAW (if you set it up as a send), to actually mix the reverb in at the appropriate level.

**Feedback-** Be careful with this control! If you boost it, go slowly. It may be good to include a limiter after Nebula if you use lots of feedback here, just to be safe. That's on you! Another thing- if you do use feedback, I would recommend you don't also introduce any dry signal with the Dry control. This is because the dry signal in Nebula also feeds back with the reverb. There's no way to prevent that from happening, for whatever reason, so there's nothing I can do about it. But it's not good. You get unwanted comb filtering.

# **Program Specific Sampling Details**

Following, I give some info on how I made these things. You really don't need to know or read this stuff, it's just here to show you the kind of work and ideas that went into the creation of these reverbs.

### 01 Phasey Tail 1

After D/A, signal went through Tascam 122 mkIII cassette deck without tape, just for some amplification. Then to spring. Then through a Denon M4 cassette deck (no tape here either) to boost signal before going back to A/D. Some of the signal was sent back out through the D/A, creating a feedback loop. The feedback was very subtle. The clamp on the spring tank was fully clamped.

#### 02 Gin + Tonic

Mostly the same setup as 1, but no feedback this time. The Dolby C noise reduction was engaged on the Denon, and even though the signal never touched tape, it still seemed to effect it (lowered highs a bit). Here the spring tank's clamp was used to clamp on the pan a bit, but not all the way down.

#### 03 Subterranean

This time the signal went to spring after D/A, then back to A/D. Clamp was not used. This is the most pure (and cleanest, distortion-wise) capture of the spring's sound in the set.

#### 04 Vodkatini

Here the signal went straight to spring, then through a Studio Projects VTB1 (with upgraded opamps). The spring clamp was fully clamped.

#### **05 Metallic Resonances**

Signal went to spring, then to VTB1. The VTB1's high pass was used here, and its tube blend was set to max (with stock tube). Signal went back to A/D from there. Clamp was used to put slight amount of pressure on pan. Feedback was used, with some of the signal going back out D/A through everything again.

# **06 Murky Cistern**

Like 5, except the VTB1's high pass was not used here, and the stock tube was swapped for a modern Tung-Sol remake. Also, no clamp this time.

# 07 Boxy

This time, signal went to spring from D/A, then to VTB1 with an old Mullard tube (tube blend at max). No highpass. A spoon was placed on the springs, along with a penny.

### **08 Squirty**

The signal went to a 2 line Audio Technica mixer after D/A. From there into the spring. The RCA cable coming out of the spring was split, and one end went to the VTB1 with a modern Mullard remake tube (tube blend about half of max). The VTB1 output was sent into the other line in on the AT mixer (creating a feedback loop, this time fully analog instead of going through the A/D, D/A loop like with previous setups). The other end of the split RCA cable went into the Tascam 122 mkIII for some amping, then to A/D. No clamp, but some aluminum foil was placed on the springs. This effect has a very twangy quality to it.

### 09 Phasey Tail 2

This one is like 8, but with a beer bottle cap and a foam packing peanut on the springs instead of foil. Also, tube blend was at max here.

## **10 Bouncy**

Similar to 8 and 9 with the following changes/additions: modern Tung-Sol remake tube used, a slice of paper on springs, signal went through a PAiA Quadrafuzz before the mixer (first thing after D/A). Like 8, this effect is very twangy.

## 11 Bionic, Submerged

What is bionic? It's a tricky, special sampling process I came up with to get unique results. Basically, the tones for sampling are played/recorded at faster or slower speeds than normal. This doesn't involve resampling. The end result is that the 'pitch' of the reverb is shifted up or down, and it's either lengthened or shortened. In this case, the final verb's profile is shifted down a little more than an octave below normal (because it's played over twice as fast, so the low-pass behavior of the spring is encountered at an octave lower than usual). So, this reverb has the most low frequency profile of all. The complete signal path was: D/A, then AT mixer, then an ADS (Braun) C3 cassette deck, to a Maxell XL II tape at double speed (this deck can go double), no NR, then A/D. Keep in mind that even the effect of the cassette tape is shifted at the SR change.

# 12 Bionic, Cavernous

Same setup as last one, but a TDK MA metal tape was used this time. No noise reduction here again (this deck hardly needs it at double speed). The tone wasn't played quite as fast either, but the final verb still leans towards lower frequencies.

### 13 Bionic, The Sewers

Ok, so here the shift goes the other direction, because this time the tones were played/recorded slower than normal (which shifts everything up). Same setup the last two, except that the Tascam 122 was used instead of the ADS- but without tape, only for amping.

# 14 Bionic, Cyber Metal

The brightest verb in the set. Again the Tascam was used, but this time there was tape involved, a TDK D90. Dolby B was used also.

## **General Usage Tips/Ideas:**

- You always have more flexibility with Nebula reverbs if you use them as a send in your DAW, as opposed to using as an insert. One of the things you can then do is apply EQ to the send track, before the color springs reverb, allowing you tailor the reverb frequency response to suit your needs.
- If using as a send you can also try finding a good method of adding some adjustable pre-delay before Nebula, since Nebula can't do it on its own.

V1.6 – use this version number to keep track of updates. If the manual posted at my site has a higher version number than the one you have, your set probably isn't up to date.

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