Cassetteverb

Reverbs made and colored with the ADS C3 cassette deck
Cupwise Nebula Programs

General Information

Basically I made some custom reverbs using lots of different sources for the actual reverb, and at some point in the sampled signal chain they went to cassette tape. In this release we have reverbs made with the A/D/S C3 deck. They are all in stereo. This deck can do double speed, and it was used for all effects here.

The main idea is to take reverbs and dirty/thicken/analog them up a bit. I didn't want to stop there though. Instead of just setting up a reverb and running it out to tape and back, I tried to get the reverb and tape to work together/interact in different ways, to try to get the tape to contribute as much as possible to the final reverb effect. One example of this is using a feedback loop (with the deck in the loop) when sampling, and trying to tweak the levels just right so that the feedback (which will have its tone heavily sculpted by the tape) will help blend everything together. Another example is using the Dolby NR or a cheap type I tape to dampen high end of the final effect.

Installation

There are two main steps to the installation-

1) Install the programs/vectors. Just copy the .n2p files to your Nebula 'Programs' folder, and the .n2v files to the 'Vectors' folder. Before moving on to the skin install, check to see that the programs do load properly in default Nebula, by going into Nebula's program finder list and loading them from there. You'll find the programs in the 'REV' category, then either the 'LO4', 'LO5', 'LO8', or 'LO9' categories below that, depending on the sample rate(s) you've installed. 'LO5' is for the 48khz rate.

2) To install the skins, consult the section of the skin installation manual relating to either Nebula 3 or Nebula 4, depending on which you're using. After installing the skins you will be loading these programs as a unique plug-in, so don't ever load them from the default Nebula and its program selector list again! The program buttons will not work if you do!

The Reverbs

Saturated Stage
Started 'in the box' with some standard convolution reverb, from impulses obtained from the internet (separate ones for left and right). Other plug-ins were used to alter the tone of those reverbs. Then, my old ART Proverb digital hardware reverb unit gave some more reverb, before going to the C3 deck which used a 'Mr Audio' type I tape with Dolby B. I used some feedback during sampling, and there was some trickery with the sample rate (basically the tones were played at ½ speed, so the effect of all hardware is shifted up an octave in the end- I call this technique 'bionic' in some of my other libraries that use it). **How does it sound?** Like a stage in a small theater, or just a very large room, but with a hint of metallic feedback flavor.

Saturated Stage (alt)
I manipulated the dynamic structure of the impulses for the Saturated Stage reverb, so that your audio inputs will more easily reach and use the higher dynamic level impulses, which sound a bit different.
How does it sound? A little bit brighter and more metallic.

Stygian Tomb:
Convolution reverbs from two impulses from a Lexicon unit were crossfaded across the dynamic steps (one dominates lower levels, the other higher). Other software trickery (vst stuff) used to alter character. Hardware Proverb unit added more reverb. C3 used a Scotch type III (type III tapes give poor reproduction of high end so they result in a dampened sound), with Dolby C. Some feedback used during sampling of hardware, along with the same 'bionic' technique used in Saturated Stage.
How does it sound? Like a strange, large chamber, with shimmering qualities.

Stygian Tomb (upside down):
I manipulated the dynamic structure so that louder signals use the lower sampled dynamic impulses, and quieter ones use the higher dynamic samples (so the reverse of normal).
How does it sound? A little brighter and more metallic. Because the dynamics are flipped, you can get a kind of expander effect, where louder signals produce much louder reverb bursts. This is because the tape compression effect is flipped upside down, creating expansion. This can make the program a bit more difficult to control, depending on what you're processing.

Bufft:
Used a classic stuttery buffer vst effect, not knowing if Nebula could actually reproduce that. Processed signal went out D/A into a Novation A-station synth, which was used for its FX. Some distortion and short reverb were used here. From there to the C3, with a low quality Memorex type 1 tape and Dolby B.
How does it sound? Like a buffery stuttering effect, but smooth and analog. You can get very cool glassy, grindy sounding results with synth inputs. You can also definitely hear the effect the Memorex has on the high frequencies, damping them in its distinctive way.

Bufft (old):
Same as Bufft but without the additional editing/eqing that one got for the update. This is how this reverb originally sounded when this library was first released (the main Bufft program is actually an updated version). It's more chaotic and probably harder to find audio it works well with, but can still be very cool when it works.
How does it sound? More bass, and it has a bit of pre-delay and a little bit of a 'reverse reverb' component leading up to the buffery effect (it's really just a reverb swell fading into it), which isn't in the new version.

Medusa's Lair:
Novation A-Station was used for some reverb and delay, which was blended with some standard convolution reverb. C3 used Maxell MX-S type IV tape, with Dolby B.
How does it sound? Very active, lots of energy. It's like a ping pong delay, which slowly kind of morphs into a reverb, then into a feedback drone. It goes from being very wide to becoming more focused in the middle. It's fairly bright, and probably more 'shimmery' than Stygian Tomb. I think the differing delays between L and R give an illusion of movement. Probably more useful for things like synths (and not so much drums). If you listen closely you can hear the silent screams of the frozen statue men. Ok not really.

Medusa's Lair (short, dampened):
I shortened the reverb a bit, applied a smooth fadeout, and also had a low pass filter sweep downward to simulate a natural decay where the high frequencies die down first, because I felt the original was maybe too bright throughout the entire duration of the decay. The low passing is subtle.
How does it sound? As you'd expect based on the above description.

Macaroni Protector:

Started with a really weird Reaktor patch which I didn't understand. It was a kind of random delay. I tried to adjust it to taste, but didn't quite know what I was doing. Mixed that in fairly low. Signal went to analog world, and one channel went through an MXR 117 flange pedal, then both channels went into my Yamaha Mu128 midi sound box, which also has FX you can use on external sounds. I used many stages of verbs and effects in there, tweaking each and mixing various parts precisely From there, to C3 with a BASF type II, Dolby C.
How does it sound? Like a strangely filtered, weird washed out reverb delay. Still kind of subtle in a way. Probably my personal favorite.

Macaroni Protector (upside down):

The dynamics are upside down, like with the Stygian Tomb alt.
How does it sound? Very slightly brighter, and the delay is less noticeable.

Forgotten Mines:

This one, I have no idea what was used to make it, except that the Mu128 and C3 deck were involved. I forgot to note down what I did. I know I spent a couple of hours tweaking it.
How does it sound? A little cavernous, but it only goes for around 4.5 seconds. Still, a lot of depth is achieved in that time, and it's very smooth too.

Forgotten Mines (equalized):

I lowered the bass around 100hz by about 4dB to make it more balanced.

DeathRay:

Some thick, gritty vst verb was tweaked, then out to analog world where one channel went through MXR 117, and the other went through my awesome Philco tube amp (from old record console). The tube amp really has a thick tone to it, and it was used to boost the treble a lot. Both channels went into the Mu128, where a lot of stuff was adjusted, and more reverb added. 'Gated' and 'Basement' algorithms were used (+ other stuff). To C3, with Sony type III tape, with Dolby B.
How does it sound? Like a weird clangorous, slightly metallic feedback reverb.

DeathRay (stretched):

I always wanted to try this. I took the impulses and stretched them out in a wave editor, in an intentionally lo-fi way. This makes it longer than the original, of course. The pitch also goes down a little as it stretches.

General Usage Tips/Ideas:

- **These programs are set up for use as sends by default.** That just means that the 'dry' control is turned all the way off. It's a lot better for you to use these programs as sends, in a separate send track in your DAW, in most cases, so that's how I recommend you use them.

- These reverbs respond dynamically and will sound different depending on the signal level. BUT the key here is that **it's not the input level you need to pay attention to, it's the output level.** I've been setting my reverbs up this way because in my head it actually seems to make more sense to me, but it would take a lot of effort to explain why. All you need to know is that **these reverbs will sound/behave different depending on how loud the signal is coming *out* of Nebula.** Trying to adjust the level going in won't do anything to the actual sound you get. So if you want to experiment and get different results, just try adjusting the 'Verb' control, to make the reverb either louder or quieter. Then you can adjust the actual loudness to taste somewhere after Nebula (like your DAW's mixer control). This is another reason why using the reverbs as sends is best.

V1.7 – 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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Huge thanks to Max Ponomaryov, aka azzimov for the skins! Consider donating to his patreon account, which helps allow him to continue doing all the great graphical work (and other help) he's been doing with Nebula!
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