

CX20 Spring Reverb



IMPORTANT: Even if you don't feel like looking at this whole manual, here are some areas I've highlighted that you really need to check out to get the full potential out of these programs.

1. Lite and Full versions

2. BE CAREFUL WITH THE FEEDBACK

3. All of these programs are set up to use as 'sends',

4. You should avoid using the dry control if you are also using feedback

General Info

This is not just a typical spring reverb! Try to imagine something like a hybrid of a very lush, warm plate, and a wide, stereo hall reverb, and you're getting close to what this sounds like. The main programs feature a sampled, adjustable dampening control. This is a pretty big deal, because it means that the different positions of the actual hardware's damper control are fully recreated. With other Nebula reverb libraries, different settings would typically be split among several separate programs, meaning you would have to load an entirely different program to hear a different decay length. Here you have a smooth recreation of the damper control in all its glory.

There's also a really cool bonus program that was made using a technique I came up with a few years ago, and always call 'bionic'. It involves running the sampling tones through the hardware at faster or slower speeds than normal, resulting in faster/slower reverbs, also with their frequency responses shifted up/down from normal, almost like the reverb is pitched up or down. Three different speeds were used resulting in three 'bionic' reverbs, which all were made with the unit's damper control set to one position, but I've attempted to make up for this by adding in a 'fade' control which simply adds a smooth fadeout to the reverb tail, making it shorter.

Lastly, there are 3 alternate mono versions for the main reverb and 2 for the bionic ones, which give you slightly different sounding results. The main one also has a stereo swap version that swaps the stereo effect of the reverb, and this can also sound different depending on what you're applying the reverb to. So you have a pretty decent variety of similar reverbs across the set.

Installation

Whether you use Nebula 3 or 4, there are two parts to the installation- first you install the programs/vectors, and then you install the skins. To install the programs/vectors just copy the .n2p files to your Nebula 'Programs' folder, and the .n2v files to the 'Vectors' folder. You can pick and choose which sample rates you want to install because everything is clearly labeled, inside the zip files.

Before attempting to install the skin(s), you should first test that the programs will load in the default Nebula (see 'Organization' section below to see where to find them in the Nebula menu), to be sure that you've done that first step correctly.

To install the skin(s), you need to look at the separate skin install manual for step by step instructions for both N3 and N4.

Organization

If you're using default Nebula instead of the custom CX-20 skin, the programs will all be found in the 'REV' category in Nebula, then in the 'CS4', 'CS5', 'CS8', and 'CS9' sub-categories, for the 44.1, 48, 88.2, and 96khz sample rates respectively. 'CS' = Cupwise Springs, and this is where I place all of my spring reverb libraries. Once you have the skin(s) installed, you'll be selecting the different programs by clicking the buttons on the skin instead of using Nebula's program finder list.

Use

All of these programs are set up to use as 'sends', and I encourage you to use them that way. If you really want to use them as inserts, I strongly suggest using your DAW's built-in wet/dry mixer control for the Nebula plugin, instead of using the 'dry' control in the reverb programs to add the dry signal back in. If you insist on using the 'dry' control in the programs to add the dry signal back in, you definitely want to avoid using the 'feedback' control also. The reason is explained in the tips section at the end of this manual.

One benefit to using these programs in an actual send slot in your DAW, is that you can also then apply a delay to the signal with whatever means at your disposal (see the tips section for ideas), to get a pre-delay for the reverb effect. Nebula doesn't have this ability built in, so this is the only way to achieve a pre-delay.

The best results to be had from this library, are when you get the output level averaging somewhere around -18dBFS on the output meter, with peaks allowed above that, while being careful not to overload Nebula. Notice that I said output and not input. These programs are driven by their output level, not input. I set them up this way because of personal beliefs about what produces the most authentic results. All of my reverbs work this way, not just this library. Try to keep this in mind.

For some reason, by default, Nebula is set up to trim the lengths of impulses that go over 5 seconds. If you are using the custom skins (you should be), those skins are set up to allow the full reverb lengths, which are over 5 seconds. If for some reason you can't get the skin installed, or just don't want to use it, you'll need to adjust a setting in Nebula to allow for reverbs over 5 seconds, to get the full length. Email me directly or through the contact form at my site for help doing this (or just getting the skins to work properly so you don't have to).

Lite and Full versions

The 'lite' programs have all the dynamics and harmonics stripped out, and have their lengths/tails faded out around 6 seconds (full versions go up to around 8 usually). Using lite is like using standard convolution impulses without the dynamics that nebula allows. You still have the sampled dampener control, which allows you to load the reverbs and tune the controls to taste while using much less resources than you would with the full versions. Then later you can switch to the full version program to render.

The full version programs are much more authentic sounding than the lite ones, but they also have many more samples, are much more complex, and therefore take much more RAM and CPU to use. You really should switch to the full versions before rendering because the dynamic steps really give a more detailed model of the sound.

Mono and Stereo Swap Programs

The "mono-L" programs are the same as the standard stereo reverb programs, except both channels use what was sampled from the left channel of the hardware. These don't convert your input to mono, it's just that both channels are processed separately with the same impulses instead of each having their own. The "mono-R" programs are similar, but use only the reverb sampled from the right channel of the hardware. These all sound similar but slightly different depending on your audio, so try them all!

The "mono-mix" programs are a little more special. The reverb sampled on the left and right channels of the hardware were both mixed together to produce a new, mono result. These programs are thicker sounding than any of the others, and I've found a lot of cases where I preferred these.

Controls

Damp- Sampled from the hardware. A lot of work went into making this come out just right. Having this control makes the programs more complex and CPU hungry than a typical Nebula reverb.

Fade- Only in the Bionic programs, which were sampled with no damping on the actual unit. This control allows you to add in a fade out that shortens the length, so you can tailor the reverb to your needs. Not as good as the sampled damp control in the main programs but still great to have and works well.

Select- Only in the Bionic Select programs. This control allows you to select one of the 3 sampled 'bionic' reverbs, which were sampled by running the sampling tones through the hardware at different speeds. This shifts the frequency response up/down, compared to the standard reverb you get with the main program.

Dry- Adjusts the dry signal's level. The programs load with this at the lowest level, which cuts the dry signal out. You definitely shouldn't use this to add dry signal in if you are going to also use feedback, and I recommend you never use it, and use your DAW's built-in wet/dry mixer control for Nebula instead, or use the program in a send slot.

Verb- Adjusts the reverb level.

FeedB- Adjusts feedback level. I usually never use it, because it gets metallic sounding fast, but a little bit of it may help beef up the reverb effect in some cases (and it can be cool sometimes for more experimental, droney results). Keep in mind that ANY changes you make to any of the other controls, or even to anything else about the audio you have going into Nebula can cause the feedback to go out of control, so the best thing to do is to adjust everything else the way you want it first, then add in some feedback to taste, and if you need to change something else again after that, lower the feedback first. You should also have a limiter after Nebula if using any of this.

Tips:

- BE CAREFUL WITH THE FEEDBACK. I highly recommend you put a limiter after nebula if you want to use the feedback control in these programs. Depending on the input audio, a little feedback may beef up the sound a bit, but it usually gets metallic sounding pretty quick.
- If you use the reverb programs on a dedicated send track in your DAW, you should try to find a good method of adding some adjustable pre-delay before Nebula, since Nebula can't do it on its own.
- You should avoid using the dry control if you are also using feedback, because the dry signal also feeds back which is typically not a good thing. This is just how the routing in Nebula is set up, and there's no way to fix it.
- The best sounding results are going to be easier to get if you try to get the output levels shown on the meter, usually reading at around -18db. If using the programs on a send channel in your DAW's mixer, I strongly recommend using the channel's fader to lower the reverb level to appropriate levels, instead of using the 'verb' control or nebula's output control to do it, because using those controls to lower the output will alter the sound you get.

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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