# CupTone2



Version1 - Programs and manual copyright Nov2021 Tim Wisecup <u>www.cupwise.com</u>



#### **General Info**

This collects a nice-sized batch of tone/color programs for Nebula. Many of them are preamps, both tube-based and solid-state. Others capture the tone of things like compressors or equalizers. Some are from more specialized hardware like saturation devices. Many include adjustable sampled controls allowing you to adjust things like the gain of a single fixed EQ band, the amount of saturation, or other effects. In fact, out of the 30 tone programs available here, 17 of them include a sampled control that allows you to make some adjustment to the result you get. These are all detailed later in the manual.

Also included is a really nice skin (by Max), which allows you to switch between all of the available programs to audition them all, quickly and easily.

A major goal for me while creating these programs, was to minimize unwanted artifacts as much as possible. I found new methods to deal with many of these things, and I believe that this release represents the most accurate and pristine large collection of tone programs for use with Nebula, to date.

There are also five separate 'dynamics only' programs which contain only the dynamic responses for some of the sampled hardware. These are intended to be paired with the matching tone program to give you the complete model for that unit. These have their own skin to avoid confusion.

#### Installation

There are two main steps to the installation-

- 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 'CW4', 'CW5', 'CW8', or 'CW9' categories below that, depending on the sample rate(s) you've installed. 'CW5' 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 selection list again! The program buttons will not work if you do!

# The Main Tone Programs

I give details on the programs below, along with any special controls they have, if any-

#### Preamps (tube-based):

- M72 Sampled from a modern clone of the classic V72 tube mic preamp.
  Drive This control adjust between samples taken at less input drive, and up to samples taken with more drive. The difference is very subtle.
- 2. **ManDual** Sampled from a nice tube preamp.

**Balanced/Unbalanced** – At the 0 setting you get samples taken using the transformer coupled, balanced input. At 100 you get samples taken using the unbalanced input, as well as with a 'gain' control being boosted on the hardware, which introduces some negative feedback. You can smoothly transition between these two sample sets, but again the difference can be very subtle.

3. **VT-Bone** – This nice budget pre is actually solid state but has a 'starved plate' type of tube effect that you can bring in with a control.

**Tube** – This control brings in the tube effect. The freq response and harmonics both change so this one isn't subtle.

- 583 Bass Boost Sampled from a 500 series tube preamp with an EQ section.
  Boost At the full setting, you get a slight bass boost (about 1dB) centered at 85hz. At the 0 position you get the preamp with no EQ.
- 583 High Boost Same unit as previous program.
  Boost This time the control gives you a 1dB boost centered around 7.5khz, and no EQ at 0.
- 6. 583 Mid Cut Again, same as previous.

**Cut** – This time you get a cut of slightly less than 1dB, so it's very subtle. At the 0 position you get flat, no EQ. All of the flat samples for the three programs sampled from the 583 are the same. The boosts and cut are the only difference.

7. **Magnecorder** – This unit was re-purposed into a tube preamp, but originally it was an amplifier for a very old tape deck.

**Flat** – This control adjusts from the original samples, at the 0 position, up to a frequency response 'flattened' version I made at 100. I did this because the original sample is VERY bass heavy. So you can use the more neutral, flattened version, or somewhere in between, but you still get the same tube harmonics.

8. **Magnecorder Hot** – Same as the previous unit, but here it was driven hotter. **Flat** – Does the same thing as in the previous program.

#### Preamps (solid-state):

9. **R511** – A nice 500 series preamp.

**Slick** – This control was actually sampled combining two controls on the hardware. The end results are that you get a different harmonic result as well as a high shelf boost, as you increase it.

- 10. **N8816** This one is actually not a preamp, but a summing mixer.
- 11. **N1073** A modern version of the classic 1073 without the EQ section, from the same company as the original.
- 12. **H1073** A clone of the 1073.
- 13. C-VP26 A 500 series preamp based on the preamps in API consoles from the 70's.
- AMA5 A class-A 500 series preamp based on British consoles from the 70's.
  Boost This control adds in a high shelf boost centered around 28khz, but extending down well into the audible frequency range.
- 15. **SA900 Line-In** A very nicely built, custom racked pair of channels from an A900 console. This program used the line inputs.

**Drive** – This control transitions between samples at the 0 position taken with less input drive, and with the EQ switched in (but no EQing), and slightly more drive and the EQ section bypassed, at the 100 position. The difference is very subtle.

- SA900 Mic-In Same unit as previous program, this time using the mic input. This program has slightly more bass frequency roll-off around 50hz.
  Drive Same as in the last program, and again it's very subtle.
- 17. **Univ PA** Not a preamp, but an old University PA amp. I put it with the pres because there was nowhere else to put it. Take note that this is a rare thing in the Nebula world- this program includes two sampled EQ controls, and every sampled combination of those controls was sampled with full dynamics! There are very few programs out there like this. It means you get a full model of the behavior in one self-contained program.

**Bass** – This PA amp has a simple EQ section. This control boosts or cuts a bass band.

**Treble** – This is the only program with not one but two sampled controls. This one boosts or cuts the treble band.

#### Comps/EQ Tone (tube):

18. **RockOne** – A boutique tube-based compressor. You'll get no compression here, just the tone of the unit in amp only mode.

**Setup A/B** – This control adjusts between two sampled captures from the unit. At the 0 position you get the first one which is a stereo capture, and at 100 you get the second which is a mono capture. The main difference is that the second one rolls off bass frequencies a bit more noticeably than the first one, with 50hz being around 1dB lower. You can smoothly transition between the two, giving an effect almost like a subtle HP filter coming in. But really the difference between the two captures was due to the levels used during sampling.

- 19. **T-5** Tone from an optical tube limiter (only 20 made).
- 20. **APEQ** Tone from a single channel passive EQ based on a Pultec, with a tube amplifier to make up the gain.

#### Comps/EQ Tone (solid-state):

- 21. **A5500** Tone from a stereo EQ unit based on the vintage 550b console EQs, with discrete opamps, and no ICs anywhere.
- 22. **CBend** Tone from an EQ unit based on a desk famously used on Beatles and Pink Floyd recordings.
- 23. **S-Tec** Tone from one of the most sought-after mastering EQs ever.

#### Tape Deck Tone:

- 24. **AX102a** Tone only (no tape), from a very famous tape deck used frequently in mastering.
- 25. **AX102b** From another example of the same model tape deck, again with no tape being used.
- 26. **AX102c** From a third example of the same deck. These three programs are from my CupReels1 AX102 release, which also includes programs with the tape. I added these here to help round-out this collection, and I like the idea of having all of my tone programs available in collections with a skin that allows quickly switching through them.

#### **Saturation FX Devices:**

27. **OSMAS –** A saturation/harmonics device.

**Setup A/B** – This control adjusts between three different sampled setups that were captured from the hardware. The captures are on the 1, 2, and 3 positions on the dial, but you can actually smoothly transition between them. These different captures were taken with different combinations of control settings, so they all sound a bit different.

- 28. **ADST** 500 format saturation module. This was sampled for me by someone else as a favor (as were many of these programs), and unfortunately it appears they didn't drive the module to actually introduce much in the way of harmonics, but we did still get a tone program out of it.
- 29. **RTape Sim 7.5 IPS** Captured from a pretty well known tape sim device that actually includes tape heads to help create its effect.

**Saturation** – I sampled the saturation control across its range, and that's recreated here with this control.

30. **RTape Sim 15 IPS** – Same thing but this time using the 15 IPS mode. **Saturation** – Saturation control.



# The Main Tone GUI

- 1. **Trim Gain** This input gain control has output compensation. So if you apply a +5dB, the output will be lowered by 5dB. This keeps your output level constant so you can just hear the results of boosting or lowering the input (typically, more or less harmonic saturation).
- 2. **Harmonics** Adjusts the level of the harmonics that the program creates. Keeping it at 0dB gives the most authentic results but you can drop it for a cleaner result or boost it for more harmonics.
- 3. **This knob** is only used in just over half of the available programs, and does many different things. Read the program descriptions above for details on what it does.
- 4. **Input Meter** Calibrated to the -18dBFS = 0VU standard.
- 5. **Peak Hold** This is a little idea that I came up with, which allows you to see what the loudest peak signals are peaking at, in dBFS. The idea is that with this readout you can drive you programs hotter without going over digital 0dBFS.
- 6. **Overload Indicator** It goes off if your input is too hot.
- 7. **Power** A bypass switch.
- 8. **Program selection matrix** Press these buttons to switch between the available programs.
- 9. This indicator shows you if the selected program is from tube-based or solid-state hardware.

### **The Dynamics Programs**

These programs come with their own separate skin. There are only a few of these, as I only made them for the samples that contained significant non-linear dynamic behavior. Some of these allow for up to around 12dB of gain reduction, and others are more subtle.

The main, intended way of using these is to pair an instance of the dynamic only program with the matching tone program, and for the most authenticity you would want to set the 'trim' control on both instances to the same setting. However, you are free to drive these dynamics programs hotter for more compression, or to not use them at all if you don't want compression. You can even use the dynamics programs alone, without any tone program, if you choose to.

The RtapeSim Dynamic program only needs to be used if you're using a very high setting on the 'Saturation' control of the main tone program, close to full saturation.

## **Dynamics GUI**



- 1. **Input Meter** Same as on the other GUI, and the peak hold and overload indicators are just to the side of it, as well as the power/bypass switch.
- 2. **Trim** Same as on the other GUI, but here it will be the control you use to set gain reduction. If you want complete authenticity, you would want to set this control to the same position as in the tone instance, but you don't really have to do that. Increasing this will lead to more gain reduction until you hit 0dBFS. Beyond that gives you no more GR, so don't go over 0 on the peak hold indicator.
- 3. **Makeup** This control lets you make up the loss of volume from the compression. Unfortunately, I couldn't figure out how to get a gain reduction meter working for these programs, so you'll just have to use your ears! Sorry!
- 4. **Release** A release control for the compression behavior. It loads at a default setting that gives a pretty quick release which comes close to recreating the behavior of the sampled hardware, but if you want you can adjust it up or down to get different results.
- 5. **Tube** Only appears in the VT-Bone program. It mirrors the same control in the main tone program. So if you want authenticity you would set this tube control to the same setting as the one in your tone instance. At a setting of 0 and up to about 30% there is no compression, and there's very little up to about 40%, so if you're using a low setting in the tone program and don't want any of the sampled tube compression from this unit, don't load a dynamics instance. It would be a waste of CPU for no effect.
- 6. **Program Matrix** Click here to switch between the programs.

# Thanks to Max for the skins! Check out his patreon, which helps him continue doing all the great graphical work (and other help) he's been doing with Nebula!

https://www.patreon.com/join/azzimov

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http://www.matthewgraymastering.com/

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