
Philco Tube Amp Tone
& LFO FX
Philco Tube Amp EQ/Tone
CUPWISE
VU
INPUT
Overload
Peak Hold
-9.48
Version A
Version B
Version C-1
Version C-2
Bypass
Bass
Treble
Output
Trim
Harmonics
23.64
45.40
-9.60
0.00
Philco Tube Amp LFO Effects
CUPWISE
VU
INPUT
Overload
Peak Hold
-0.00
Bypass
Steps
4
6
8
12
RND
Version A
Version B
Version C
Special 1
Special 2
Bass
Trim
Output
LFO Base
LFO Width
LFO Rate
Smooth
100.0
0.00
0.00
50.00
0.06
0.00

General Information

The simple EQ/tone controls (bass and treble) were sampled from a Philco tube amp salvaged from an old phonograph/radio console. The amp features inputs for radio, phono, and tape, as it was a single component of what would have been a very nice entertainment center back in the 1950s. It offers a rich sound full of character, and strong tone shaping capability, but is lo-fi by nature, which means there will be some roll-off of lower bass and upper high frequencies. The roll-off starts at varying points between the programs.

Three distinct captures of the amp were created using different signal chains to get some variation in tone. An alternate version of the third capture offers slightly extended upper freq range. The final result- four programs you can use to shape your tone with the simple bass/treble controls.

From these captures I also created a set of LFO effect programs. These still allow you to adjust the bass level directly, but the treble level is modulated by an LFO. I programmed a setup (using Nebula's FUN system) which allows you to place the LFO anywhere in the full range of that control with ease, if you read the relevant part of this manual and take the time to understand it. There are also two further, very similar 'special' LFO effect programs, which were sampled from the same device but feature a sweeping peak band that sweeps upward while the amp's treble level goes up. This peak band was taken from an EQ vst plugin and was applied before the amp. You get to choose from multiple LFO shapes for each of the effects.

The simpler EQ/tone programs are contained in a skin which allows you to press a few buttons to pick which flavor you want. The LFO programs are all collected in a similar but larger skin, allowing you to choose which effect and LFO shape you want using a larger matrix of buttons.

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 load properly in the default Nebula.** The compressor programs are in the 'RAD' category, then either the 'PA4', 'PA5', 'PA8', or 'PA9' categories below that, depending on the sample rate(s) you've installed. 'PA5' is for the 48khz rate.
2) To install the skins, consult the skin installation manual! After installing the skins you will be loading these programs as a unique plug-in, not by using the default Nebula and its program finder/list to select them!

The Samples

The 6-tube amp was sampled in three different hardware chains for 3 different 'flavors'- A, B, and C. Version A was the most straight-forward sampled setup; the amp was sampled in isolation. For version B I used a Tascam 122 mk3 to drive the Philco, which produced a fuller response with less low/high end roll-off. Use that one if you want to keep more of those frequencies. For version C an FM transmitter sent the signal to a tube tuner/radio, which outputted to the Philco. For whatever reason this version produced the most roll-off and the result is like a wide bandpass filter.

EQ/Tone Interface & Controls

A) Program Matrix – These buttons allow you to pick which of the four programs to use. The bypass button bypasses the effect.

B) Overload/Peak Hold – The peak hold meter holds onto and displays the loudest peak level for a short time. The overload indicator lights up if your input exceeds 0dBFS. You don't want that because the dynamic samples taken from the hardware end there.

C) Input meter – It's a VU style meter.

D) Bass – This adjusts the bass level. In Version A it defaults to a mid position because you can cut and also slightly boost the bass, but in the other programs it defaults maxed out because you can only cut (the full range of the control was sampled in all programs, we just get these different results due to the sampled chains being different).

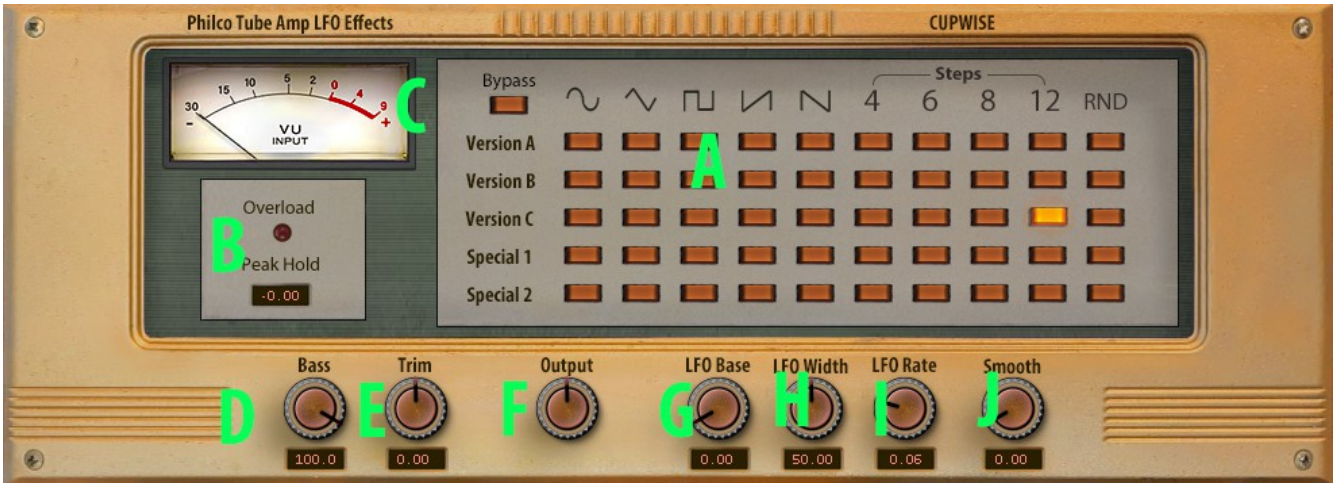
E) Treble – Can be used to boost or cut the higher frequencies.

F) Output – A simple output gain control.

G) Trim – Adjusts input level, with automatic output compensation. For example, boosting input here by 2 dB also lowers output by 2 dB, keeping the overall level the same. This allows you to get different levels of drive while keeping a consistent output level.

H) Harmonics – Adjusts the harmonics levels directly, like a mixer for the generated harmonics. It’s not a drive control, but rather a way to boost or reduce harmonic presence. Usually best left at default.

LFO FX Interface & Controls



A) **Program Matrix –** These buttons allow you to pick which of the program/LFO shape combos you want to use. The bypass button bypasses the effect.

B) **Overload/Peak Hold –** Same as on the other GUI.

C) **Input meter –** VU style meter.

D) **Bass –** Same as on the other GUI for the Versions A-C programs, but for the Special programs it becomes the '**Intensity**' control. There, it increases the amount of treble boost used by the modulation effect.

E) **Treble –** Can be used to boost or cut the higher frequencies.

F) **Output –** A simple output gain control.

G) **LFO Base** – This sets the lowest level that the LFO can modulate down to, for the treble boost/cut in the Version A-C programs, and treble combined with the sweeping peak band (frequency) in the Special programs. Modulation can never go below where you set this.

H) **LFO Width –** Sets how far above the 'LFO Base' position that the modulation can go. Use these two controls to place the LFO modulation exactly where you want it. The width is calculated as a % of the difference between the 'LFO Base' control's current position and the max setting of that control. In simple terms- turn it up to get a more intense effect.

I) **LFO Rate –** The modulation rate.

J) **Smooth –** This can be used to smooth the modulation. It's more useful with the LFO shapes that include instant jumps from one position to another, like the square, up/down ramps, steps, and random settings.

Version 2

Thanks to Max for doing a few touch-ups to my skin, and also allowing me to use his VU meter! [You can check out his Patreon here.]