The Vintage Tube Collection and Tube Booster Audio Plug-Ins for PC 32 Bit and 64 Bit VST and Mac VST.



Thank you for your purchase of The "THE VINTAGE TUBE COLLECTION" Plug-In!

We are very excited to present this commercial Plug-In that uses a special technology developed by Acustica Audio called Acqua. "Acqua" is a stand-alone interface engine that is "Powered By Nebula Technology". This allows us to make use of the most advanced sound generation processing currently available in software form.



For PC, make sure to choose the 32 bit or 64 bit version depending on your system requirements.

Please follow the instructions carefully:

We recommend a minimum computer with the following: Windows XP or higher compatible VST platform. At least 1 Gig Ram (the more the better) At least an AMD Dual Core CPU

Installation:

If using Windows 7 or late XP, we recommend using right click "run as administrator" to resolve most issues with installation.

Make sure that all audio hosts are closed when installing. Make sure that you chose the proper installation directory where your vstplugins are located. There are specific directories depending on whether you are running 32 bit plug-ins, both 32 bit and 64 bit, or only 64 bit. Use right click "run as administrator" to install "THE VINTAGE TUBE COLLECTION" to your vstplug-ins directory, and use right click "run as administrator" to open your DAW.



For Mac VST, please follow the instructions carefully:

CDSoundMaster "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" Mac VST Installation Guide

Before installation, be sure to close all other applications, as they can conflict with the installation process.

Make sure that you have administration rights for your Mac so that there are not issues writing new files to your computer.

Make sure that your audio host is closed.

If this is your first CDSoundMaster VSTPlug-In for your Mac, please make sure that you first download and install the "Acqua\_Host\_Installer" available on our website.

Extract contents to the following location: (Primary HDD)Macintosh HD> Library> Frameworks>

You only need to download and place this Acqua Host Installer this one time for your Mac CDSoundMaster VST Plug-Ins.

To install "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" download and unzip.

*Copy/Paste the CDS-MAC-VTC-VST and/or CDS-MAC-TUBE-BOOSTER-VST Folders to the following location:* 

HD>Library>Audio>Plug-Ins>VST>

So that it looks like this:

HD>Library>Audio>Plug-Ins>VST>CDS-MAC-VTC-VST and/or HD>Library>Audio>Plug-Ins>VST>CDS-MAC-TUBE-BOOSTER-VST

Once pasted, they should automatically recognize in your VST-Compatible DAW or audio editing program when it loads. The new "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" series of plug-ins will now appear in your VST Plug-Ins list within your favorite audio program. But wait, we're not done yet!

When you first load any instance of the "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" it will automatically generate a serial file for you. You only need to authorize your "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" program one time for the entire plugin collection. The plug-Ins will not run until you complete the authorization process.

Go to your "VINTAGE TUBE COLLECTION AND TUBE BOOSTER". Within this folder you will see a file labeled "VTCTB.SER". This is your unique serial file that has been generated. Email this serial file to <u>Michael@CDSoundMaster.com</u>

*We will send your authorization file. Place this "VTCTB.AUT" file in the same folder as your "SER" file and reload the plug-In(s). Now they are authorized and ready to work for you!* 



For MAC AU, Please follow the instructions carefully:

Instructions for use as Audio Units Plug-Ins.

If you are using "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" with a Mac AU host only,

Please make sure that you follow all of these instructions.

Before installation, be sure to close all other applications, as they can conflict with the installation process.

Make sure that you have administration access to your Mac, or it may prevent you from correctly writing files.

If this is your first CDSoundMaster VSTPlug-In for your Mac, please make sure that you first download and install the "Acqua\_Host\_Installer" available on our website.

Extract contents to the following location: (Primary HDD)Macintosh HD> Library> Frameworks>

You only need to download and place this Acqua Host Installer this one time for your Mac CDSoundMaster VST Plug-Ins.

To install "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" first download and unzip.

*Copy/Paste the CDS-MAC-VTC-VST and/or CDS-MAC-TUBE-BOOSTER-VST Folders to the following location:* 

HD>Library>Audio>Plug-Ins>VST>

So that it looks like this:

HD>Library>Audio>Plug-Ins>VST>CDS-MAC-VTC-VST and/or HD>Library>Audio>Plug-Ins>VST>CDS-MAC-TUBE-BOOSTER-VST

Make sure that you have downloaded the "VSTAU Manager" from our website.

Open the "VSTAU\_Manager" and it will automatically scan your vst plug-ins directory. You can choose to 'install' only one plug-in at a time, or you can choose to install all of your vstplugins, although we highly recommend only doing one plug-in for now. You have the option of uninstalling, reinstalling, etc. any combination of plug-ins chosen.

Once you have 'installed' the "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" plugins, you can open your AU host and open an instance of "VINTAGE TUBE COLLECTION and/or TUBE BOOSTER".

When you first load any instance of "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" it will automatically generate a serial file for you. You only need to authorize your "VINTAGE TUBE COLLECTION AND TUBE BOOSTER" program one time for the entire plug-in collection. The plug-Ins will not run until you complete the authorization process.

Go to your CDS-MAC-VTC-VST and/or CDS-MAC-TUBE-BOOSTER-VST folders, located at "HD>Library>Audio>Plug-Ins>VST>". You will see a file labeled "VTCTB.SER". This is your unique serial file that has been generated. Email this serial file to <u>Michael@CDSoundMaster.com</u>

We will send your authorization file. Place this "VTCTB.AUT" file in the same folder as your "SER" file and reload the plug-Ins(s). Now they are authorized and ready to work for you!

You can use the VST and AU versions on the same computer in any combination of hosts and programs.



## "Vintage Tube Collection": The CDSoundMaster Vintage Tube Collection

So, what is it about 'that tube sound' that everyone is always talking about? There is a lot beyond the science and numbers of good sound. Overdriving a signal, or subtly resetting and restaging volume levels can activate the special overtones and harmonic qualities of different tubes to produce the richest, purest sound that exists. Beyond the technical representation of RMS, 1st and 2nd order harmonics, dB's, and transients, comes the interaction of the mind, the ears, the spirit, and the music. We have selected the range of tubes that are sonic building blocks for you to use to make the best mixes that you can.

This collection is a near-perfect representation of natural sound passing through an all-tube analog device making use of the most important sonic characteristics of the "12" series dual triode vacuum tube; specifically, the 12au7. Several specific vintage tubes, known as "NOS" or "New Old Stock" were collected, tested, and selected for this very special release. These tubes are among the elite of the very last existing versions of certain specialty designs. In fact, the only tubes that are considered more valuable or collectible than those in this collection have become so expensive due to their few numbers, that one could easily spend more for the tubes than the gear they are designed for! Tubes were selected based not only upon their manufacturing brand, but also for the specific product line, for the specific years and dates of origin, for the specific factories that they were created in, down to every precise detail of construction of identifying parts, and for their current test-result readings to assure the maximum integrity in sound. The tubes for this collection are from the 12au7 family of dual triodes, which are preferred for their high end audiophile reproduction abilities.

The Source Plus Vacuum Tube Hardware was calibrated and levels set to sample specifically at 96kHz. This device is transformerless and has almost nothing in path except for the tubes, plates, and regulated voltage controlled by bias. It is designed to place nothing in the way of the actual vacuum tube stage, but it also means that it is extremely 'tunable'. To make the most of the representation of these classic tubes at a wide frequency spectrum, balance of both triodes, balanced output, balanced converter level ins and outs, and actual bias were all adjusted to get the smoothest transition in the low frequencies and extreme high frequencies as well.

THE TUBES:

The Mullard Short Plate, small halo getter: Blackburn Plant, 1962. The Mullard 1960's Short Plate M8136. The Mullard Long Plate, D-shaped getter, Blackburn Plant, 1957. The Radiotechnique Long Plate, 1958. The Amperex Bugle Boy Short Plate, halo getter, Heerlen, Holland Plant, 1964. The Brimar BVA 13D5 Long Plate, 1964. The JJ/Tesla, Short Plate, Current production, Russia, under new QC from U.S. owner. The Amperex Bugle Boy Long Plate, D-shaped getter, Heerlen, Holland, 1957. Bonus Tube: A hand-selected modern-day Russian 12ax7

## The "Vintage Tube Collection"

## The Programs

For all of the programs in this collection, the aesthetic qualities of the actual tube itself play just as large a role as the settings themselves in determining best uses. At clean settings, these tubes all exhibit a hifi polishing quality that has made them the perfect complement to the most stringent listening environment. The absolute natural reaction of analog science to music is the kind of frequency shaping that takes place with the best sounding harmonic content supplement that our ears can respond to! Each tube has slightly unique reactions to frequency, so each program and type of tube will be explained here for your best choices of use in content.

The Source + Plus is our completely custom design that was used for sampling this collection. It allows for the reproduction of sound at the absolute purest quality, with a range of adjustment and control all the way to a level of full overdrive and distortion yet in a very hifi, full, round character. This allows for the inclusion of all of the tube's personality to shine through. No longer is the evaluation of these tubes limited to extremely controled listening environments where only the most discerning ears will truly appreciate the subtle differences and qualities. At different bias settings, and different control levels, one can hear all of the many strengths and weaknesses, providing a great reference for each tube's best use in recording, mixing, and mastering. An important element of the construction of this proprietary design of the hardware, is that it acts upon both sides of the dual triode tube at the same time, in a cascading serial mode, with absolute control of the stage 1 input gain, the relative output of stage 1 into stage 2, with unique control of stage 1 output and stage two input. These two stages reach the output gain at the same time, so they can be activated at any level of gain at either stage, before this is increased at the output gain stage of triode #2 AND output gain master. This means that when I have dialed every setting in for each program, it is not just being turned on at a pre-determined set level. It is dialing in the absolute best sounding performance of each tube. If a tube begins to react earlier to certain settings than another tube, then the settings have been chosen specifically for the tube to sound its best.

These tubes have been compared and tested under a great range of content and settings in the analog world in order to best classify their usefulness. There is definitely a reason that the Bugle Boy brand by Amperex and the Mullard classic vintage tubes rise to the top of nearly every single audiophile list of favorites. This is sometimes immediately followed by the Radiotechnique, Brimar, and a select few others, matched only by the JJ/Tesla as a modern manufacturing that meets the sonic goals of these amazing classics on its own merits.

The Amperex Bugle Boy Short Plate and Long Plate both share many of the same desirable characteristics, but are unique designs. The most outstanding characteristics of this tube is the combination of all elements one looks for in a tube. The high end, mids, lows, separation, harmonics, sense of space in sound reproduction, dynamics, sustain, stereo width, and microphonics. For these tubes, the low frequencies are reproduced at a quality that can be trusted. They can be very musical at all frequencies when adjusted in a device like the one used for this collection. The mid range is very balanced and subtly forward sounding at a rate of increase correlating to the increase in harmonics that is spectacular on full mixes, bus groups, and individual instrument and track tuning as well. The high end is very sweet sounding, and is best described as accurate but not edgy or bright. It is very wide and clean and not fuzzy, yet it is not glassy or dull. When the tube is pushed harder, it remains full and round before sounding noticeably distorted.



The long and short plate Mullard's are known as the favorite of the warm sounding tube. Considering that the audio world most widely labels 'that tube sound' as 'warming up tracks', it is hard to resist considering these two of the greatest tubes in the world. At the top of the food chain of tubes based upon sound characteristics are the "12" series. The most popular is the 12ax7 because of its wide use in guitar amps and distortion pedals. For absolute pure sound in hifi preamplification, the 12au7 is considered the best. The 12au7 can replace the 12ax7 in any cab./pedal scenario as well, and usually is credited with better tone and roundness/fullness in signal before distortion.

The Mullard covers the complete gamut from almost perfect linearity used for final mastering, to absolute shredding with lengthened, beautifully textured harmonics and ringing overtones that bring instruments to life.

They are perhaps slightly behind the Bugle Boy in absolute sound stage separation of instruments, and overall extended sounding highs. But, they make up for these characteristics immediately with an up-front quality for individual instruments, vocals, and dimensional stereo sound that is built by combining the type of harmonics with the frequency shifts that happen on a very subtle level. Words like silky, velvety, warm, rich, and musical are all descriptors that I believe hold true for the Mullards. I'd say these two were my absolute favorite in all instances if I didn't have to rule out the Amperex in the process! Truly, the two Bugle Boy's and two Mullards are an absolute perfect match for each other.

The Brimar 13D5 is an excellent example of lively sound without unwanted brightness. It is able to exhibit some characteristics of higher gain without overt artifacts. It is smooth but not as personality-driven as the Mullard and not as overwhelmingly impactful as the Amperex. At moderate settings, it begins to stand out as an excellent tone-shaper, adding fullness to low mids from as wide a "Q" as 50Hz to 2kHz, while remaining exceptionally flat in the sub-lows. Even at extreme settings and mid and low bias settings, the Brimar holds on to a nice volume increase curve from 100Hz to 1kHz. If you have a thin, brittle, or harsh sounding source that should be filling out the mids and low end, you may want to try some of these programs out. More specifics are found in each program. The quality of this tube is not a second choice to the Amperex of Mullard, in that the frequencies or tonal qualities do not cheapen the sound or bring undesirable results. Trust me, there are plenty of tubes that fall into that category and they are not in this collection!

The Radiotechnique is described as a French Mullard. It is, in fact, from a Mullard plant located in France, but they had specific designs of their own from month to month, year to year. The 1958 long plate is one of the absolute most sought after from this plant, only two others being considered worthy of this year; the '56 and the '65 short plates. This is an extremely linear tube with subtle personality all the way into high gain. At moderate settings it has a wonderful character of smoothness and roundness. It provides a slight scoop around 2kHz or so, with a slight rise in upper frequencies, with more volume at around 500Hz or so at more heavy settings. Overall, this tube is great for general experimenting on tracks where you want to add nice harmonics and a beautiful rounded tone without making a huge change in frequencies. The JJ/Tesla is an excellent, tight, punchy, yet smooth sounding tube with excellent response to sharp, quick transients. It is fantastic on percussive material and can be pushed hard for harmonics without major loss to frequencies. It gains a fairly common frequency curve when pushed into overdrive, with a rise in wide "Q" from around 75Hz to 1kHz, with a median around 500Hz or so.

The 12ax7 is an excellent sounding tube, most likely hand-selected Sovtek. It is added here for fun, so I will focus notes on the true main attractions. I do encourage you to try some settings and find some favorites as I have. There is absolutely nothing wrong with using this program all over the place if you like the sound. If they all miraculously disappeared tomorrow, I'm sure the price would jump. But, there is a reason they come stock on 90% of current beyond the bulk pricing, as they run linear when so-desired and do not leave a huge sonic imprint of their own, mostly moving out of the way of the equipment to produce its own signature sound.



Tube Booster has been created to provide the authentic sound of a valve line driver, or level amplification stage. It is a dynamic program with a complex process for adding a special harmonic saturation with little side effects to frequency spectrum. It has been created to have equal effect at multiple sample rates, and has been pre-edited for Low, Medium, and High amounts of signal drive. Tube Booster can be used at lower levels than the programs for more subtle effects. This can be useful on its own and in combination with VTC programs and consoles, tape machines, and anywhere that the user wishes to impart the vacuum tube harmonic characteristics to their signal chain. It can be added to your rendering chain, used on its own, and used in multiple instances.



Typically, Tube Booster will be used in the same scenarios that an audible boost in signal is desired. For example, instead of compressing a weak bass track, adding the extra energy of a tube stage pushed into gentle or even heavy 'drive' or saturation, can bring more attitude and 'glue' to the recorded performance without making things sound artificial or unnatural. Thoughtful use of Tube Booster on complete mixes and bus groups can add fullness rich overtones to complex groups of musical content, increasing the average level without harming transients.



The harmonic distortion in tube devices vary from one design to another, and from one tube make to another, but there are certain similarities that can be assumed about the high end analog tube hardware that defines it in a unique way from other types of harmonic content, like tape for instance. Tubes tend to have a different scaling of harmonics especially beyond the second order.

Some similarities to tape are present, but typically tubes tend to round out sound for a higher gain before the harmonics become more overt, and the 'driven' signal tends to sound 'fuzzy' and 'larger' as the signal is driven harder, where tape tends to be more overt when going into overdrive, and has a more 'distorting' character when driven hard, where tubes can be described as a rounder 'overdrive' when pushed hard. This quality is very true to life in Tube Booster. When high levels of tube drive are used with more percussive, impactful, wide dynamics, or fast transients, they typically contain a signature fast punchy attack on the first response of the transient. Where tape tends to sound 'driven' at this stage, tubes tend to sound like a fast hard attack, while still rounding out the overall signal.



Tube Booster contains just 3 programs: Low, Medium, and High. These are designed to be used up to two serial instances, and depending on the material, as much as 3-5 instances. The best results come from use with signals that contain a peak of -5dB or less. The "Low" setting can be used for louder material, or for rendering chains, the user can use very low RMS or Peak levels for any combination of instances. For the most noticeable amount of high gain drive, the "High" setting can be used with -5dB peak for most audio. It is the most effective when used early in the chain, before a great amount of processing has already taken place.



Thanks and God Bless You. Sincerely, Michael Angel CDSoundMaster.com

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