

# GTR-VTX For Nebula Pro



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## Manual Index

[Installation](#)

[The Programs](#)

[About The GTR-VTX For Nebula Pro](#)

[About The Hardware](#)

[Program List](#)

## Installation

### For PC Users:

Use the included installer to select your NebulaTempRepository Folder to install the collection there. Or, you can simply copy all "n2p" files to your Nebula "Programs" folder and copy all "n2v" files to your "Vectors" folder.

### For Mac Users:

Copy all "n2p" files to your Nebula "Programs" folder and copy all "n2v" files to your "Vectors" folder.

# The Programs

The "GTR-VTX For Nebula Pro" consists of 152 programs: You will find these in your CDSoundMaster "GTR" category, under the sub-category "VTX".

Programs are sampled at 96kHz and are tested to retain accuracy at 44.1kHz and 48kHz sample rates with the latest version of Nebula3 Pro.

Programs are fully organized and categorized for easiest use in Nebula Pro. Under the "GTR-VTX" Menu, you will see the following categories to choose from:

AMP (Amplifiers)

EQ (Equalizers)

5K (5 Kernel Reduced CPU)

CLN (Clean - No distortion kernels)

CAB (Cabinets)

PDL (Pedals)

The "AMP" programs contain the preamp, power output, to emulated speaker output.

The "EQ" programs contain the same full signal chain as above, with the addition of all eq controls. Each amp contains unique eq sonic signatures and also varied control options.

The "5K" programs are identical to the "AMP" programs, but the harmonic distortion kernels are reduced from 10 kernels to 5, to lower cpu hit and improve performance.

The "CLN" programs are identical to the "AMP" programs as well, but all distortion has been removed for performance and also if one desires to use the programs just for the dynamic frequency response and not for any harmonic content.

The "CAB" programs are the entire signal chain from preamp to power out, the same as the "AMP" programs, but instead of using the simulated speaker output, they are recorded using a microphone at the actual speaker. To make for the most unique and classic representation of this process, we used an SM57 microphone running through a classic Quad Eight Console Channel with the EQ circuit engaged and set to +0dB. One full set of recordings are provided recording at the Center Cone of the 12" NeoDog speaker just of axis, titled "CABC" in the program names. The other set is recorded at the speaker's edge just off axis, labeled "CABE" in the program names.

The "PDL" programs include an emulated pedal effect just ahead of the preamp. This changes the tonal, spectral, dynamic, and harmonic content of these programs, but does not cause a large increase in distortion. Like the rest of the collection, it provides the accurate character of the pedals feeding the amp without a large increase in distortion. You can add distortion ahead of these programs, using similar pedal effects for increased accuracy.

## **Program Description:**

The "AMP" programs

There are 16 amplifier programs.

AC15

The Vox AC15. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC15TB

The Vox AC15 with 'Top Boost'. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC30

The AC30. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC30TB

The AC30TB (Top Boost). 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BLACK2X12

A Black Face with Two 12" Speaker Cabinets. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BOUTIQUECL

A Boutique Combo Amp using the Clean channel. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BOUTOD

A Boutique Combo Amp using the Drive channel. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

RECTO

Dual Rectifier. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## TWEED1X12

Tweed 12" Speaker Cabinet. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## TWEED4X10

Tweed with four 10" Speaker Cabinets. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## UK70'S

1970's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## UK80'S

1980's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## UK90'S

1990's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## UKBLUES

British Blues Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## UKMOD

Modern British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## USHIGAIN

U.S. High Gain Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## The "EQ" programs

There are 13 eq programs.

## AC15-EQ

The Vox AC15. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### AC30-EQ

The AC30. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### BLK2X12-EQ

A Black Face with Two 12" Speaker Cabinets. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### BOUT-EQ

A Boutique Combo Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### RECTO-EQ

Dual Rectifier. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### TWEED1X12-EQ

Tweed 12" Speaker Cabinet. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### TWD4X10-EQ

Tweed with four 10" Speaker Cabinets. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### UK70S-EQ

1970's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### UK80S-EQ

1980's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### UK90S-EQ

1990's British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### UKBLUES-EQ

British Blues Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### UKMODERN-EQ

Modern British Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### USHIGAIN-EQ

U.S. High Gain Amp. 10 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### The "5K" programs

There are 16 "5K" programs.

#### AC15 5K

The Vox AC15. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### AC15TB 5K

The Vox AC15 with 'Top Boost'. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### AC30 5K

The AC30. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### AC30TB 5K

The AC30TB (Top Boost). 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### BLACK2X12 5K

A Black Face with Two 12" Speaker Cabinets. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### BOUTIQUECL 5K

A Boutique Combo Amp using the Clean channel. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

#### BOUTOD 5K

A Boutique Combo Amp using the Drive channel. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

RECTO 5K

Dual Rectifier. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

TWEED1X12 5K

Tweed 12" Speaker Cabinet. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

TWEED4X10 5K

Tweed with four 10" Speaker Cabinets. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK70S 5K

1970's British Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK80S 5K

1980's British Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK90S 5K

1990's British Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UKBLUES 5K

British Blues Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UKMOD 5K

Modern British Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

USHIGAIN 5K

U.S. High Gain Amp. 5 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

The "CLN" programs

There are 16 "CLN" programs.

AC15 CLN

The Vox AC15. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC15TB CLN

The Vox AC15 with 'Top Boost'. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC30 CLN

The AC30. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

AC30TB CLN

The AC30TB (Top Boost). 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BLACK2X12 CLN

A Black Face with Two 12" Speaker Cabinets. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BOUTIQUECL CLN

A Boutique Combo Amp using the Clean channel. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

BOUTOD CLN

A Boutique Combo Amp using the Drive channel. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

RECTO CLN

Dual Rectifier. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

TWEED1X12 CLN

Tweed 12" Speaker Cabinet. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.



TWEED4X10 CLN

Tweed with four 10" Speaker Cabinets. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK70S CLN

1970's British Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK80S CLN

1980's British Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UK90S CLN

1990's British Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UKBLUES CLN

British Blues Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

UKMOD CLN

Modern British Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

USHIGAIN CLN

U.S. High Gain Amp. 0 Kernels of harmonic distortion and dynamic spectral recording of the preamp to power out to speaker emulator output.

## The "CAB" programs

There are two sets of Cabinet programs, all recorded with 6 Kernels of distortion.

The first set is labeled "CABC", recorded at the "Cone" just off axis with an SM57 through a vintage Quad Eight recording console channel. The second set is labeled "CABE", recorded at the edge of the speaker just off axis with the same mix and preamp configuration.

CABCAC15

CABCAC15TB

CABCAC30

CABCAC30TB

CABCBLK2X12

CABCOUTCL

CABRECTO

CABCTWD1X12

CABCTWD4X10

CABCUK70S

CABCUK80S

CABCUK90S

CABCUKBLS

CABCUKMOD

CABCUSHIGN

CABEAC15

CABEAC15TB

CABEAC30

CABEAC30TB

CABEBLK2X12

CABEBOUTCL

CABEBOUTOD

CABERECTO

CABETWD1X12

CABETWD4X10

CABEUK70S

CABEUK80S

CABEUK90S

CABEUKBLS

CABEUKMOD

CABEUSHIGN

The "PDL" programs

These programs add a pedal effect to the beginning of the signal chain. They do not increase the drive level to a high gain distortion, but they do alter the mid level distortion by creating a more complex combination of distortion from the pedal combined with the preamp stage and subtle output stage. You can use a distortion plug-in ahead of these programs that is similar to the pedal used for greater authenticity. Or, if you use a single distortion plug-in for all VTX programs, you will notice the variation from program to program, and the mid-gain distortion added from the VTX programs can greatly enhance the quality and drive type used. The "PDL" programs use 10 kernels of distortion.

The "FATOD" Pedal programs represent a fat overdrive pedal.

FATODAC15

FATODAC15TB

FATODAC30

FATODAC30TB

FATODBLK2X12

FATODBOUTCL

FATODBOUTOD

FATODRECTO

FATODTWD1X12

FATODTWD4X10

FATODUK70S

FATODUK80S

FATODUK90S

FATODUKBLS

FATODUKMOD

FATODUSHIGN

The "FUZZ" Pedal programs represent a fuzz distortion pedal.

FUZZAC15

FUZZAC15TB

FUZZAC30

FUZZAC30TB

FUZZBLK2X12

FUZZBOUTOD

FUZZRECTO

FUZZTWD1X12

FUZZTWD4X10

FUZZUK70S

FUZZUK80S

FUZZUK90S

FUZZUKBLS

FUZZUKMOD

FUZZUSHIGN

The "TB" Pedal programs represent a top boost pedal.

TBBOUTCL

TBBOUTOD

TBBLK2X12

TBRECTO

TBTWD1X12

TBTWD4X10

TBUK70S

TBUK80S

TBUK90S

TBUKBLS

TBUKMOD

TBUSHIGN

The "TUBEOD" Pedal programs represent a tube overdrive pedal.

TUBEODAC15

TUBEODAC15TB

TUBEODAC30

TUBEODAC30TB

TUBEODBLK2X12

TUBEODBOUTCL

TUBEODBOUTOD

TUBEODRECTO

TUBEODTWD1X12

TUBEODTWD4X10

TUBEODUK70S

TUBEODUK80S

TUBEODUK90S

TUBEODUKBLS

TUBEODUKMOD

TUBEODUSHIGN

## About The "GTR-VTX" For Nebula Pro

The "GTR-VTX" For Nebula Pro consists of 152 programs that reproduce the dynamic spectral and harmonic content of the AD60 VTX Amp. This program library faithfully reproduces the settings of this amazing tube combo amp in all its intricacies, up to a moderate level of distortion. the harmonic distortion is subtle on its own, but when used with your favorite distortion plug-in, the complexity and added realistic texture is very apparent. Complex distortion is something that builds upon itself, and can be very difficult to get a pleasant response with just a static algorithm. But, when combined with a complex signal chain like that found in this collection, the beautiful overtones and extra richness truly come to fruition.

We recommend using a simple distortion plug-in just ahead of your VTX program. Even a very low level of distortion will drive your VTX program and add the desired gain. When using any program, but especially the "PDL" pedal programs, you can use any simple emulation of the same pedal effect just ahead of VTX, and get an incredible analog response. For example, you can use an overdrive plug-in ahead of the Tube Overdrive program, instead of a regular distortion algo.

The EQ programs are specific to the amp that is being emulated. Some have combined presence, some are more adaptive, and some only contain a cut or boost in certain frequencies. The entire complex eq process for each amp has been combined into an easy-to-use Low, High, Boost, Cut interface, which combines all Low, Medium, High, and Presence options into two easy-to-use knobs. This decision was based on the fact that so many amps are extremely adaptive, meaning that they do not just change bass or treble when adjusted, but the low affects the high, the mids affect the lows, etc. Also, this decision is based on the fact that few amps have all controls available. And finally, the decision is based on having all options available without an extreme cpu hit and hard drive capacity bog. The difference in two controllers with all sonic possibilities versus interactive choices for four eq controls simultaneously was somewhere between 50 samples in a program, and 3000 samples in a program, with essentially no difference in quality or sonic changes.

## About The Hardware

The AD60 VTX is truly an amazing amp, and is the result of multiple technology breakthroughs. From the original documentation: "Digital modeling amps fall into one of two categories: they're either made by a company that specializes in making digital, guitar gadgets and has little or no experience in building amps. Or, they're made by an established amp manufacturer that's attempting to become a credible digital engineering concern in a couple of years or less!...

Valvetronix is the brainchild of a mind-meld between the digital expertise of Korg's critically acclaimed ToneWorks team (a bunch of axe addicts who've spent the last ten years living, breathing and dreaming in digital!) and the world-renowned amp gurus behind one of the most revered names in guitar amplification - Vox! As you are no doubt aware, Vox's all-valve, AC30 amps have been the first choice of countless professional players for the past four decades and have been heard on numerous hits.

Korg's ToneWorks team has a pretty impressive track record too; for over a decade, their many digital guitar devices have proven to be a firm favourite with both the guitar loving press and guitar loving public. They were also the first folk to master the art of using oversampling to create digital distortions that sounded and felt real... The most recent ToneWorks breakthrough is their proprietary REMs (Resonant structure and Electronic circuit Modeling System), the stunning realism of which has deservedly earned an avalanche of critical acclaim and has been welcomed with open arms by serious guitarists all over the globe.

**VALVE REACTOR TECHNOLOGY:** In keeping with Vox's brave, pioneering spirit, the Valve Reactor circuitry that drives the power amp in your new VOX combo is a groundbreaking piece of technology...

While much of the tone creation and shaping carried out in this amp is done in the digital domain, its Valve Reactor power amp is 100% analogue. The resulting journey your guitar's signal takes through the analogue world of the power stage plays a major role in providing the all-important feel and tone of the original amps we modeled.

The Valve Reactor power stage is, to all intents and purposes, a bona fide valve (tube) push-pull power amplifier, but in miniature. It utilizes a 12AX7 valve (a dual triode device - meaning "two valves in one") and is equipped with an output transformer... Instead of connecting directly to the loudspeaker though this transformer is connected to a specially designed VariAmp Power Circuit that increases the magnitude of the transformer output from its lowest level (1 Watt) up to the maximum output of 60 Watts per channel.

Because VariAmp Power Circuit stage is completely transparent (doesn't colour or change the signal in any way), the resulting output tone is pure valve. It also ensures that the output signal maintains the high dynamic range associated with traditional valve amps - something most solid-state amplifiers cannot deliver, and one of the main factors why valve guitar amps normally sound and feel so much louder and more alive than a solid-state amp boasting the same output power.

The output of your Valve Reactor power amp is also designed to "read" the constantly changing "impedance" curve of the loudspeaker system it is hooked up to and then "report" this reactive information back to the output transformer... This information permits the behaviour of the valve stage of the amp to vary with the speaker load (impedance), which is another important part of "real world" valve tone.

Apart from the vital valve tone this ingenious power amp design provides, it also allows us to replicate various "circuit characteristics" that are unique to the all-valve power stages of the amps we've modeled. These "characteristics" include: Class A or Class A/B operation, Presence and Resonance (low end) control circuitry (both found in the negative feedback circuit that some, but not all, valve power amps have) and power output. Being able to match such vital characteristics... helps ensure that each and every one of our models is as tonally authentic.

3. PREAMP SECTION As the title of this section suggests (imagine that!?), this is the "preamp" control section of your Valvetronix combo. And, in keeping with what it is supposed to be, it looks and acts exactly like (wait for it)...an amp! Plus, in true VOX tradition, it boasts our instantly recognizable, "chicken-head" (pointer) knobs...no soft touch, control pads or up and down cursors have been allowed to invade this sacred, tone shaping area. C'mon, this is a guitar amp, not a computer game!

AMP TYPE Selector Switch

This allows you to select any one of our sixteen (16), stunningly accurate amp models - each of which is based on an accepted all-tube classic, including the legendary VOX AC30TBX. As already mentioned in the intro to this manual, each model not only replicates the exact gain and tonal characteristics of the original amp's preamp circuit, it also reconfigures the all-important power amp stage too - in terms of both Class (A or A/B) and negative feedback circuit (or lack thereof).

Not only is this a cool feature, to us it's essential! After all, how can you claim to have modeled an amp if you've just zoned in on the preamp and ignored the power amp? C'mon! Peanut butter alone (regardless of how good it tastes) does not a great peanut butter and jelly sandwich make - you need some jelly and bread too! Never make the mistake of thinking the power stage is not an important part of any amp - it's vital, in fact it can make or break it. Anyway...



The amp types on offer are:

VOX AC15  
VOX AC15TB  
VOX AC30  
VOX AC30TB  
UK MODERN  
RECTO  
US HIGAIN  
BOUTIQUE OD  
UK BLUES  
BOUTIQUE CL  
UK '70S  
BLACK 2x12  
UK '80S  
TWEED 1x12  
UK '90S  
TWEED 4x10

4. POWER AMP CONTROLS PRESENCE Control This control allows you to adjust the amount of Presence (high frequency "sparkle") in your sound. Like all of the preamp knobs we've just looked at, the PRESENCE control is programmable.

NOTE: Presence is a function of a power amp containing a negative feedback circuit and not all the original amps we modeled contain one - for example, none of the four Vox amps we modeled (AC15, AC15TB, AC30 & AC30TB) feature a negative feedback circuit. Furthermore, FYI, not all amps that have a negative feedback circuit necessarily feature a Presence control. For example, the original BLACK 2x12 - negative feedback in the power amp? Yes. Presence Control? Nope.

Whenever a modeled amp didn't have a Presence control, rather than have this knob do absolutely nothing, we used it to mimic the behavior of another of the amp's variables - like the BRIGHT switch on a BLACK 2x12 or the CUT control found on all of the VOX originals.

MASTER (Volume) Control

As is the case with all Master Volume controls, this knob enables you to adjust the overall volume of your Valvetronix combo.

LINE OUT Jack(s) This Output carries a cabinet simulated signal for connection to a soundboard or recording console. The AD60VT has as a single, Mono LINE OUT jack

CONTROLLING FACTORS

Although the top panel of your Valvetronix amp houses controls for GAIN, VOLUME, TREBLE, MIDDLE, BASS, PRESENCE and MASTER, not all of the amps we've modeled have as many controls. In such cases, rather than leave you with knobs that do nothing (what on earth would be the point of that!?), we've made full use of all six (6) Valvetronix amp controls without compromising the accuracy of any of our models. This means you'll be able to mimic the full tonal spectrum of each and every one of the originals we've modeled...and then some, thanks to the extra flexibility and additional control the six Valvetronix amp controls give you.

For example, if an original doesn't have a Gain Control (AC15, AC15TB, AC30, AC30TB, UK BLUES, UK '70S, BLACK 2x12, TWEED 1x12 and TWEED 4x10), the Valvetronix's GAIN control will mimic the original's Volume control.

Also, if an original amp doesn't have a complete 3 band EQ network then we'll set up the "missing" tone controls on our model to be "neutral" (i.e. as the original) when set at 12 o'clock - thus giving you extra tonal flexibility in those EQ areas, if you so wish. Just so you know, the amps we modeled that don't have individual controls for Treble, Middle and Bass are:

AMP ORIGINAL TONE CONTROLS AC15/AC30 (channel 2) Top Cut only AC15TB Treble & Bass AC30TB Treble, Bass and Cut TWEED 1x12 Just one, called Tone!

Also, as you'd probably expect, we do the same exact thing with the Valvetronix's PRESENCE control too - namely, if one isn't present (bad pun, not intended!) on the original then PRESENCE will be an added control on our model. This time though, the "neutral" position is when the control is all the way off (turned fully counterclockwise). The two models this applies to are BLACK 2x12 and Tweed 1x12.

IMPORTANT NOTE: As you'll discover when you read their descriptions, in the case of the AC15, AC15TBX, AC30 and AC30TB models, we've utilized the PRESENCE control to mimic the TOP CUT control - whether it was present on the original or not.

Lastly, if an original amp features a unique switch or control we make sure that we cover it! Such things will be revealed in the model descriptions that follow shortly...

#### TUBE TALK

Us Brits call 'em valves while our US cousins call 'em tubes...as the saying goes: England and America are merely two countries divided by a common language! Anyway, call 'em what you will, these wondrous glass bottles lie at the tonal heart of each of our 16 models. As all the amps we've modeled hail from one of the two countries just mentioned, in honour of their heritage, the descriptions of all English amps will employ the words "valve" and "valves", while the American ones will be tubular!

QUESTION: What's the difference between an ECC83 preamp valve and a 12AX7 preamp tube?  
ANSWER: Nothing! They're the same exact thing - namely the most popular preamp tube in ampland. ECC83 is the British name, 12AX7 (a.k.a. 7025) is the American. See, I told you we were two countries divided by a common language!

#### POWER AMP ACCURACY

As already touched on a couple of times, what happens in the power stage of any good tube amp is of paramount importance to the way the amp sounds, feels and behaves. The way the power amp operates (Class A or Class A/B), the power tubes used (EL84s, EL34s, 6L6s, 6V6s), the exact nature of the negative feedback loop circuitry (if one even exists) and how the power stage interacts (a relationship called damping) with the speaker(s) it is driving - all these things play a vital role in the creation of tone. And, thanks to our patented in USA Valve Reactor Technology all these important bases are faithfully and accurately covered. For example: if you choose amp model AC30TB - an amp with a Class A power stage, EL84 output tubes and no negative feedback, that's exactly what your Valve Reactor power amp reconfigures itself to emulate. And, as an added bonus, thanks to our rear panel POWER SELECTION switch you can adjust the output power (Wattage) to best suit the model in question (e.g. the original AC15 is 15 Watts, the TWEED 1x12 is 18 Watts and the AC30TB is 30 Watts) or the size of the room you're playing in.

#### TURN IT UP!

All truly great, all-valve amps have one thing in common - they invariably sound at their best when they're cranked to the max! It's got nothing to do with eardrum shattering decibels either, it's just that when the power valves are driven hard, they definitely impart a unique tone and width to the overall sound. Thanks to the awesome accuracy of our Valve Reactor power amp,

the same is also true of your Valvetronix combo. For this reason, we heartily recommend that you crank the sucker up as often as possible. And, as I've literally just pointed out, thanks to our unique POWER SELECT control, you have a choice of output Wattages that'll suit every occasion - from bedroom, to garage, to gig...and all points in-between. So, what are you waiting for - select, crank 'n' enjoy!

This all said, let's take a look at each of our amp models...

1. AC15 This is modeled on Channel 2 of an amazing sounding 1962 VOX AC15, which is part of our vast amp collection. This 1x12", 15 Watt, valve driven, dual channel combo was unleashed on the market in 1958 and was the first ever VOX amplifier. The reason for it being named the AC15 is simple: AC stands for Amplifier Combination while 15 indicates the Wattage. Thanks to its compactness, power, built in tremolo/vibrato effects (on Channel 1 only) and tremendous tone, this combo was a huge hit with the popular British guitar bands of the time, including several chart topping acts, the majority of whom were only too happy to endorse Vox.

One of the biggest reasons for the unique, signature tone of this amp is the fact that it employs EL84 output valves in a Class A circuit with no negative feedback. This is also true of the other three VOX amps, we've modeled - the AC15TB, AC30 and AC30TB. In a nutshell, the result of this design is more power and more distortion - the latter of which gets thick with second and third harmonics that become more and more prevalent as the amp is cranked. Thanks to our unique

Valve Reactor Technology the power stage of your Valvetronix amp is automatically switched to its "EL84s in a Class A circuit with no feedback" emulation whenever AC15, or any of the other three Vox models, is chosen.

Like most amps of its era, the AC15 is the very essence of simplicity. In fact, the Channel we modeled, Channel 2 (remember!?), only has two controls - Volume and Top Cut. When you select AC15, the Valvetronix's GAIN control mimics the original's Volume control, while the PRESENCE control acts as the Top Cut.\*

FYI, the AC15's Top Cut control affects the high frequencies in a very different way than a "regular" Treble control. Deft use of it will help you dial in the exact amount of that instantly recognizable, world-famous VOX "sparkle." As for what the "extra" TREBLE, MIDDLE and BASS controls on our AC15 model do: as already mentioned earlier, they're exactly that - "extra!" Set them at 12 o'clock and they're "neutral" (i.e. they mimic the exact tone of the original) or tweak them for extra tonal flexibility.

\*CONTROL NOTE: The original AC15's Top Cut control works in the opposite way you'd expect - it "cuts" when you turn it up! You'll be glad to read that our model of the Top Cut control (the PRESENCE knob) works in a much more logical fashion - turn it up for more "sparkle", turn it down for less.

Original's valve compliment: 1 x EF86, 3 x ECC83s, 1 x ECC82 in preamp, 1 x EZ81 rectifier, 2 x EL84s in power amp.

2. AC15TB While the AC15 was born in the late '50s, the AC15TB is a modern-day child of the '90s which combines the sweet 'n' desirable tonal characteristics of the AC15's low Wattage power stage, with the increased tonal flexibility that the Top Boost (TB) channel of an AC30 has to offer. Then, to sweeten the pot even further, a 12" Celestion "Blue" speaker (what else?), Reverb and a Master Volume control were thrown in too. The result is a highly flexible 15 Watt, all-valve, 1x12 combo that successfully marries the pureness of great vintage VOX tone with modern features.

The original has two tone controls - Treble and Bass. So, as is the norm, the Valvetronix's TREBLE and BASS controls mimic their namesakes while the MIDDLE ("neutral" at 12 o'clock) and PRESENCE add further tonal flexibility...should you want it. To ensure maximum 'Voxiness,' we've made sure that the PRESENCE control behaves exactly like the "Top Cut" on the original AC15 - except in reverse ("off" = cut) to make it more logical, just like on our AC15 model. In trademark VOX fashion, our AC15TBX model oozes clean tones that 'jangle' and 'chime,' while its overdrives are smooth yet pulsating with desirable harmonic overtones. Enjoy! Original's valve compliment: 5 x ECC83s in the preamp, 1 x 5Y3GT rectifier, 2 x EL84s in power amp.

3. AC30 As already stated, the VOX AC15 was a huge hit with the British guitar bands of the late '50s. However, as the popularity of the AC15 using bands grew, so did their need for a more powerful amp. Sure, the AC15 was loud for a 15 Watt amp - darned loud in fact - but it was no match for 1,000 + screaming fans! Remember folks, back in the late '50s/early '60s, guitar amps weren't being fed through the PA - that was reserved purely for vocals, the band's backline had to do the rest. Clearly VOX needed to come up with a louder amp and the company was only too happy to rise to the challenge...

The fruit of VOX's labour was unveiled to the world in 1959 - the 30 Watt, 2x12, AC30. Several top British bands graduated up to the AC30 instantly and, within months, one of them had scored a number one single with a stirring guitar instrumental. Not surprisingly, pretty much every other UK act worth its salt immediately followed suit and the AC30 became the amp behind the so-called "Beat Boom" of the time. More importantly, it also became the driving force behind the now legendary "British Invasion" - the name given to the huge wave of success that several English bands enjoyed in America during the '60s. This charge was led by a quartet hailing from Liverpool who quickly became Vox's most famous ambassadors ever.

We've modeled the sterling sounds of the AC30's Normal channel as they definitely encapsulate those classic tones that defined the aforementioned British invasion. Just like its smaller brother, the AC15, the AC30's Normal channel boasts the bare minimum of knobs - Volume and Top Cut (modeled by GAIN and PRESENCE\* respectively). Although the AC30 can be considered an AC15 on steroids, the additional sonic characteristics and spread a pair of Celestion, 12" "Blue" speakers bring to the table cannot and should not be ignored. Rest assured, we did everything but ignore the all-important role these speakers play and spent countless hours ensuring we captured said magic in our AC30 model.

\*CONTROL NOTE: Once again, our PRESENCE control models the "Top Cut" on the original AC30 exactly - except in reverse ('off' = cut) to make it more logical, just like on our AC15 model. Original's valve compliment: 4 x ECC83s, 1 x ECC82 in the preamp, 1 x GZ34 rectifier, 4 x EL84s in power amp.

4. AC30TB Even though the AC30 was a runaway success, several artists expressed a desire for the amp to have more tonal flexibility and a pinch of extra gain too. VOX reacted quickly and came up with some clever extra tone circuitry which featured an additional ECC83 valve and was called "Top Boost."\* When "Top Boost" was added to an AC30 it increased the gain of the combo's Brilliant channel, and added two extra EQ controls, giving the amp three tone controls -Treble, Bass and Cut. To say it was an instant hit with the guitar playing public would be a gross understatement! In fact, its gutsy tone became an instantly recognisable signature sound of many major groups in the mid '60s.

NERDY HISTORICAL NOTE: VOX initially called this their "Brilliance Unit" but it quickly became known as "Top Boost." When Top Boost was first introduced it was only available as a retrofit assembly. Even though this modification was not particularly difficult to add, it was beyond most folk (hey, I dunno about you, but messing around with electricity is hardly my idea of fun!). Consequently, in 1964, Top Boost was fitted to the AC30 as standard.

Once again, the PRESENCE control of our model acts as the original's Cut (but in reverse: "off" = cut) while the GAIN, TREBLE and BASS mimic the original's Volume, Treble and Bass controls. The MIDDLE is an "extra" with 12 o'clock being its "neutral" position. Our AC30TB model produces clean sounds that are rich and jangly with a smooth yet detailed top end, and overdrives that have a glorious, throaty bark - just like those classic, "Class A" tones that have made the original a "must have" in any serious player's amp collection. Original's valve compliment: 5 x ECC83s & 1 x ECC82 in preamp, 1 x GZ34 rectifier, 4 x EL84s in power amp.

5. UK BLUES Our UK BLUES model is based on the "High Treble" channel of an extremely rare, handwired head made in jolly old England in the early '60S. Although the TWEED 4x10 circuit was used as a basic template for this amp, several fundamental changes (e.g. different tubes, different transformers, a higher output impedance and vastly different speakers in a closed-back cab), give UK BLUES its own unique and highly desirable character. Indeed, when cranked-up\* this 30 Watt baby produces a crunch that forever changed the sound of rock 'n' roll - which is why it is still highly revered to this very day.

Original's valve compliment: 3 x ECC83s in preamp, 1 x GZ34 rectifier, 2 x KT66 in power amp.

6. UK '70S This is based on the "High Treble" channel of a 1969, 100 Watt, all-valve head, boasting a Plexiglas front panel and four (4) inputs. The no-nonsense original doesn't feature a Master Volume control so the best and, arguably, only way to set it up is to max out the volume and let rip! And, that's exactly what everyone did - and still does!

As great as the original sounds when cranked wide open, it is so deafening loud that it can peel paint off a wall at 100 paces! This means it is hardly the ideal amp for small gigs, let alone late-night practice sessions in your bedroom! This however, is not a problem with the UK '70S model that lurks in your Valvetronix amp. Thanks to it having programmable controls for GAIN (which models the original's "High Treble" Volume control) and VOLUME plus an overall MASTER, the glorious "cranked " tone of the original can be achieved at a volume level that matches your other programs - and, more importantly, won't cause premature deafness or force your "friendly" neighbours to call the cops! And let's not forget that incredibly useful POWER SELECTION switch that resides on the rear panel either... So, wind the GAIN control all the way up and immerse yourself in an instantly recognizable, organic overdrive that responds beautifully to the subtle dynamics of your playing and dominates "classic rock." Rolling back your guitar's volume control results in a unique and highly useable clean sound. Original's valve compliment: 3 x ECC83s in preamp, 4 x EL34s in power amp.

7. UK '80S This is modeled on a 1983, all tube, single channel 100 Watt head that boasts a Master Volume control - a wonderful feature that allows the user to dial in a decent crunch tone without having to max out the amp's volume.\* Invariably played with it's (preamp) Gain control cranked to the max, this amp was responsible for the fat, roaring sound that dominated '80S hard rock and heavy metal. Yes sir, from spandex clad Europeans who rocked like hurricanes, to American speed freaks who rode the lightning and reigned in blood, UK '80S was the only amp of choice...and, for many, still is!

Although UK '80S became famous for its distinctive, cranium-crushing crunch, it isn't merely a "one trick pony" and neither is our model - just like the original, when you roll back your guitar's volume knob you'll get a bright, clean sound that's perfect for chord work and will cut through any mix like a hot knife through butter. Original's valve compliment: 3 x ECC83s in preamp, 4 x EL34s in power amp.

8. UK '90S This model is based on the "lead" channel of a 100 Watt, dual channel head that is capable of so much preamp distortion it houses a Gain control that goes all the way up to a Nigel Tufnel approved "20, dunnit!" This amp replaced UK '80S and was developed to satisfy the ever-evolving rock guitarists' insatiable lust for more gain, features and flexibility. Was this amp popular? Judging by the fact it quickly became the "industry standard" for the decade in question, the answer is a resounding "yes!" Original's valve compliment: 4 x ECC83s in preamp, 4 x EL34s in power amp.

9. UK MODERN This is modeled on the High Gain channel of a modern, all-tube 100 Watt that is effectively a hybrid of the UK '80S and UK '90S amps. It combines the toneful, high gain preamp stage and modern features of UK '90S with the unmistakable, "snarling" punch and girth the UK '80S power stage had to offer. The result is a highly aggressive, tone-breathing monster capable of mondo-gain while retaining individual note definition. With the GAIN control on full, UK MODERN allows lead lines to soar into soulful feedback, while its low-end "chunk" remains tight and punchy. Wimps beware! Original's valve compliment: 4 x ECC83s in preamp, 4 x EL34s in power amp.

10. RECTO This bad boy is based on the "Modern High Gain" channel of a brutal, 150 Watt, armour-plated beast hailing from California. Its deep, dark, loose low-end, somewhat "fizzy" top and Godzilla-like gain has made this all-tube a mainstay for many modern, metal acts who either tune their guitars down as low as they can possibly go, or wield 7-string axes.

At low GAIN settings, RECTO produces a distinctive, bright clean sound bolstered by some rich, upper harmonics that add fullness and dimension. This said, RECTO is definitely not

recommended for Country 'n' Western picking. But, if you play slamming, "nu-metal" that's tuned lower than whale droppings, then RECTO could well be the only way to go!

Original's tube compliment: 5 x 12AX7s in preamp, 3 x 5U4G rectifier tubes, 6 x 6L6s in power amp.

11. US HIGAIN This is modeled on the Overdrive Channel of an all-tube, 100 Watt head built in 1991 and covered in snakeskin! This high gain, power house was designed by a guy who also builds and drives Hot Rod cars so it should come as no surprise that the original's controls all go to eleven - after all, "that's one louder innit!" (Nigel Tufnel!)

US HIGAIN is capable of a powerful, heavily saturated sound that combines an open low-end with compressed mids and highs. The result is a tone that remains focused and well defined at even the most extreme gain settings. These attributes have made this head a favorite with several of the world's leading players, and its versatility make it ideal for a wide variety of purposes and styles. Original's tube compliment: 4 x 12AX7s in preamp, 4 x 6L6s in power amp.

12. BOUTIQUE OD For this one we modeled the Overdrive channel of a very rare, very expensive and very respected 100 Watt head named the Overdrive Special. This custom-order, handwired beauty has a spectacular overdriven sound that's perfect for sax-like, legato soloing. With its GAIN control wide-open, BOUTIQUE OD produces a stunning sustain which is very smooth and very soulful - can you say "woman tone!?" Original's tube compliment: 3 x 12AX7s in preamp, 4 x EL34s in power amp.

13. BOUTIQUE CL For this amp type, we modeled the Clean channel of another very expensive, handwired, custom amp made by the same boutique builder as BOUTIQUE OD. We auditioned several top-shelf boutique amps for this model but this amp was the clear winner. Even though its garish, fuzzy red covering wasn't to everyone's taste, it's beautiful clean sound was! Its beautifully rounded low-end, delightfully transient mid-range attack and sweet treble make it the perfect partner for single-coil pickups. It is also incredibly responsive and extremely sensitive to picking styles and pickup selection. And, as an added bonus, strummed chords just ring out and blossom. Original's tube compliment: 3 x 12AX7s in preamp, 4 x 6L6s in power amp.

14. BLACK 2x12 The dual channel, blackfaced beauty we modeled here is considered a "musthave" 2x12 combo for country and blues players, and rightfully so - after all, its celebrated clean sound is very tight 'n' twangy, with a deep, taut, piano-like bass. Pristine clean tones aside, BLACK 2x12 is also capable of producing that classic Chicago blues tone - especially with single coil pickups. In keeping with the original, when pushed hard the bass on our model tends to crumble. So, to emulate this classic, BLACK 2x12 overdrive, here's what you dial in on your Valvetronix: full GAIN, no BASS, full MIDDLE and set TREBLE to taste. Because the EQ network of BLACK 2x12 lies before the main gain stage of its preamp y'see, pushing the mids in this way emphasizes the distortion in that frequency range and the result is a lovely, singing blues tone. As already mentioned elsewhere, the original amp doesn't have a Presence control but does have a Bright Switch. The PRESENCE control on your AD60VT emulates this switch when "off" and "on," plus all points in-between! Original's tube compliment: 4 x 12AX7s & 2 x 12AT7 (a.k.a. ECC81) in preamp, 4 x 6L6s in power amp.

15. TWEED 1x12 The original we modeled here was born in Fullerton, California, in 1958, and clad in "tweed" - hence its name! Just like the AC15, this 18 Watt, 1x12, all-tube combo is the very essence of simplicity. Aside from the obligatory Volume knob, it only housed one other knob - a single Tone control creatively named (wait for it!) Tone! This Tone control is merely a treble cut and boost, and its behaviour can be mimicked by using the Valvetronix's TREBLE, MIDDLE and BASS EQ network as follows:

Original Tone control turned all the way down (off) = BASS on full; TREBLE and MIDDLE at 9 o'clock (PRESENCE "off"). Original Tone control turned up "full" (on 10) = TREBLE on full; MIDDLE and BASS at 9 o'clock (PRESENCE "off"). NOTE: As the original doesn't have a Presence control, PRESENCE is "neutral" when "off," but can be used to add "extra" sparkle and cut to the model if you so wish.

In keeping with the original, the TWEED 1x12 produces an open, relatively uncoloured sound when clean, but starts to "snarl" beautifully when pushed into overdrive. Its highly desirable "snarl" is rich with harmonic content and cranking this puppy up will produce those classic, old rockabilly and rock 'n' roll sounds of the '50s and '60s, at the drop of a 10 gallon hat - especially when a single coil pickup is used. TONAL HINT: To duplicate this "big sounding" little amp even more accurately, turn the POWER SELECT to 15W on the AD60VT and 15W x 2 on the AD120VT. Original's tube compliment: 1 x 12AY7, 2 x 12AX7s in preamp, 1 x 5Y3GT rectifier, 2 x 6V6s in power amp.

16. TWEED 4x10 The 4x10 combo we modeled here was built in 1959 and originally intended for bass guitar. This said, six-stringers were quick to embrace its smooth-yet-cutting overdrive which is perfect for R&B (rhythm 'n' blues) guitar. TWEED 4x10 is also very sensitive and responsive to both picking strength and the volume setting on your guitar. This means that by

backing-off your axe's volume when the amp is cranked, you can produce a beautifully clean and full tone. It also means that dynamic picking control allows you to make notes or chords more distorted or clean than others, depending on how hard or how soft you pick 'em.

TONAL NOTE: Just like on the original, the Middle and Treble control of TWEED 4x10 are highly interactive and high settings of the Middle control automatically add treble to your sound. As a result, you may want to turn down the Treble control as a counter measure. Conversely, low Middle settings reduce treble so you might wanna crank the Treble a little more in such instances.

Original's tube compliment: 1 x 12AY7, 2 x 12AX7s in preamp, 1x GZ34 rectifier, 2 x 5881s in power amp.

The Vox AD60VTX combo amp was introduced at the 2003 Summer NAMM Music Trade Show in Nashville, TN. The AD60VTX replaced the AD60VT, an amp that had been first offered only two years earlier. The 2003 Vox product catalog dated "Summer 03" suggests that both the AD60VT and AD60VTX were initially offered concurrently. The AD60VTX differed from the AD60VT in several ways. The most notable change was the replacement of the Celestion 7080 12" speaker from the AD60VT with the Celestion/Vox "Neo (or new) Dog." The Celestion/Vox "Neo Dog" 12 inch speaker featured a neodymium magnet structure. The incredible magnetic properties of neodymium magnets mean that only a small amount of material is needed to produce the same flux as a much larger ceramic magnet structure. This offers a drastic savings in weight. The "Neo Dog" speaker weighs approximately one half of the weight of the Celestion 7080 it replaced without any loss of tone or power handling capacity. The AD60VTX featured a plywood cabinet, the AD60VT had a medium density fiberboard cabinet. The AD60VTX had an speaker impedance selector switch, the AD60VT did not. The impedance selector switch allowed the AD60VTX to operate at the full 60 watt power at four, eight or sixteen ohm speaker loads. This amp had followed the basic proportions of the 1960's era Vox AC-15. Unlike the AC-15, the AD60VTX cabinet has a closed back. [Click here to read about the REMS modeling preamp in the AD60VTX](#) [Click here to read about the Valve Reactor power amp in the AD60VTX](#) The AD60VTX was last offered in 2007.

In 2001, Vox introduced the Valvetronix "Blue" Series amps. This amp really had it all. The Valvetronix "Blue" Series amps packed an incredible number of innovations. The control section was based on the Korg REMS (Resonant Structure and Electronic Circuit Modeling System) technology. REMS had been used in a number of "pod" style stand alone guitar effects devices, but incorporating this technology into the preamp of a guitar amplifier was truly a first. The REMS circuit could accurately reproduce the complex preamp circuitry of sixteen of the world's most popular amplifiers. This was a Vox that would not only sound like a Vox, but could also emulate the sounds of a black face, tweed or plexi style amp. In addition to amp modeling, the Valvetronix "Blue" Series amps included literally every sound effector used by guitarists. Ten effects pedals, five modulation effects, reverb, delay, and a full set of gain, volume and tone controls insured that this amp could give you what you needed. The Valvetronix "Blue" Series also introduced the revolutionary VR Valve Reactor output circuit, which you can read about by [clicking here](#). The AD60VT and AD120VT amps were introduced in July 2001. By 2003, the original "Blue" series amps were replaced with a slightly updated design, the VTX Series. The new AD60VTX and AD120VTX combo amps were soon joined by two trapezoid amp heads, the AD60VTH and the AD120VTH. Matching 2x12 and a 4x12 enclosures were also offered.



The details of the Valvetronix "Blue" Series control panels follow. The Valvetronix "Blue" Series amps have one channel with dual inputs. Working across the control panel from left to right, the "Pedal" section comes next. Ten pedal effects are selectable from a rotary control. In the picture at left, the knob is pointing to the highly authentic "Acoustic" simulation which allows your electric guitar to sound like a miked acoustic. Other pedals include a Compressor (try this with your 12 string electric), Vox Wah and Autowah, U-Vibe, Octave, Treble Boost, Tube OD, Fat OD, and Fuzz. The "Modulation" section offers Chorus, Flanger, Phaser, Tremolo and Rotary (Leslie type) effects, selectable by pushing the "Type" button. Rotary controls adjust the speed and the depth of the effects. The "Ex Ctl" button allows the control of modulation speed to be sent to the accessory VC12 floor controller. The "Amp Type" section has been designed to incorporate tones modeled from sixteen of the world's most popular amplifiers utilizing Korgs REMS modeling technology. Included are "Tweed" and "Black Face" amp models from California and "Plexi" tones from the UK. You can also boogie with two "Boutique" amp models. And of course, what Vox modeling amp would be complete without the Vox AC15 and AC-30. A traditional set of volume and tone controls allow for maximum tonal flexibility. The "Delay" section has digital simulations of tape based echoes. Speed is adjusted by the "Tap" button. Feedback and Depth controls will tailor the echo effects to your preference. The "Reverb" section has a digital simulation of Spring, Room, and Plate type reverbs. The Bypass button turns off the Programmer Section (explained below) and returns the amp controls to the "what you see is what you get" state.

The Valvetronix "Blue" Series amps include a digital programmer that will allow for the storage of thirty two user designed control memories, or "patches" of control and effects settings. This programmer will store the settings of the Pedal, Modulation, Amp Type, Delay and Reverb sections plus the placement of Gain, Volume and Tone controls. These stored "patches" may be written into the memory of the amp using the "Write" button and recalled using the "Bank" and "Channel" controls. A digital guitar tuner is also included. Both Line Out and Head Phone jacks are included on the Valvetronix "Blue" Series amps. A Level control adjust both the Head Phone and Line Out levels. Stereo effects Loop jacks allow additional effects to be added to the signal chain. A Cat 5 jack, located on the rear panel of the amp, allows connection to the optional VC12 floor controller.

The Vox Valvetronix "Blue" Series amps not only have an innovative front end based on the proprietary Korg REMS preamp circuit, they also introduced the revolutionary hybrid Valve Reactor output amp circuit. The Vox Valve Reactor has its origins in the Japanese keyboard design laboratory of Korg in the late 1980s. An electronic engineer at Korg started the development of a new hybrid power amp design. His concept was to develop a one watt power tube circuit to be used as the "driver" for a high powered solid state output stage. While this was a unique concept, it was shelved after some development. It just didn't sound right. More than ten years later, electronics engineer Steve Grindsrod left his position at Marshall Amplification, PLC to assume the head engineer position at Vox. After arriving at Vox, Grindsrod stumbled across the hybrid tube/solid state output circuit attempted some years earlier at Korg and felt that it had potential. After further R&D, the Vox Valve Reactor was successfully developed. This unique output circuit was incorporated into the new Vox "Blue" series.

The "Blue" AD60VT and AD120VT amps were introduced in July 2001. By 2003, the original "Blue" series amps were replaced with a slightly updated design, the VTX Series. The new AD60VTX and AD120VTX combo amps were soon joined by two trapezoid amp heads, the AD60VTH and the AD120VTH. Matching 2x12 and a 4x12 enclosures were also offered. The

details of the Valve Reactor circuit follow. The heart of the Valvetronix Valve Reactor power amp circuit is the 12AX7 "twin triode" tube. The 12AX7 has two complete amplification or "triode" circuits inside its glass envelope. Ordinarily, these "twin triode" amplification circuits are used in series, or cascaded, in the gain stages of the preamp of a guitar amp. One would normally not expect to find a 12AX7 as part of an output amp. However, this is exactly how the 12AX7 is used in the Valvetronix Valve Reactor power amp circuit. Stated simply, the Valvetronix "Valve Reactor" circuit converts what would normally be a preamp tube to a one watt tube power amp. The output from this one watt tube circuit is then fed into a solid state amplifier to be boosted to a usable total output of 60 watts.

The drawing at left shows the output from the REMS preamp stage being fed into the "phase inverter." The phase inverter splits the signal from the REMS preamp to supply the input signal to the 12AX7 power tubes. The one watt output from these tubes is then fed into an output transformer, just as one would find in a large tube power amplifier. It is this combination of power tube and output transformer that gives true tube tone to the VR circuit. After the variable power solid state amp boosts the output to 60 watts, two further interactions occur between the REMS preamp and the VR output circuit. These interactions further enhance the amp modeling of the REMS preamp. These interactions are explained as follows. Some amps use "negative feedback" to keep the output tube from distorting; others do not. The REMS preamp instructs the Valve Reactor circuit whether or not to apply negative feedback, depending on the amp model selected on the control panel. Additionally the REMS preamp instructs the Valve Reactor circuit whether it should bias the one watt tube as a "Class A" circuit (like a Vox AC-30) or "Class AB" circuit (like a Fender or Marshall amp) based on the amp model selected on the control panel. This further enhances tonal accuracy.

Here are two views of the 12AX7 tubes on the chassis bottom of an AD120VTH amp head. It takes a bit of patience to remove these tubes for maintenance. They only protrude about a quarter of an inch from the bottom of the chassis, making them hard to grip. A view of the twin 60 watt solid state power amps in a AD120VTH. These are used to boost the one watt output from the 12AX7 power tubes to a usable 60 watt x 2 output. Large fins are used to dissipate heat and keep the amp output section cool. A rear panel rotary Power Select output power control on the AD120VTH allows the choice of 1 watt x 2, 15 watts x 2, 30 watts x 2, or 60 watts x 2. When 1 watt x 2 is selected, the solid state power amp is disconnected from the output circuit. You only hear the tubes. The VTX and VTH amps had twin speaker jacks are provided for each channel, along with an impedance selector switch. The inclusion of this switch allowed these amps to be capable of delivering their total maximum rated power to the speakers, regardless of impedance load. The VT series amps had a single speaker output jack and no impedance selector switch.

# Program List

The "AMP" programs

There are 16 amplifier programs.

AC15

AC15TB

AC30

AC30TB

BLACK2X12

BOUTIQUECL

BOUTOD

RECTO

TWEED1X12

TWEED4X10

UK70'S

UK80'S

UK90'S

UKBLUES

UKMOD

USHIGAIN

The "EQ" programs

There are 13 eq programs.

AC15-EQ

AC30-EQ

BLK2X12-EQ

BOUT-EQ

RECTO-EQ

TWEED1X12-EQ

TWD4X10-EQ

UK70S-EQ

UK80S-EQ

UK90S-EQ

UKBLUES-EQ

UKMODERN-EQ

USHIGAIN-EQ

The "5K" programs

There are 16 "5K" programs.

AC15 5K

AC15TB 5K

AC30 5K

AC30TB 5K

BLACK2X12 5K

BOUTIQUECL 5K

BOUTOD 5K

RECTO 5K

TWEED1X12 5K

TWEED4X10 5K

UK70S 5K

UK80S 5K

UK90S 5K

UKBLUES 5K

UKMOD 5K

USHIGAIN 5K

The "CLN" programs

AC15 CLN

AC15TB CLN

AC30 CLN

AC30TB CLN

BLACK2X12 CLN

BOUTIQUECL CLN

BOUTOD CLN

RECTO CLN

TWEED1X12 CLN

TWEED4X10 CLN

UK70S CLN

UK80S CLN

UK90S CLN

UKBLUES CLN

UKMOD CLN

USHIGAIN CLN

The "CAB" programs

CABCAC15

CABCAC15TB

CABCAC30

CABCAC30TB

CABCBLK2X12

CABCOUTCL

CABCRECTO

CABCTWD1X12

CABCTWD4X10

CABCUK70S

CABCUK80S

CABCUK90S

CABCUKBLS

CABCUKMOD

CABCUSHIGN

CABEAC15

CABEAC15TB

CABEAC30

CABEAC30TB

CABEBLK2X12

CABEBOUTCL

CABEBOUTOD

CABERECTO

CABETWD1X12

CABETWD4X10

CABEUK70S

CABEUK80S

CABEUK90S

CABEUKBLS

CABEUKMOD

CABEUSHIGN

The "PDL" programs

The "FATOD" Pedal programs represent a fat overdrive pedal.

FATODAC15

FATODAC15TB

FATODAC30

FATODAC30TB

FATODBLK2X12

FATODBOUTCL

FATODBOUTOD

FATODRECTO

FATODTWD1X12

FATODTWD4X10

FATODUK70S

FATODUK80S

FATODUK90S

FATODUKBLS

FATODUKMOD

FATODUSHIGN

The "FUZZ" Pedal programs represent a fuzz distortion pedal.

FUZZAC15

FUZZAC15TB

FUZZAC30

FUZZAC30TB

FUZZBLK2X12

FUZZBOUTOD

FUZZRECTO

FUZZTWD1X12

FUZZTWD4X10

FUZZUK70S

FUZZUK80S

FUZZUK90S

FUZZUKBLS

FUZZUKMOD

FUZZUSHIGN

The "TB" Pedal programs represent a top boost pedal.

TBBOUTCL

TBBOUTOD

TBBLK2X12

TBRECTO

TBTWD1X12

TBTWD4X10

TBUK70S

TBUK80S

TBUK90S

TBUKBLS

TBUKMOD

TBUSHIGN



The "TUBEOD" Pedal programs represent a tube overdrive pedal.

TUBEODAC15

TUBEODAC15TB

TUBEODAC30

TUBEODAC30TB

TUBEODBLK2X12

TUBEODBOUTCL

TUBEODBOUTOD

TUBEODRECTO

TUBEODTWD1X12

TUBEODTWD4X10

TUBEODUK70S

TUBEODUK80S

TUBEODUK90S

TUBEODUKBLS

TUBEODUKMOD

TUBEODUSHIGN

I truly hope that this collection adds to your enjoyment of Nebula.

Thanks and God Bless You.

Sincerely,

Michael Angel

CDSoundMaster.com