



**VINTAGE VACUUM TUBE AMPS**

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X-Model Guitar Preamp  
(Dual Master)

# Welcome To The Family

Congratulations and thank you for choosing your X-Model Guitar Preamp. At VVT we know you are constantly searching for new sounds and new ways to improve your existing sound. We understand the constantly evolving nature of artistic creativity and the search for perfect tone to complement your ever-widening musical vision. Providing the tools to help you to create your own sonic signature is our primary mission. At 9 lb the X-Model Guitar Preamp is an amazing tool to use for gigs and in the studio.

As with the X-Model Overdrive amplifiers, the Guitar Preamp beautifully accentuates the inherent quality of any instrument. It breathes and dynamically responds to your playing technique exactly the way a great amplifier should. The VVT X-Model Guitar Preamp is an all tube design: other than the power supply rectifier diodes, there are no clipping diodes, transistors, or other solid state parts. Furthermore, this is not a “starved” tube preamp where the tubes are operating at very low voltage and sound like it. Here, the tubes are operated at the correct voltages just like a real guitar amp. This gives the preamp a broad dynamic range which accounts for its extra touch sensitivity, tonal shaping characteristics, and excellent guitar volume control response. In addition, overdrive voicing can easily be dialed up using the VOLUME/CLEAN LEVEL DRIVE/OD LEVEL structure and can be tweaked to perfection for any guitar/pickup combination. You will find it very easy to balance volume between the Clean Channel and the OD Channel. From there, the boost switch lifts the mid frequencies in the 1K Hz range. Just a little tweaking on your guitar volume and tone controls will yield a surprising amount of control. And, with this preamp, you can have your cake and eat it to: Sparking cleans to grind to thick distortion without blowing out the walls..

Getting familiar with the X-Model Guitar Preamp is easy, so don't be terribly surprised when you find yourself up and running in no time; although, we highly recommend you spending some quality time with it due to it's chameleon like qualities. You may find yourself dialing in tones you thought might never be possible or find some tones unique to your playing style. First hand experience and real world application will yield the ultimate satisfaction. Finding your own path of comprehension and self-expression can only be achieved by mastering your instrument in combination with your new amp.

Here are a few ideas. **1.** Plug the Direct or Buffered output in to any guitar amp FX Loop Return (Power Amp In) and use the X-Model Guitar Preamp to shape your tone. This can be a tube or solid state amp. **2.** Use the X-Model Guitar Preamp to run two power amps simultaneously. The Direct output and Buffered output are in phase so there is no phase cancellation. You can use Buffered output to drive time based effects to one amp and use the Direct output for the dry signal to the other amp. It's a very cool stereo effect. **3.** Use the Direct or Buffered output to a Speaker Cabinet Simulator (your choice) and direct box to drive a PA for live shows or Studio mixer for recording. Note: A guitar speaker cabinet simulator is required to use this preamp when using a PA/Studio mixer. Otherwise it will not sound like a guitar amp. PA speakers and studio monitors have wider bandwidth. Guitar speakers usually have a 4K or 5K response curve. [See the note about Cabinet Simulators in later this document.](#)

First, we need to stress a few important cautionary notes.

## Important Information:

1. Please read all of the information contained in this document.

# CAUTION!

2. This is a high gain preamp designed for professional musicians. The tone is not scooped and muffled like mass produced products to keep guitarist from settings that may cause oscillation. Use some judgment during operation. With the Overdrive and Boost engaged you cannot crank the Drive, and OD Level controls and not expect the amp to complain with loud squeals and feedback. The preamp will greatly amplify anything received by your pickups; this includes any noise, as well as your playing. It is recommended that you disengage the OD and Boost when you are not playing. Or, use the Volume control on your guitar to reduce noise received by your pickups.
3. **HUM** - Some hum or amplified noise is normal. As the volume and gain is increased amplified noise will be noticeable and will be more apparent in a quiet room. Additionally, tubes have inherent noise as do resistors. However, excessive hum (noise) can be caused by electronic devices such as neon signs, light dimmers, fluorescent lights, aquariums, etc. located near the amp or your guitar. Hum can vary with different outlets, rooms, buildings and guitar pickups.
4. **Audio Output:** This is a pre-amplifier – not a power amplifier. A power amp is required to drive a speaker load.

# CAUTION!

## RISK OF ELECTRIC SHOCK

**WARNING:** This guitar amplifier contains lethal HIGH VOLTAGE. To avoid risk of injury or death from electric shock, do not open the enclosure or remove the chassis from the cabinet. Refer all service work to qualified personnel.

**WARNING:** This amplifier contains Vacuum Tubes. Vacuum tubes are heated to produce electrical currents and they get HOT. Touching this surface could result in bodily injury. To reduce the risk of injury from a hot component, allow the surface to cool before touching. DO NOT touch or attempt to remove vacuum tubes until they have had time to cool.

### **IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:**

**WATER AND MOISTURE:** This amplifier should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

**POWER SOURCES:** The amplifier should only be connected to a 120VAC household power source.

**GROUNDING OR POLARIZATION:** Precautions should be taken so that the grounding or polarization is not defeated. Do not remove the ground from the power cord.

**POWER CORD PROTECTION:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the amplifier.

**SERVICING:** You should not attempt to service this amp beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

**FUSING:** Your amplifier is equipped with a marked fuse receptacle, replace only with the same type fuse.

## *It All Starts Here*

The input level of this preamp determines how much drive and sustain your guitar will produce. Tonal balance, which we refer to as VOICING, determines how your amp will respond to your playing style and how it will sound with a particular guitar. Like all guitar amplifiers, the X-Model Guitar Preamp has tone and gain controls. But, unlike other amplifiers, this preamp gives you total control over VOICING and GAIN.

The VOLUME control increases preamp gain as you rotate the knob clockwise. As the gain increases, the tonal balance is shifted from treble and upper mid frequency emphasis which produce up front sparkling tone, to a lower mid and bass emphasis, which produces a thick meaty tone. The VOLUME CONTROL AFFECTS BOTH CLEAN AND OVERDRIVE CHANNELS. In order to achieve a smooth, saturated, overdrive tone the VOLUME control needs to be set at least the 12 o'clock position.

The CLEAN LEVEL control is the master volume for the CLEAN CHANNEL ONLY.

The DRIVE Control increases the gain in overdrive channel. As you rotate the knob clockwise you will notice an increase in drive as well as a certain amount of compression, though the sonic qualities will shift as well; as the gain increases the tone will become brighter with more bite.

The OD LEVEL control is the Master volume for the OD CHANNEL. Use the CLEAN LEVEL and OD LEVEL controls to balance volume between the clean and overdrive channels. The tonal effects while increasing the OD LEVEL provide a meatier fuller tone. This is where balancing both Gain (Drive) and OD Level controls is key to achieving the desired tone.

Different combinations of Volume, Drive, and OD Level settings, will have a dramatic effect on the response of the amplifier and the personality of your instrument. It is easy to get familiar with the action of these controls and you'll be amazed with your ability to make any guitar sound mellow, fat, soulful, or aggressive.

**Note:** Cabinet Simulators (or Speaker Emulator) circuits are very useful in a recording studio during guitar recording, practicing using headphones, and on the stage as an additional signal output, which can be plugged directly into the mixer's input. The Cabinet Simulator's job is to emulate the frequency response of a guitar amplifier's speaker cabinet, which is the last and one of the most important elements of guitar sound creation (with the exception of microphone and the listener's perception of sound).

As an electronic circuit a Cabinet Simulator is a set of active or passive filters that create a desired frequency response. In its simplest form it's a typical low pass filter with roll off at about 4-5kHz, since this is the usual bandwidth limit of a guitar speaker (-3dB roll off). There are many good speaker cabinet simulators available from cheap to expensive – simple to complex. (e.g. Beringer Ultra G, Palmer PGA 04, Two Notes Torpedo, ADA Guitar Cab Simulator, etc. etc.)

# *X-Model Preamp Controls*

## FRONT PANEL, RIGHT TO LEFT:

1. **INPUT - GUITAR INPUT.** Plug in your guitar or stomp box here.
2. **BOOST Switch** – Turns the Mid Frequency boost on or off for the clean and overdrive channel.
3. **OVERDRIVE Switch** – Turns the Overdrive Channel on or off.  
Note: This Overdrive Switch and Boos Switch provide the same functions as the footswitch. If this switch is in the ON (UP) position the footswitch **WILL NOT WORK**. Likewise, if the footswitch for this function is ON the front panel switches **WILL NOT WORK**..
4. **VOLUME** – Sets the amount of gain for the clean and overdrive channels. This Volume control also serves as a tone shaping control, counter-clockwise for crisp and articulate, clockwise for thick and saturated.
5. **CLEAN LEVEL:** This is the Master volume for the Clean channel.
6. **EQUALIZATION SECTION** – Passive / Interactive tone controls.
  - a. **TREBLE** – High frequency equalization.
  - b. **MIDDLE** – Mid frequency equalization.
  - c. **BASS** – Low frequency equalization.
7. **DRIVE** – Sets the amount of drive for the OD channel only
8. **OD LEVEL** – This is the Master Volume for the OD channel only
9. **STANDBY Switch** - Turns ON/OFF DC voltage to the amp.
10. **POWER Switch** – Turns AC power ON or OFF. Lights when the POWER Switch is ON

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## REAR PANEL, RIGHT TO LEFT:

1. **AC MAINS INPUT** – 120VAC 60Hz Power Inlet. Use only the factory supplied AC cord set or a UL approved equivalent type.
2. **AC Power FUSE** – (P/O the Mains Input) 1 Amp Slo-Blo Fuse – Only replace with same type and rating.
3. **DIRECT OUTPUT – Send Control:** Sets the final output signal level to the power amp or other device you are driving.
4. **DIRECT OUTPUT JACK:** ¼” unbalance output
5. **BUFFERED OUT – Send Control:** Sets the final output signal level to the power amp or other device you are driving.
6. **BUFFERED OUTPUT Jack:** ¼” unbalanced output
7. **FOOTSWITCH Jack** – Tip/Ring/Shield jack. Plug the supplied footswitch in here.

## FOOTSWITCH:

1. **OD Switch** – Turns the OD Channel ON or OFF  
Note: The front panel Overdrive Switch must be in the OFF (DOWN) position to activate the FOOTSWITCH. The LED on the FOOTSWITCH will light when the Overdrive functions is active.
2. **BOOST Switch** – Turns the alternative mid frequency boost ON or OFF.  
Note: The front panel BOOST Switch must be in the OFF (DOWN) position to activate the FOOTSWITCH. The LED on the FOOTSWITCH will light when the BOOST functions is active

## *Tube Function and Location Chart*

Tube locations are indicated below. All tubes are factory selected for superior performance, consistent tone quality, and reliability. While substituting other brands may not cause damage to the amplifier this may affect amplifier performance in unpredictable ways. For best performance, replace only with factory recommended tubes. Substituting other tube types is not recommended.

Factory recommended tubes are listed under each location. Numbering sequence is left to right **looking at back of amp** starting with V1 to the far left side.

- V1 (shielded tube) - JJ ECC83S (12AX7), Clean Channel
- V2 (shielded tube) - JJ ECC83S (12AX7), OD Channel
- V3 (shielded tube) - JJ ECC83S (12AX7), Output Buffer

# X-Model Guitar Preamp

## LIMITED WARRANTY

This preamp is guaranteed against failure. Vacuum tubes are guaranteed for 30 DAYS from the date of purchase. If a tube fails within the 30 day period, VVT Amps will replace the tube at no charge. All other electronic components are guaranteed for FIVE YEARS. The cabinet is guaranteed against structural defects for ONE YEAR. VVT Amps will service your amplifier and supply all parts at no charge providing the unit is under warranty. Any shipping costs associated with repairs are your responsibility. VVT Amps DOES NOT PAY FOR PARTS OR SERVICE OTHER THAN OUR OWN. A COPY OF THE ORIGINAL SALES RECEIPT IS REQUIRED TO VERIFY YOUR WARRANTY. VVT Amps assumes no responsibility for external equipment or speakers damaged by this device. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow supplied instructions. Accidental damage to the preamp, cabinet, or vinyl covering is not covered.

This WARRANTY does not apply to VVT Amps products that have been tampered with, damaged by shipping carriers, reverse engineered, or modified. VVT Amps, Inc. reserves the right to suspend or terminate the Warranty at our sole discretion, should damage from any of the above limitations and or exclusions be detected upon examination. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for VVT Amps any liability in connection with the sale or servicing of VVT Amps products. VVT Amps SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. If service is required you may contact VVT Amps at 240-222-3830 or [vvtamps@vvtamps.com](mailto:vvtamps@vvtamps.com). We will respond as soon as possible and make arrangements to repair. If your unit is out of warranty, VVT Amps will repair your preamp but you will be charged the current RATE for parts and labor.

**Keep the information on this page for your records.**

**MODEL**

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**SERIAL NUMBER**

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**OPTIONS INCLUDED**

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**PURCHASE DATE**

Vintage Vacuum Tube Amps  
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**Specifications:**

Model Name	X-Model Guitar Preamp
Product Number	502221091
Model Number	57211954-0001
Series	X-Model
Type	All Tube
Audio Output	Preamp – Adjustable Line Level Signal
Output Impedance	Direct Output – 38KOhms; Buffered Output – 600 Ohms
Speakers	N/A
Channels	Two Channels – Normal/Overdrive – One Input
Features	100% Vacuum Tube Preamp Clean Channel Clean Boost OD Channel OD Boost Dual Master Volume (Clean Level) (OD Level) Control Panel or Footswitch Function Control
Controls	Front Panel: Right to Left Input Jack, Boost Switch, OD Switch, Volume, Clean Level, Treble, Middle, Bass, Drive, OD Level Standby Switch, Power Switch with indicator  Back Panel: Right to Left AC Power Inlet with Fuse Direct Output Send Control Direct Output Jack Buffered Output Send Control Buffered Output Jack Footswitch Jack
Covering	Textured Vinyl (Tolex)
Weight	9.5 lbs.
Dimensions	Height: 6” Width: 13 1/4” Depth: 9 1/4”
Tube Complement	3 X JJ ECC83S/12AX7 Tubes
Accessories	Footswitch – Included with amp P/N - XOD0001
Options	N/A
Introduced	6/2012
Notice	Product Prices, Features And Specifications Are Subject To Change Without Notice