TubePre V2 Owner's Manual



English



0.1 Important Safety Instructions

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED

PERSONNEL.

CAUTION: To reduce the risk of electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no object filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION: These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other

than that contained in the operation instructions. Repairs must be performed by qualified service personnel.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry a cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Use only attachments/accessories specified by PreSonus.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with this apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Servicing is required when the apparatus has been damaged in any way, such as if a power-supply cord or plug is damaged; or liquid has been spilled, or objects have fallen, into the apparatus; or if the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. All PreSonus products in the USA should be serviced at the PreSonus factory in Baton Rouge, Louisiana. If your product requires a repair, contact support@presonus.com to arrange for a return-authorization number. Customers outside the USA should contact their local distributor. Your distributor's contact information is available at www.presonus.com.
- 15. The apparatus shall be connected to a Mains power outlet with a protective grounding/earthing connection.
- Where the Mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

EU Directives on the Protection of the Environment and Other Euro Stuff

RoHS This product is compliant with the EU Directive 2011/65/EU for the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment. No lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr+6), PBB or PBDE is intentionally added to this device. Any traces of impurities of these substances contained in the parts are below the RoHS specified threshold levels.

REACh This product is compliant with the European Union Directive EC1907/206 for the Registration, Evaluation, Authorization, and Restriction of chemicals (REACh) and contains none or less than 0.1% of the chemicals listed as hazardous chemicals in the REACh regulation. WEEE This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point



for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

CE This product complies with the European Union Council Directives and Standards relating to electromagnetic compatibility EMC Directive (2006/95/EC) and the Low Voltage Directive (2004/108/EC).

Overview and Features

Get the big picture with this summary of features and list of what's in the box.

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Quick Start Guide

Follow these basic instructions to start using your TubePre V2 right away. Basic hookup diagrams are on pages 8 and 9.



Hardware	10

Read the full anatomical breakdown of your TubePre V2.

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Resources 14

Read the TubePre V2 technical specifications, information on troubleshooting and repairs, and limited warranty.

1.0 **Overview**

1.1 Introduction

Thank you for purchasing the PreSonus TubePre V2. PreSonus Audio Electronics has designed it utilizing high-grade components to ensure optimum performance that will last a lifetime. With separate instrument and microphone inputs, the TubePre V2 is a handy direct-injection (DI) box for guitars and bass. The TubePre V2 proves that dynamic preamps can come in small packages!

We encourage you to contact us with questions or comments regarding this product. You can reach us by email at techsupport@presonus.com or call us at 1-225-216-7887 between 9 a.m. and 5 p.m. Central Time (GMT -06:00). PreSonus Audio Electronics is committed to constant product improvement, and we value your suggestions highly. We believe the best way to achieve our goal of constant product improvement is by listening to the real experts: our valued customers. We appreciate the support you have shown us through the purchase of this product.

Please use this manual to familiarize yourself with the TubePre V2's features, applications, and correct connection procedure before connecting it to your recording system. Pay close attention when connecting the TubePre V2 to your system, as bad cables and improper grounding are the most common causes of problems encountered in recording and P.A. systems. Check your cables, connections, and grounding if you experience noise or other sonic performance problems.

1 Overview

1.2 Summary of Features

1.2 Summary of Features

- 12AX7 vacuum-tube-based preamp
- Tube Drive tube-saturation control
- 48V phantom power
- 80 Hz high-pass filter
- Polarity reverse switch
- Lighted VU meter
- Clip LED
- Unbalanced 1/4" Instrument input
- Balanced XLR Microphone input
- Unbalanced ¼" Line output
- Balanced XLR Line output

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1.3 What's in the Box

In addition to this manual, your PreSonus TubePre V2 package contains the following:



• PreSonus TubePre V2



12 VDC, 1A power supply

- 2 Quick Start Guide
- 2.1 Getting Started

2.0 Quick Start Guide

This Quick Start Guide is designed to help you connect and use your TubePre V2 as quickly as possible. The following step-by-step instructions are based on a common studio environment. Your setup may vary based on your needs and applications.

2.1 Getting Started

Connect the Power

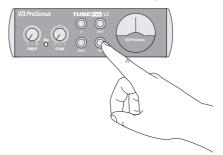
- 1. Turn every knob on the TubePre V2 front panel completely counterclockwise (left).
- 2. Connect the included power supply to the TubePre V2 and plug it into a wall socket, power strip, or surge protector.

Connect Your Input Sources

- 1. Turn down the main output volume on your audio interface or mixer to its lowest position.
- 2. Grab a microphone and a mic cable and plug them into the TubePre V2 mic input.



- Connect the audio output (TRS or XLR) of your TubePre V2 to a line input on your audio interface or mixer. For the best sound quality, PreSonus recommends using balanced cables.
- 4. If your microphone requires phantom power, press the 48V button on the front panel.



5. Speak into the microphone while watching the VU meter on the front panel and slowly turning the TubePre V2 Gain knob clockwise.



- 2 Quick Start Guide
- 2.1 Getting Started
- 6. Set the input level on your audio interface or mixer, using the recommended level-setting procedure for that device.
- 7. Speak into the microphone while monitoring the TubePre V2 (again, following the monitoring instructions for your audio interface or mixer), and turn the Drive knob clockwise until the desired effect is achieved.



Your TubePre V2 is now ready to use!

2.2 Using Your TubePre V2 with an Audio Interface

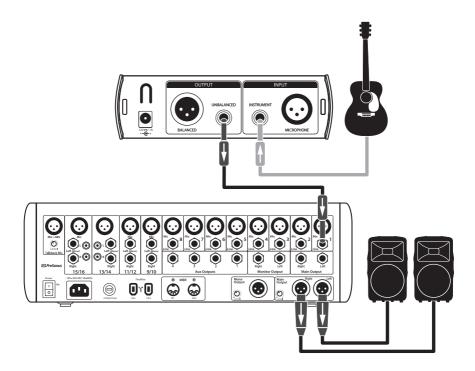
Microphone preamps greatly influence the final sound of a recording. Most audio interfaces offer built-in microphone preamps, and some interfaces notably the PreSonus FireStudio[™] family and AudioBox[™] VSL family—feature high-quality XMAX[™] preamps. However, adding the TubePre V2's selection of timbres greatly expands your choice of sounds.

When using the TubePre V2 as a front end for a recording device, it is important to watch the preamp's output levels. Turning up the gain and tube drive too high could overload the inputs of your recording device, and if your recording device is digital, this could overload the analog-to-digital converters. While analog distortion can be very desirable, no one wants to hear digital distortion. By properly adjusting the output level of your TubePre V2 and the input level of your recording device so that your recording input is not clipped, you will achieve the best possible sound.

2 Quick Start Guide

2.3 Using the TubePre V2 as a DI

2.3 Hookup Diagram: Using the TubePre V2 as a DI



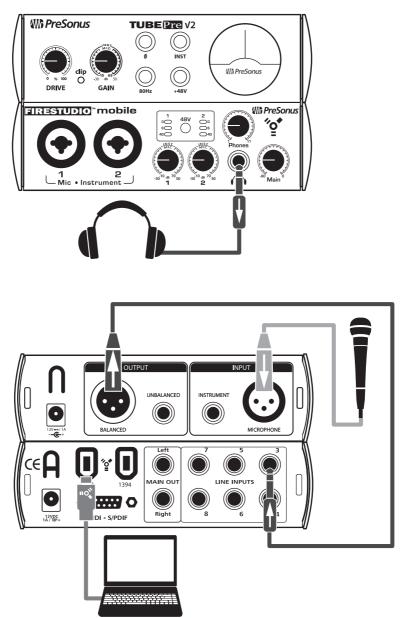
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Using the TubePre V2 with an Audio Interface 2.4

2.4 Hookup Diagram: Using the TubePre V2 with an Audio Interface



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3 Connections

3.1 Front-Panel Layout

3.0 Hardware

3.1 Front-Panel Layout





Drive control. The Drive knob controls the signal level being routed through the 12AX7 vacuum tube. The effect ranges from subtle to extreme, depending on the setting; the more signal being sent to the tube, the more distortion you will hear. This is great for guitar, bass, and even vocals, if that is the effect you want to achieve. Of course, in some applications, tube drive is not needed.

Adjusting the tube drive can create these desirable effects:

- Warming up the sound. This is achieved by adding in a small amount of tube drive (30% or less). It is especially desirable for vocals and electric bass. The resulting sound is richer and sweeter.
- **Overdriven tube sound.** This effect is achieved by adding in 30 to 100% tube drive. The more tube drive you add, the more overdriven the sound will be. This sound is extremely useful for creating distorted guitar, and it's great for an authentic "blues harp" harmonica sound.

Owner's Manual













Gain control. The Gain (input gain) knob controls the amount of boost applied to the preamplified signal and provides the following gain structure:

- Microphone input. 80 dB of variable gain (-15 dB to +65 dB)
- Instrument input. 80 dB of variable gain (-30 dB to +50 dB)

Clip LED. The Clip LED will illuminate if your input signal exceeds +20 dBu. Clipping the input produces very unpleasant distortion. If you want goodsounding distortion, increase the Drive control while lowering the Gain.

Phase reverse. Reverses the polarity of the signal. Use Phase Reverse when recording with more than one open microphone to combat phase cancellation between microphones.

Instrument input. This button activates the instrument preamp circuit, bypassing the microphone preamp. When this button is engaged, the XLR input will not pass signal.

48 Volt phantom power. This button enables phantom power to the XLR Microphone input.

XLR connector wiring for phantom power:

Pin 1 = GND Pin 2 = +48V Pin 3 = +48V

80Hz roll-off. The 80Hz button is a low-end roll-off filter. When enabled, this button causes all frequencies below 80 Hz to be attenuated (cut) by 12 dB. This can be handy in live and studio applications. For example, the 80 Hz filter can help to reduce the "boominess" or "muddiness" of a vocal, improving the overall clarity.

- 3 Connections
- 3.2 Back-Panel Layout



VU Meter. The analog VU meter displays the output level of your TubePre V2.

3.2 Back-Panel Layout





INSTRUMENT

Microphone input. Your TubePre V2 is equipped with a high-quality PreSonus XMAX[™] microphone preamplifier for use with a wide variety of microphones, including dynamics, condensers, and ribbons.

Instrument input. The ¼"TS connector in the input section of the TubePre V2 is for use with a passive instrument (e.g., guitar or bass).

NOTE: An active instrument has an internal preamp and should be plugged into a line input rather than an instrument input. Plugging a line-level source into the Instrument input on the TubePre V2 may result in a very loud and distorted audio signal.



Main Outputs. The TubePre V2 features both an unbalanced ¼"TS and a balanced XLR output.

Power User Tip: Both outputs can always be used simultaneously. For example, the Unbalanced output could be connected to an onstage amplifier while the Balanced output is connected to the P.A. system or monitor mixer. In this way, your TubePre V2 can be used as a direct box for live performance and recording.



Power Supply Connector. This is the connection for the TubePre V2's external power supply.

4 Resources

4.1 Vacuum Tube Care and Maintenance

4.0 **Resources**

4.1 Vacuum Tube Care and Maintenance

Your TubePre V2 is equipped with a 12AX7 vacuum tube. This tube works well in a wide variety of situations; however, some owners may wish to experiment with other compatible vacuum tubes to explore additional tonal possibilities. There are many different 12AX7 tube brands from which to choose but you must use a 12AX7.

Tube life and performance are affected by how often the tube is used and how hard the tube is driven while in use. Poor performance and microphonics (noise caused by mechanical vibration of the elements of an electron tube, component, or system) are the most common signs of wear. Periodic replacement of the vacuum tube is recommended. There is no predetermined time for replacement. If you notice that the sound quality in your TubePre V2 has deteriorated, it is most likely that a worn out tube is to blame.

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4.1.1 How to Replace the Tube

- 1. Unplug the unit. Proceed with caution, as the tube could be hot.
- 2. There is one screw on the top and one screw on the bottom of the chassis that connect the left side panel (as viewed from the front of the unit). Remove these two screws.
- 3. Remove the left side panel.
- 4. Grip the tube and pull outward to remove it from the socket.
- 5. Align the pins of the new tube and place it in the socket. The pins align with the large pin spacing located at the bottom. Make sure that the tube is completely seated in the receptacle.
- 6. Replace the left side panel and screws.

4 Resources

4.2 Specifications

INPUTS:

Mic Input:

Connector Type	XLR, female, balanced		
EIN	-131 dB, 20 kHz BW, max gain, Rs=40Ω, A-wtd -128 dB, 20 kHz BW, max gain, Rs=40Ω, unwtd		
Frequency Response	20 Hz - 20 kHz, -0.3 dB, +4 dBu, unity gain 5 Hz - 120 kHz, -3 dB, +4 dBu, unity gain		
THD+N	0.01%, -10 dBu, 1kHz, unity gain, 20 kHz BW, unwtd		
Dynamic Range	115 dB, 1 kHz, unity gain, 20 kHz BW, A-wtd 107 dB, 1kHz, unity gain, 20 kHz BW, unwtd		
Input Impedance	1.3 kΩ		
Phantom Power	+48 VDC, 10 mA		
Instrument Input:			
Connector Type	1/4"TS, female, unbalanced		
Input Impedance	1 ΜΩ		
OUTPUT:			
Analog Output:			
Connector Types	XLR, male, balanced ¼″TS, female, unbalanced		
Maximum Output	+20 dBu		

Output Impedance Tube Stage:

Туре	12AX7

51Ω

Power:

Туре	+12 VDC, 1000 mA, center pin positive
PSU Barrel Dimensions	5.5 mm 0.D., 2.1 mm l.D., 9.5 mm length

NOTE: As a commitment to constant improvement, PreSonus Audio Electronics, Inc., reserves the right to change any specification stated herein at any time, without notification.

4.3 Troubleshooting and Repairs

If you experience problems with your TubePre V2, please try the following before contacting PreSonus Customer Support:

- 1. Check our Web site at www.PreSonus.com for answers to frequently asked questions and for troubleshooting techniques specific to the TubePre V2.
- 2. Make sure your TubePre V2 and all equipment connected to it are powered on.
- 3. Disconnect/reconnect your TubePre V2 power supply.
- 4. Check your connection cables and audio sources.
- 5. Check your microphone.
- 6. Isolate the problem by disconnecting any extraneous equipment in your signal chain.

To submit a tech-support request, visit our Web site at http://support.presonus.com/home or call us at 1-225-216-7887 between 9 a.m. and 5 p.m. Central Time (GMT -06:00). Please note that you must register your product at PreSonus.com before contacting Customer Service. Customers outside of the United States should check first with their regional PreSonus distributor for technical support and repairs.

When contacting technical support, please have the following information at hand:

- A brief description of the connections to and from your TubePre V2.
- A description of the problem that you are encountering.

4 Resources

- 4.3 Troubleshooting and Repairs
 - Your TubePre V2 serial number (located on the bottom of the unit).

If you think that your power supply has failed, rather than the TubePre V2 itself, please let the Customer Service representative know. If your TubePre V2 is still under warranty, a replacement power supply will be provided to you free of charge. If your TubePre V2 is no longer under warranty, you may purchase a replacement at **www.PreSonus.com/store.**



4.4 **PreSonus Limited Warranty**

PreSonus Audio Electronics, Inc., warrants this product to be free of defects in material and workmanship for a period of one year from the date of original retail purchase. This warranty is enforceable only by the original retail purchaser. To be protected by this warranty, the purchaser must complete and return the enclosed warranty card within 14 days of purchase. During the warranty period PreSonus shall, at its sole and absolute option, either repair or replace, free of charge, any product that proves to be defective on inspection by PreSonus or its authorized service representative. To obtain warranty service, the purchaser must first call or write PreSonus at the address and telephone number printed below to obtain a Return Authorization Number and instructions of where to return the unit for service. All inquiries must be accompanied by a description of the problem. All authorized returns must be sent to the PreSonus repair facility postage prepaid, insured, and properly packaged. PreSonus reserves the right to update any unit returned for repair. PreSonus reserves the right to change or improve the design of the product at any time without prior notice. This warranty does not cover claims for damage due to abuse, neglect, alteration, or attempted repair by unauthorized personnel and is limited to failures arising during normal use that are due to defects in material or workmanship in the product. Any implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this limited warranty. Some states do not allow limitations on how long

4 Resources

4.4 PreSonus Limited Warranty

an implied warranty lasts, so the above limitation may not apply to you. In no event will PreSonus be liable for incidental, consequential, or other damages resulting from the breach of any express or implied warranty, including, among other things, damage to property, damage based on inconvenience or on loss of use of the product, and, to the extent permitted by law, damages for personal injury. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty only applies to products sold and used in the United States of America. For warranty information in all other countries, please refer to your local distributor.

PreSonus Audio Electronics, Inc.

7257 Florida Blvd. Baton Rouge, LA 70806 USA www.PreSonus.com

Added bonus: PreSonus' previously Top Secret recipe for... Jambalaya

Ingredients:

- 5 lbs link andouille sausage
- 3 lbs boneless chicken
- 2 lbs ground beef
- 3 lbs onions (yellow or purple)
- 2 stalks of celery
- 1 lb bell peppers (green or red)
- 1 batch green onions
- 3 lbs rice
- Tony Chachere's Cajun Seasoning
- 1 bottle chicken stock concentrate (or 3 cubes chicken bullion)
- 1 can Rotel tomatoes with chilies, diced (regular hot)
- Tabasco sauce

Cooking Instructions:

- 1. In a 16 qt. pot or larger, slice link sausage and pan-fry until brown.
- 2. Add ground beef and brown.
- 3. Do not remove from pot Add diced onions, celery, and bell peppers, 1 can Rotel Original diced tomatoes w/chilies, 3 oz concentrate chicken stock, ½ teaspoon of Cajun seasoning, 1 teaspoon of Tabasco hot sauce (or more...maybe lots more).
- 4. Cook until onions are translucent.
- 5. Add chicken and cook until it turns white.
- 6. Add diced green onions, 1 tsp. salt, ½ gallon water and bring to a boil.
- 7. Add rice and bring to a boil. Cook on high for 8 minutes, covered, stirring every 2 minutes
- 8. Cook covered on low for 10 minutes, stirring only once.
- 9. Turn off and let sit for 30 minutes.
- 10. Serve and enjoy!

Serves 20

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TubePre V2 Owner's Manual

EMC Statement:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this device not expressly approved by PreSonus Audio Electronics could void the user's authority to operate the equipment under FCC rules.

This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

ATTENTION — Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant las limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le réglement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.



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