



VTL

TL2.5*í* Line Stage Preamplifier

Owner's Manual

MAKING TUBES USER FRIENDLY

VTL TL2.5*i* Preamplifier

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Introduction

Congratulations on your purchase of a VTL pure tube preamplifier.

This hand crafted equipment is designed to deliver superb performance for your listening pleasure for many years to come. Please take a moment to read through this owner's manual. You will get an idea of the installation procedures needed to connect this preamplifier to the rest of your audio system, as well as the various functionality this preamplifier can perform. Please take enough time to get familiar with the features of this product. After you have finished reading this manual please keep it in a safe place for future reference.

The VTL team is proud that you have selected our pure tube preamplifier as a new member of your home audio system. This preamplifier is designed to give you the convenience and flexibility to manage all your audio and video sources while at the same time giving you the musical experience that is the most alive and the truest to your source, and we hope you'll get many hours of enjoyment from it.

Electrical Safety Notice

Electrical voltage from power cables is hazardous. We recommend that the power cord connected to this unit be used with a properly grounded outlet. To prevent electrical shock do not remove the cover of this preamplifier while the unit is powered on.

Prior to connecting this preamplifier to any audio or video equipment in your system, make sure this unit's power (and the rest of the equipment connected to its input and output channels) is turned off. Adding or removing input or output cables to the preamplifier while the system is powered on can cause damage to the system.

Water and Moisture

The preamplifier should be used away from water or moisture. If liquid enters the preamplifier it must be immediately returned to your dealer for servicing. In this case you should under no circumstances try to power the unit on - there are hazardous voltages present in this unit that can cause serious injury if they come in contact with you.

Location and Ventilation

Install this preamplifier in a location which is stable and well ventilated. If the preamplifier is placed in a built-in installation, ensure that there is adequate room for a supply of air to flow through the ventilation openings. Allow at least 3 - 5 inches clearance on the top and around the sides of the preamplifier. Be sure the preamplifier is at least 10 inches away from your amplifier to prevent possible noise introduction into your system. Tiptoes or other isolation accessories may prove useful in reducing mechanical vibrations. Do not place the preamplifier next to heat sources such as radiators, stoves or other appliances. Do not place preamplifier on the floor where small children can tamper with the equipment. If it is not possible to place preamplifier out of the reach of small children it is recommended that you remove power cables when the equipment is not in use.

Servicing

Do not attempt to service the preamplifier beyond the procedures described in this manual. For all other service and questions, please contact your authorized VTL dealer or the factory.

Getting Started

After you open the carton you should find the following items inside:

- The preamplifier, with a power cord
- The remote control hand-held unit with two AA batteries
- This User Manual, VTL Quality Assurance test document, VTL product warranty registration card

Remove each item from its packaging material and check to make sure that no physical damage has occurred during shipping of the unit. There should be no rattles inside either of the preamplifier or remote control units. Look through the vent slots and check to see that the tubes appear properly seated firmly in their sockets. Contact your VTL dealer immediately if physical damage is detected.

TL 2.5 Front Panel Controls



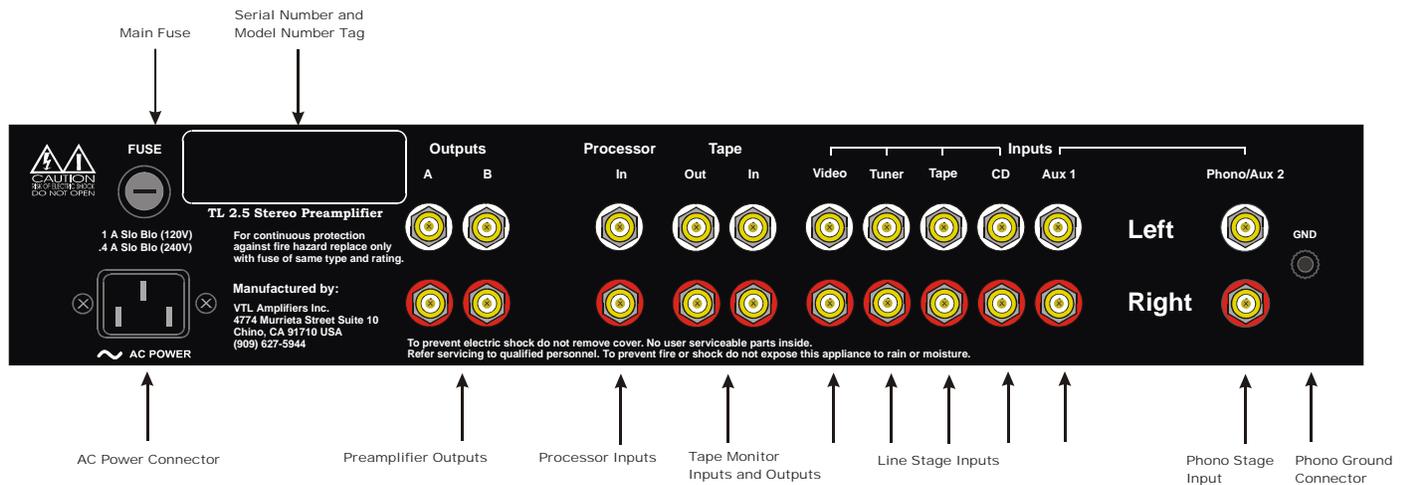
You can operate the various controls and switches from the front panel to access the full functionality of the unit. The Status indication LED shows the various operating modes of the unit.

- ➔ The *Status* LED indicates the power on status of the preamplifier. When the unit is powered on, the LED light will first blink to indicate the preamplifier is in mute, and then after 30 seconds, the blinking will go away. The Status light continues to stay on to indicate that the system is in the “ready” state.
- ➔ The *Input Selector* can be used to select the source component for the preamplifier. You can choose any one of the six inputs by turning the selector knob to the location as marked above the knob.
- ➔ The *Tape Monitor* can be used to select whether the input source is coming from tape monitor or not. If you wish to use the preamplifier to monitor an ongoing recording session from the tape deck, you can select this switch to Tape Monitor mode. In this state the playback from the preamplifier will come directly from the tape deck. In the default operating mode of the preamp, this switch stays in the down position. This means that the input source will not come from the tape deck, but will be dependent on the input selection made on the preamplifier.
- ➔ The *Surround Processor*. This switch can be used to change the control of your audio/video system to the surround processor when the switch is turned to the *Processor In* position. In this mode, the surround system will only control all of the channels of your system, and the preamplifier is in the unity gain mode. In this mode the volume control and the amplification stages of the TL2.5 are bypassed completely, and the signal is passed to the front left and right amplifiers at precisely the same volume as the surround processor is putting out. In the default operating mode of the preamp, the *Processor* switch stays in the down position. This means that the preamplifier will not be receiving the signal from the surround processor.
- ➔ The *Balance Control* knob can be used to set the left and right channel level. When the line on the knob is in the 12 o'clock position this indicates that the left and right channels are equally balanced - you will feel a center detent in the control to indicate this exact position.
- ➔ The *Volume Control* knob changes the loudness level of the output from your speaker system. Turning the knob clockwise will increase the volume level. Alternatively, turning the knob counter-clockwise will decrease the volume level.
- ➔ The *Mute* switch is a momentary toggle switch to allow you to switch the system into the mute state if the preamplifier is currently in the operating state - press the switch down. If the preamplifier is currently in mute state, clicking this switch down again will change the system back into the operating state.

- ➔ The *Status* LED indicates whether the preamplifier is in operating state or in muted state. When the LED light is on, the preamplifier is in operating state. When the LED light is on and flashing, the preamplifier is in mute state. The LED is off when the system is powered off.
- ➔ The *Remote Receiver* window allows the transmission of signal from the remote hand-held unit to be received by the preamplifier. Keep this window clear from any obstruction to allow maximum signal transmission.
- ➔ The *Power On/Off* switch can be used to turn the preamplifier on and off. Press the switch up to turn the preamplifier ON and press the switch down to turn the unit OFF. The *Status* LED should be on and off respectively, according to the setting of the *Power On* switch.

The Preamplifier's Back Panel

From the Preamplifier's back panel, you can access the input, output, ground and power connectors, the main fuse holder, and the serial number of the unit.



The Remote Control Hand-held Unit

The Remote Control hand held unit which comes with this TL2.5, allows you to perform some basic functions from the comfort of your seat:

- Increase/decrease the Volume Control by pressing the up and down arrows respectively on the remote control hand-held unit.
- Set the system in mute or operate modes by pressing the mute button on the remote control hand-held unit. This is a toggle control that changes the operating state from one to the other each time it is pressed.

If the TL2.5 is in mute, pressing the up arrow to increase the volume will remove the mute to allow you to hear the change of the volume adjustment. The volume down command will not change the mute state.

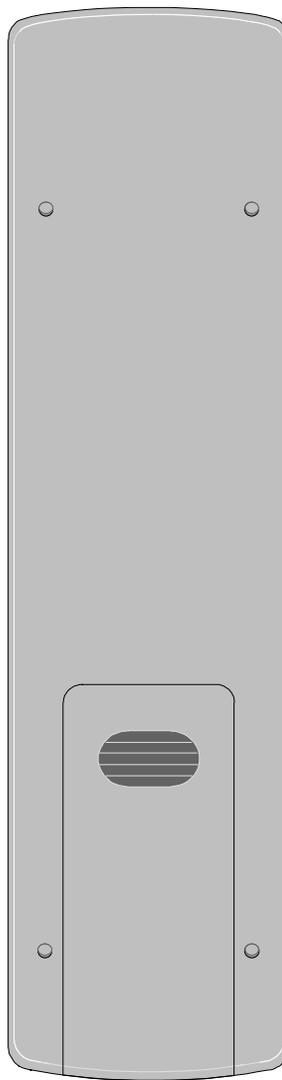
When you first press the buttons on the remote control unit, there is a delay of a few seconds (about 1-2 seconds) before the TL2.5's completes the processing of the signal sent by the remote. Wait for the response from the TL2.5 before pressing another button on the remote unit. During this processing period, selection of other remote functions will be ignored. If more of one button is pressed at once then the remote will perform no function. While the TL2.5 is in the warm up mode, with the LED blinking, the TL2.5 will not be able to react to commands from the hand held remote.



Fitting the Batteries to the Remote Control

1. The back cover of the remote control is a sliding cover that is removable by pressing down on the arrow and sliding the cover off in the direction of the arrow to reveal the battery compartment. Remove the cover and put it aside for re-installation later.
2. Locate the battery holder and insert the two AA batteries (supplied) in the marked positions, + to + and - to -.

3. Being careful not to damage the cover or the remote shell, replace the back cover and slide it back into position with a snap.
4. After power up of the TL2.5, test the remote control functions and ensure that all the functions are working correctly. If the functions are not working then check that the batteries are in the correct mounting positions and that they are not stale. If you still encounter problems then you should call the VTL factory or your VTL dealer.



Connecting Your Preampifier to your system

1. Connect all source components (e.g. CD, Tuner, Tape, DAT, Video Player etc.) to the inputs on the preamplifier. For example, connect the output cables from the CD transport to the CD input connectors of the preamplifier. Make sure that the preamplifier and the source components are powered off. Use appropriate interconnects for the different sources. If a direction indicator is printed on the cable make sure that the cable is connected to the source and the preamplifier in the appropriate direction (arrows flowing in the direction the signal will travel, ie. from the source to the preamplifier.) It is also important that the left and right channels from the source components are connected to the corresponding left and right channels of the preamplifier.
2. Connect the power amplifier to the output channel of the preamplifier. The interconnect cable between the amplifier and the preamplifier links the left and right input channels of the power amplifier to the left and right output channels of the preamplifier. The low output impedance of the preamplifier is capable of supporting long interconnects up to 35 feet, and can also easily drive transistor amplifiers. There are two sets of output connectors available from the preamplifier so that a second pair of amplifiers can be connected to the system. The second pair can either be used for bi-amping or to drive a subwoofer in the system. When connecting more than one pair of amplifiers in parallel it is advised that you be aware of the different input impedance, sensitivities and resultant input impedance. If you have any questions about this then you should contact either you dealer or the manufacturers of your amplifiers, or contact the VTL factory service department.
3. Connect the Surround Sound Processor to the preamplifier. To take advantage of the Surround Processor loop capability, connect the *Right and Left* output of the Home Theater processor to the *Processor In* on the preamplifier.
4. Connect the Tape Monitor input and output channels to the preamplifier. To take advantage of the Tape Monitor capability, connect the *Tape Out* on your tape deck to the *Tape In* on the preamplifier and connect the *Tape Out* on the preamplifier to the *Record In* on your tape deck.
5. Connect the Phono stage to the preamplifier. If your preamplifier comes with the optional phono board, you can connect the output from your turntable to the Phono/Aux 2 input channel of the preamplifier. Use the *Ground* connector on the preamplifier so that you can insert the ground wire from the turntable into the space between the connector and chassis. Be sure to tighten the *Ground* connector and make sure that it makes a firm contact with the wire.

Powering your system on

After you have properly connected all your source and amplifier components to the preamplifier you are ready to power your system on.

1. If you haven't already done so, ensure that all the tubes inside the VTL preamplifier are properly seated all the way into their sockets before connecting the unit to an AC source.
2. Power on the source component(s) you intend to use for your listening session
3. From the preamplifier's front panel Power On switch turn on the preamplifier. Check to make sure that the Status LED indicates preamplifier warm up mode, as indicated by the flashing Status LED. Check to ensure that the volume control is at the minimum or desired level.
4. Once the preamplifier completes its warm up cycle the Status LED will stop flashing to indicate that it has returned from the mute state into the operating state. In case the Status LED do not behave as described above check to make sure that the power cable is securely connected to the AC Power connector in the back panel of the preamplifier, and that the power cable is plugged into the AC supply. Contact your VTL dealer if the unit still will not power up after these checks have been performed.
5. Adjust the Input Selector to the input source you would like to use. Make sure the Tape Monitor and Surround Processor In switches are in default state (down position) if you're not utilizing these features.
6. Turn on the power amplifier(s) in your system.
7. Set the source component to play mode.
8. Turn up the volume control to the desired playing level. If the preamplifier is in mute, (i.e. the Status LED is flashing), flip the mute switch again to reset the system out of mute and into operating mode.

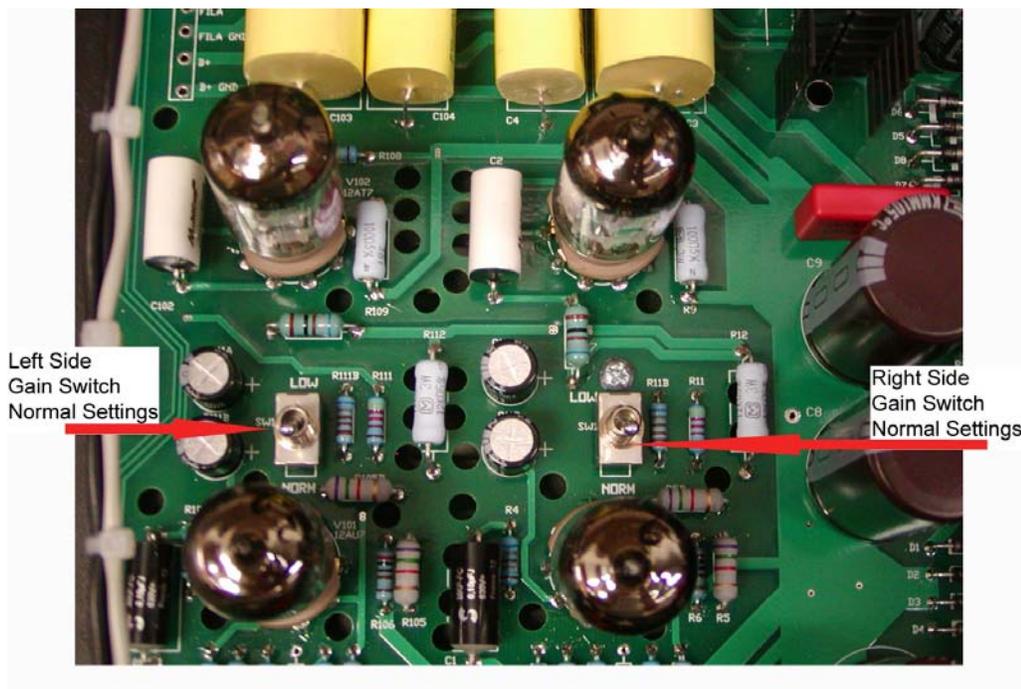
Using the Preamplifier with the Remote Control

1. Follow the power on sequence steps 1 to 4 as described in the previous section.
2. Refer to page 6 **Fitting the Batteries to the Remote Control** section for battery installation instructions.
3. Use the remote control's volume button to adjust the desired playing level. Increase the volume by pressing the up arrow button on the remote control. Decrease the volume by pressing the down arrow button on the remote control.
4. If the system is in mute, (i.e. the Status LED on the preamplifier's front panel is flashing), press the round mute button on the remote control to reset the system out of mute mode and put it into operating mode. Note that pressing the

volume up arrow on the remote control unit will also reset the system out of mute mode. On the other hand, pressing the volume down arrow will not affect the mute/operating state of the preamplifier.

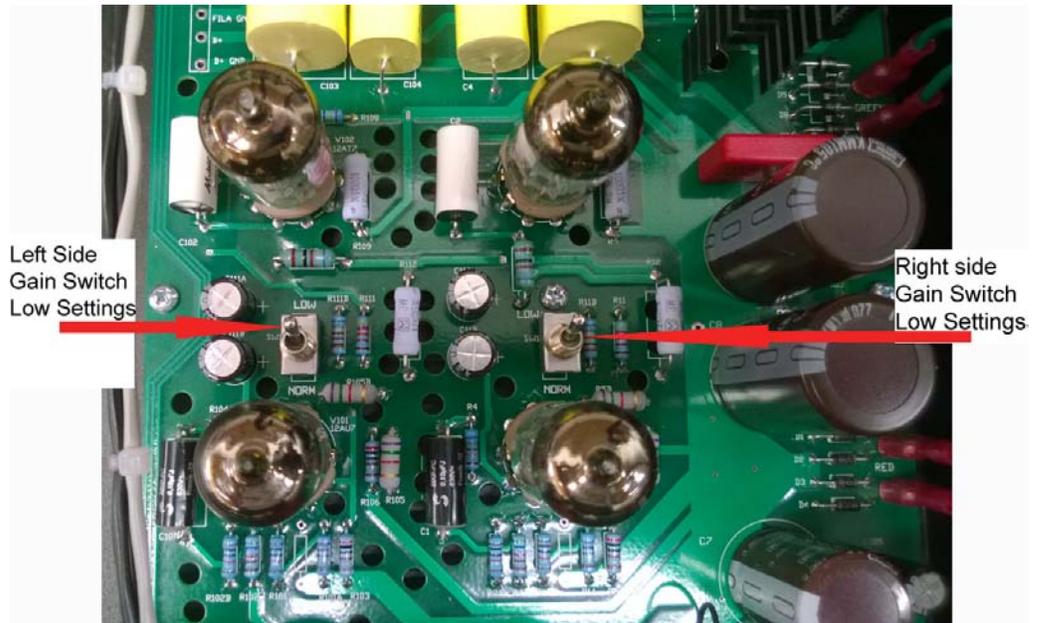
Gain Switch Settings

Inside the preamplifier, between the two 12AU7 and two 12AT7 tubes, are a pair of Gain switches which you can use to set the preamplifier to either NORMAL GAIN or LOW GAIN. When the preamplifier is matched with amplifiers of high sensitivity, tube rush noise may become too loud for your system. In this case, you can change the gain setting of the TL2.5 preamplifier from NORMAL GAIN to LOW GAIN by changing the direction of the two toggle switches. Please check the label NORM and LOW written on the PC board for the proper direction of both switches and be sure to set both switches to the same setting.



NORMAL GAIN SETTING

When both toggle switches point to the 12AU7 tubes towards the front of the preamplifier, the preamp is set to NORMAL GAIN.



LOW GAIN SETTING

When both toggle switches point to the 12AT7 tubes towards the back of the preamplifier, the preamp is set to LOW GAIN.

Powering the system off

1. When you're done listening to your system always turn your power amplifier(s) off first. Allow a short time (15 - 20 seconds) for the amplifier(s) to power down after you turn them off.
2. Then turn the preamplifier volume down. This is a precaution to avoid a sudden surge in your system the next time you turn it on.
3. Turn the preamplifier and source components off, if you prefer to keep these off when not in use. (You may keep your VTL preamplifier and your source components on permanently if you prefer to keep them warm.)

Operating the Preamplifier

Connecting and Selecting Source Components

The Input Selection for the preamplifier is marked for Video, Tuner, Tape, CD, Auxillary and Phono source components. The input connectors on the back panel of the preamplifier are correspondingly marked Video, Tuner, Tape, CD, Auxillary and Phono. Be sure to connect the proper interconnect cable from the source component to the corresponding input connector of the preamplifier and in the correct channels.

If your preamplifier does not come with the phono option then you can also use *Phono/Aux2* as an additional input for any source you wish to use, including a separate external phono stage that can produce a line level signal.

If you have installed the optional phono stage for your preamplifier the *Phono/Aux2* input connector should be reserved exclusively for the phono input from your turntable. Do not connect any other input sources to this connector.

Power On Stages

When you first power-on your preamplifier it goes through a warm-up stage which takes approximately 50 seconds. During this period the preamplifier is in the muted mode, as indicated by the blinking Status LED. After the warm-up stage is completed the preamplifier automatically goes into the operating state. The Status LED turns into a steady green light, indicating that the preamplifier is ready for use.

Connecting the TL2.5 to a Home Theater System

Your VTL TL2.5 integrated amplifier is designed to work in conjunction with both the conventional two-channel and the home theater systems. If you have both systems set up so that your front speakers are used for your audio as well as home theater systems, then connect the external surround processor front left and right main outputs to the TL2.5 *Processor In* input, so that it will be able up to drive the front left and right speakers when the processor loop is engaged.

Under this configuration, when you are listening to your two-channel audio system from sources connected to the line inputs of the TL2.5 set the *Processor*

switch on the TL2.5 front panel to the default operating position (down). The source components and the TL2.5 are now driving the front speakers, giving you the full volume control and source selection.

When you want to use your system for home theater, set the TL2.5's *Processor* switch to the *Processor* position (up). Under this configuration the TL2.5 receives the external surround processor's signal for the front left and right channels directly from the external surround processor, and passes it directly to the power amplifiers without amplification or attenuation. This means that in this mode the volume control and the amplification stages of the TL2.5 are bypassed completely, and the signal is passed to the front left and right amplifiers at precisely the same volume as the surround processor is putting out. This gives the external surround processor the volume control of these channels while controlling the center, rear and subwoofer channels at the same time.

Caution: Before switching the *Processor* switch to either the up or down position ensure that you adjust the volume of the TL2.5 and the surround processor to a low level to protect your system from high signals that might come through.

Caution: If you do not have a surround processor connected to the TL2.5's *Processor In* input, you may get a slight buzzing sound when you set the *Processor* switch to the up position, which comes from the open input of the power amplifier. This slight buzz will not damage anything in your system.

Using the Tape Loop to monitor recordings

If you use a tape deck that gives you the capability of monitoring the recording, i.e. listening to the recording while it is taking place, you can use the TL2.5's Tape Loop switch to take advantage of this feature. Connect the tape's input and output cables to the TL2.5's Tape Out and Tape In connectors, respectively, as per the instructions in the *Getting Started* section of this manual. While the tape deck is in recording mode, set the preamplifier to *Tape* mode (switch in the up position.) This allows the preamplifier to play back the recording simultaneously while the tape is recording. The volume of the Tape monitor input is regulated by the main volume control on the TL2.5 in this mode.

Caution: Before engaging the Tape monitor switch be sure to turn the volume control all the way down. If your tape deck does not have a monitor feature (sometimes called a 3rd head), then connecting to the TL2.5's Tape Loop may result in a loud hum through the system whenever the Tape Loop switch is engaged.

In this case the output from the tape deck should be connected to the regular line input marked *Tape* in the main input cluster on the TL2.5.

This loud hum will not damage your TL2.5, but may damage other components in the system if sufficiently loud enough.

Connecting a second pair of amplifiers

If you wish to use two pairs of amplifiers to drive your loudspeakers in a bi-amplified mode you can connect the amplifiers to each of the two outputs of the preamplifier. One pair would go to *Output A* and the other to *Output B* on the back panel of the preamplifier.

Consult your speaker and amplifier manuals for additional installation instructions on this mode of usage. Your dealer should also be able to give you guidance with this procedure.

Connecting to the Turntable

If your TL2.5 Preamplifier is equipped with the optional internally retrofittable phono stage, you can use the phono stage with either MM or MC cartridge. The VTL factory standardly configures the TL2.5 phono stage to work with a MM cartridge. If you would like to alter the standard setting, please follow the instructions below or contact your dealer for assistance. The following drawing shows the location of the 12AX7 tubes and 12AU7 tube used in the phono stage.

1. Remove the top cover of the TL2.5:

Turn off the TL2.5 preamp and remove the power cord. Use a #2 Phillips screw driver and remove the 6 screws on the top and 2 screws on each side of the preamplifier. Keep the screws in a safe place so that you can put the cover back onto the unit when you have completed the following installation.

Check to make sure that the optional phono PC board is installed to the left of the line stage PC board in your preamplifier. If you have any questions, please call your dealer or the VTL factory for assistance.

2. Selecting MM

Jumpers on Phono PC Board: (near MM Input pads) There are two small black jumpers located on the phono PC board near the left and right MM Input pads. To set the phono stage for MM, lift the black pin jumper and

connect the jumper to one pin of the header only (does not matter which pin). Do this for both headers (one per channel).

Tubes on Phono PC board: If you are using the phono board for **MM** only, the tube in socket V2 can be removed.

Jumpers on RCA Input PC board: there are two sets of jumpers for configuring the phono board to MM. Please change the connectors on the two configuration boxes and put the them across pins 4 and 5 and pins 9 and 10 respectively.

3. **Selecting MC**

Jumpers on Phono PC board: (near MM Input pads). To set the phono stage for MC, make sure both pins of the header are connected by the jumper.

Tubes on Phono PC board: (MC) – For MC mode, install the 12AX7A China tubes to the tube sockets closest to the edge of the board (V2).

Jumpers on RCA Input PC board: there are two sets of jumpers for configuring the phono board to MC. Please change the connectors on the two configuration boxes and put the them across pins 3 and 4 and pins 8 and 9 respectively.

4. **Replace the cover**

Put the cover of the preamplifier back onto the unit, and insert and tighten all 10 screws.

5. **Connecting the turntable to the preamplifier**

Connect the RCA input cables from the turntable to the Aux2/Phono RCA inputs of the preamplifier. Loosen the binding post of the ground connection and place the ground connector(s) from the input cables to the binding post.

6. **Power** the preamplifier and your amplifiers on and check to see that there is no hum in the system. There should be a mild rush from both channels at high volume, with no hum present. If you experience hum or any other anomaly then please call the VTL factory for clarification.

Care and Maintenance of your VTL preamplifier

Break In Period

Your VTL preamplifier is a pure tube product designed to give you the continued optimum performance over a long time period. Initially the tubes and circuits will require a burn-in period to reach maximum performance. During the first 100 hours of usage the preamplifier will undergo several improvements in sound. To break in the preamplifier you can leave it on with a music source connected to it and playing with the volume control turned to the $\frac{1}{2}$ level. It is not necessary to have the power amplifier on during this break in period, as the preamplifier will still pass the signal.

Tube Life

Your VTL preamplifier has been designed to ensure long tube life. Tube replacement need not be considered until after approximately 5000 hours of use (roughly 4 to 5 years depending on your listening requirements.) As the tubes age beyond their peak performance there will be a general softening of the sound.

We recommend a complete replacement of all tubes in your preamplifier at that time, which will restore it to a “like new” sound quality. Your VTL dealer or VTL factory service department will be happy to assist you with the re-tubing process.

Note: use only tube types and tube brands that are recommended by VTL. VTL specified replacement tubes are available from your authorized VTL dealer or the VTL factory service department. Any damage incurred to units which use non-VTL approved tubes will not be covered under the warranty.

Changing Tubes

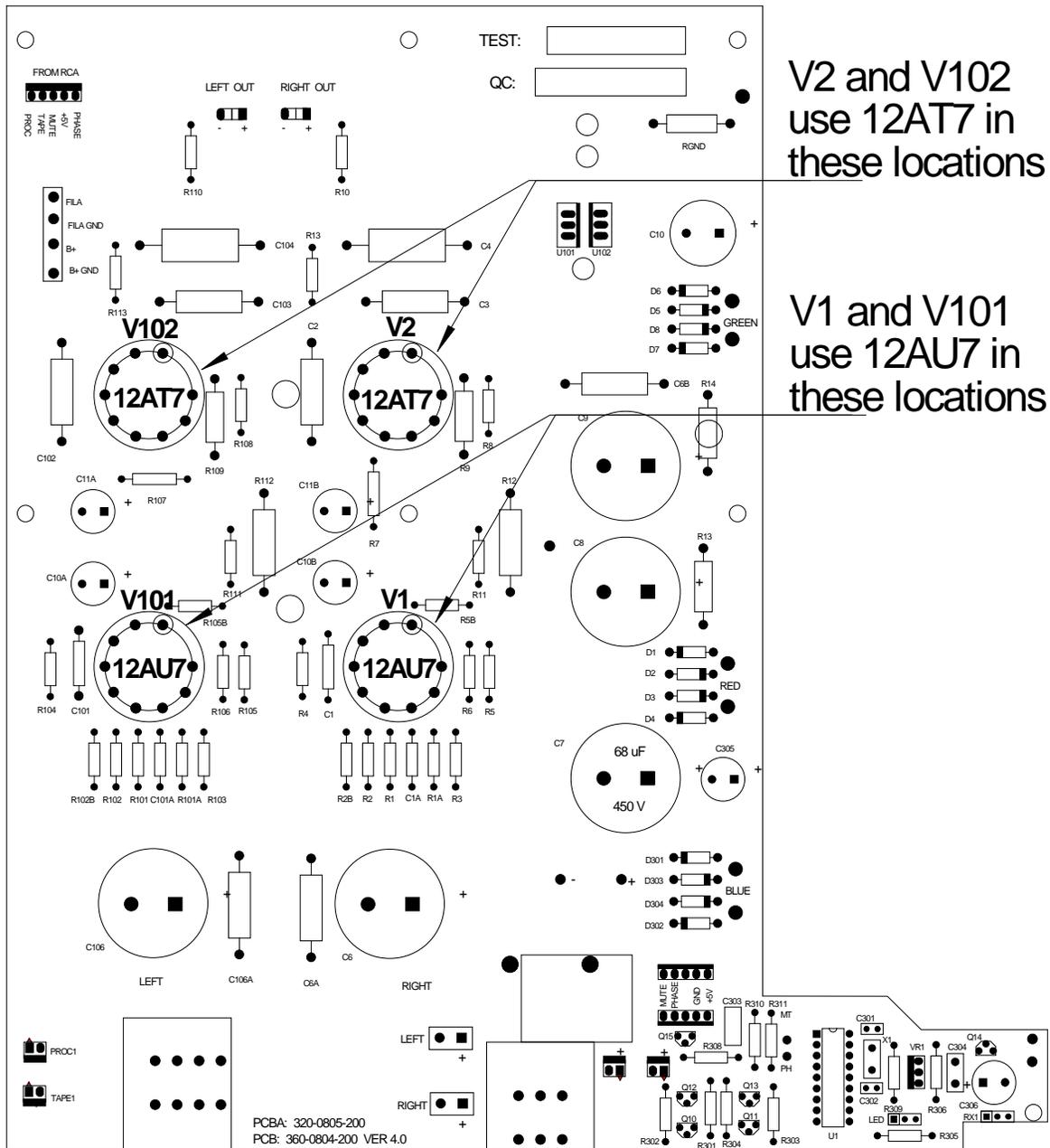
Do not attempt to change tubes yourself unless you feel confident that you can do so safely. Contact your authorized VTL dealer or the VTL factory service department if you would like the service to be performed by a trained technician.

To change tubes in your preamplifier you must first turn the power **off** on the preamplifier, **unplug** the unit from the wall outlet and disconnect the preamplifier from the rest of your system. Using a Philips Star screw driver remove the cover chassis from the unit by loosening the two screws from each side of the preamplifier and the three screws from the top along the front and back edge. Carefully remove the cover and the screws and store them in a safe place.

When you look down from the top, you will see a printed circuit board mounted inside the preamplifier. **WARNING: DO NOT TOUCH ANYTHING INSIDE THE PREAMPLIFIER, EITHER WITH YOUR FINGERS OR WITH ANY METALLIC OBJECT, UNTIL AFTER THE UNIT HAS BEEN SAFELY DISCHARGED.** The VTL preamplifiers can store energy in the power supplies long after they have been turned off, and incorrectly discharging the unit can damage the circuits, which will NOT be covered under the warranty. Be sure to understand these constraints before going any further. If at this stage you feel that you would rather not attempt this procedure yourself you can take the unit to your VTL Authorized Dealer to have the work done.

If you feel comfortable with undertaking the procedure yourself then be sure to only touch the tubes themselves, and do not allow any part of your body or hanging jewelry to come into contact with any part of the circuit inside the unit.

Locate the four tubes which are plugged into sockets on the PC board. There are a total of four tubes, two are 12A17 tubes and the other two are 12AU7. The following figure indicates the location of the tube type with respect to the sockets, looking from above and in front of the unit.



V2 and V102 use 12AT7 in these locations

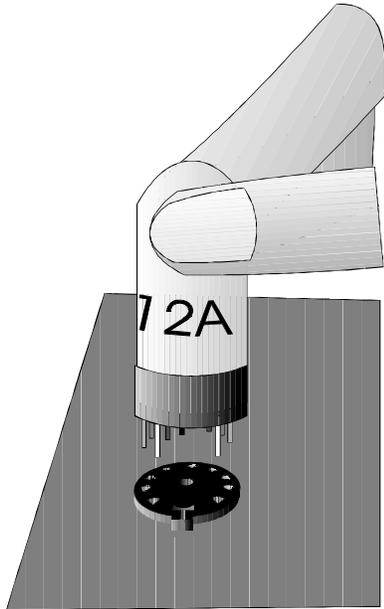
V1 and V101 use 12AU7 in these locations

Removing Tubes

Locate the tube you need to remove and hold onto the upper portion of the tube towards its tip. Gently rotate and rock the tube with your fingers to loosen it from its socket until its pins are completely disengaged from the socket. Take the tube out of the unit.

Plugging in a new tube

Consult the figure above to make sure that you are inserting the correct tube type into the correct socket. Hold onto the upper portion of the tube towards its tip. Lower the tube onto the socket, making sure that the pins from the tube matches the holes in the socket. There are two pins on the tube which are spaced at a wider distance from each other than the rest of the pins. Make sure that these two pins go into the side of the socket which matches that distance. Press the tube firmly into its socket, using a gentle force and a slight “rocking” motion. When the tube is properly and completely inserted into the socket it should be firmly implanted and does not give in to any movement at all when you try to rock it.



After you're satisfied with all the changes you made inside the preamplifier box you are ready to put the unit back together.

Replacing the chassis cover

Lower the preamplifier's cover chassis slowly back into the opened preamplifier box, making sure that the cover is put on in the correct front and back position. Locate the screws which were removed from the cover and put them back on the cover. Tighten all screws to make sure that the cover is securely put back to the unit.

Changing the Main Fuse

The primary mains fuse for your preamplifier is rated 1A Slo Blo (120Volt AC) or .41 A Slo Blo (240 Volt AC). The mains fuse is housed in a holder located on the back panel of the unit. To change the fuse make sure the unit is powered off. Disconnect the AC power cord from the unit. Move the preamplifier so that you can work with the panel in the back. Locate the mains fuse holder and turn the knob in a counter-clockwise direction while pressing inwards to loosen it. The fuse cap should come out from its housing with the fuse held inside the cap. Take the fuse out and replace it with a new one.

WARNING: For continued protection against fire hazard only replace the fuse with the same type and rating as was originally specified for the preamplifier. If you have problems locating the correct fuse contact your VTL dealer or the VTL factory service department.

Cleaning

Your VTL preamplifier should be dusted occasionally with a damp non-abrasive cloth. You should not use any solvents for cleaning the front panel, as this can damage the lettering and the finish. It is recommended that you use a contact cleaner such as Pro-Gold on the input and output connectors regularly to ensure optimum sound and proper signal conducting capability.

Troubleshooting

1. When I power on the preamplifier, Status LED does not come on and nothing else happens. What should I do?

Check to make sure that the power cord is properly connected to the preamplifier and the AC outlet. If there is no problem with the power source, check the fuse unit in the back panel of the preamplifier. If the fuse is blown, change the fuse. Turn the power on the preamplifier again. If the problem still persists, contact your authorized VTL dealer immediately.

2. Using the remote control from another stereo component in my system affects the control of my VTL preamplifier. Why is this happening and what should I do?

Your VTL preamplifier is equipped with a remote control receiver unit which decodes signals coming from a Phillips microcontroller chip. If you own another stereo component that comes with a remote control unit using the same microcontroller chip, signals transmitted from this component could be picked up by the VTL preamplifier as well. A good indication that there is an interface problem is if the Status LED turns amber or blinking amber, as this is a state which is not used by this VTL preamplifier. The VTL remote control unit uses the standard RC5 connections to the chip. If your other remote unit also adopts the same standard, then there is a chance that the signals from both remotes may be interpreted as the same. If the functions with the same command are different for both units then one or other of the remote controls will have to be re-programmed. Contact your VTL Dealer or the Factory for a solution to this problem. *Note that in either case there is no damage being done to your VTL preamplifier while it is being used in these states, and you can continue to safely use the preamplifier until a solution is reached.*

Please contact the VTL factory service department to report this problem as we are interested in knowing which models of stereo equipment could cause this problem.

3. I am getting a noise and hum coming from my system when I turn the amplifiers on. What can I do to eliminate the noise?

It is recommended that you connect as many components as possible to a good clean AC ground in your system for optimum noise reduction and safest operation. If however there are too many paths to ground then a ground loop hum can result, and you should either contact your dealer or the VTL factory to try to resolve this problem.

4. I am getting a noise and hum coming from my video source. What can I do to eliminate the noise?

The noise may be coming in from your video cable system. First disconnect the VCR from the system to see if this will solve the problem. If it does then you will need to try to lift the ground from the cable TV wire. If the problem still persists contact your VTL authorized dealer or the VTL factory service department.

5. I am getting a ringing noise from the preamplifier when I touch or bump it. What should I do?

One or more of the tubes in the preamplifier may be the source of the problem. Follow the procedures listed in this manual to remove the tubes and change them for new ones.

6. My remote control hand held unit for the preamplifier is not working. What should I do?

Look at the back of the remote control unit. Open the back cover. Locate the two batteries inside the remote unit. Take the old batteries out and replace them with new AA batteries. Slide the back cover on and snap it into place. Test the remote unit to see if it is working properly.

If the remote control unit is still not functioning properly, contact your VTL authorized dealer or the VTL factory service department.

7. Using the remote control from another stereo component in my system affects the control of my VTL TL2.5. Why is this happening and what should I do?

Your VTL TL2.5 is equipped with a remote control receiver unit that decodes signals coming from a NEC microcontroller chip with a unique respond code. If you own another stereo component that comes with a remote control unit using the same microcontroller chip, the VTL TL2.5 could pick up signals transmitted from this component as well. If your other remote unit also adopts the same standard as the TL2.5, then there is a chance that the signals from both remotes may be interpreted as the same. If the functions with the same command are different for both units then one or other of the remote controls will have to be re-programmed. Contact your VTL Dealer or the Factory for a

solution to this problem. *Note that in either case there is no damage being done to your VTL TL2.5 while it is being used in these states and you can continue to safely use the TL2.5 until a solution is reached.*

Please contact the VTL factory service department to report this problem, as we are interested in knowing which models of stereo equipment could cause this problem.

8. My remote control hand held unit for the TL2.5 is not working. What should I do?

Look at the back of the remote control unit. Open the back cover. Locate the two batteries inside the remote unit. Take the old batteries out and replace them with new AA batteries. Slide the back cover on and snap it into place. Test the remote unit to see if it is working properly.

If the remote control unit is still not functioning properly, contact your VTL authorized dealer or the VTL factory service department.

Specifications

TL2.5i Line Stage

Vacuum Tube Complement	2x12AU7, 2x12AT7
T.H.D. 20 Hz - 20 KHz	< 0.02%
Signal to Noise Ratio	90 dB
Maximum Output Voltage	30 V RMS
Gain	8 dB or 14 dB (User Selectable)
Input Impedance	100K ohms
Output Impedance	200 ohms
Channel Separation	75 dB @ 1 KHz
Power Consumption	100 Watts (line) 150 Watts (with Phono)
Primary Mains Fuse Rating	1A Slo Blo Ceramic (120Volt AC) 0.5A Slo Blo Ceramic (240 Volt AC)
Dimensions	19" wide x 15" deep x 4" high (48 cm x 38 cm x 10.2 cm)
Weight	25 lbs (11.3Kg)

Warranty

Your VTL amplifier/preamplifier is covered by a limited warranty against defects in materials and workmanship for a period of 90 days from date of purchase by the original purchaser only when purchased from an authorized VTL dealer only. A further optional limited non-transferable five-year warranty is available to the original purchaser only upon proper registration of ownership within 30 days of date of first purchase. The warranty period begins on date of first sale to the end user, or one year after shipment from the VTL factory, whichever is the earlier.

Proper registration is made by filling out and returning to the factory the warranty card attached to this general warranty statement, along with a copy of the original sales receipt as proof of the original date of purchase, within 30 days of purchase. Only one registration card is issued with each unit. If the warranty registration card has already been removed then this is not a new unit, and is therefore not warranted by the factory. If you believe this to be a new unit then please contact the factory with the details of purchase.

This warranty is provided by the dealer where the unit was purchased, and by VTL Amplifiers Inc. Under the terms of the warranty defective parts will be repaired or replaced without charge, excepting the cost of tubes. A six-month warranty on tubes is available with the correct recording of the serial number of the preamplifier on your warranty registration card and mailing it with your purchase receipt to VTL.

If a VTL product fails to perform properly under the above warranty then the purchaser's sole remedy shall be to return the product to the authorized VTL dealer or to VTL Amplifiers Inc, where the defect will be repaired without charge for parts and labor. The product will then be returned via prepaid, insured freight, method and carrier to be determined solely by VTL Amplifiers Inc. All returns to the factory must be in the original packing and accompanied by a Return Authorization, (new packing will be supplied for a nominal charge if needed), accompanied by a written description of the defect. This must be shipped to VTL Amplifiers Inc via insured freight at the customer's own expense. Charges for unauthorized service and transportation costs are not reimbursable under this warranty, and all warranties, express or implied, become null and void where the product has been damaged by misuse, accident, neglect, modification, tampering or unauthorized alteration by anyone other than VTL Amplifiers Inc.

This warranty applies only to units used in residential non-commercial use. The warrantor assumes no liability for property damage or any other incidental or consequential damage, whatsoever which may result from failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of the expressed warranty. All warranties apply only to VTL products purchased and used in the USA.

Warranty Registration

Warranty registration for VTL products is valid in the USA only. International VTL customers should consult their local VTL dealer regarding product registration and warranty procedures.

To obtain valid US warranty service, please fill out the enclosed VTL Warranty Registration card and mail it to the following address with a **COPY OF YOUR ORIGINAL BILL OF SALE** within the first thirty days of purchase:

**VTL Warranty Registration
4774 Murrieta Street, Suite 10
Chino, CA 91710
USA**

To help you keep a record of the serial number and purchase information, please enter the following information into this manual.

Product Model Number: _____
Serial Number: _____
Purchase Date: _____
Authorized Dealer: _____

Service Notes

Date	Service	Initials
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