



VAC Renaissance Preamplifier Mk V

Operation & Maintenance Information



Valve Amplification Company

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SAFETY NOTICES, WARNINGS, AND CAUTIONS (ENGLISH)

The MAINS plug is used as the disconnect device. Disconnect the mains plug from the apparatus before servicing the unit.

Operate only from an AC MAINS SUPPLY of the voltage indicated. If voltage conversion is necessary it must be done at the VAC factory or by the importer.

The MAINS SUPPLY must be EARTHED. Do not defeat or remove the MAINS cord safety ground connection. Do not connect the mains cord to an outlet that is not properly earthed.

Provide adequate ventilation - allow at least 3 inches above and to each side.

Do not place in a completely enclosed cabinet.

Do not stack other equipment on top of the VAC unit.

Do not operate on carpet or any other surface that might block air flow. Do not impede air flow.

Keep all flammable objects away from the amplifier.

No naked flame sources should be placed on or near the apparatus.

Do not leave the apparatus unattended in operation.

Apparatus must not be exposed to dripping or splashing. Do not place objects filled with liquids on the apparatus.

This apparatus is heavy. Be certain to install it in a secure location from which it can not fall or tip over. Obtain appropriate assistance to unpack, move, and install the apparatus.

Never operate the apparatus without all covers and cages securely in place.

Vacuum tubes become hot enough to cause serious burns. Never touch a tube when the apparatus is on; it may take several minutes for it to cool down after the apparatus is switched off.

Do not touch a tube if the glass is broken; the internal structure carries high voltage. Unplug the apparatus and wait 30 minutes before attempting to remove such a tube.

Recommandations de sécurité (French)

Le câble d'alimentation est utilisée comme interrupteur principal. Débranchez le cordon d'alimentation de l'appareil avant d'intervenir sur l'appareil.

L'appareil ne doit être utilisé que sur la tension indiquée. Si un changement de voltage est nécessaire, il doit être effectuée par VAC ou par l'importateur.

L'appareil doit être relié à la terre. Il ne faut pas supprimer pas ou déconnecter la terre sur le cordon d'alimentation. Ne pas brancher le cordon d'alimentation à une prise qui n'est pas correctement mise à la terre.

Il faut assurer une ventilation adéquate - laisser au moins une dizaine cm au-dessus et de chaque côté de l'appareil.

Ne placez pas l'appareil dans un meuble complètement fermé.

Ne pas empiler d'autres appareils sur le dessus du VAC.

Ne pas utiliser sur un tapis ou toute autre surface qui pourrait bloquer la circulation de l'air. Ne pas faire obstacle à l'écoulement d'air.

Conservez tous les objets inflammables loin de l'amplificateur.

Aucune flamme nue ne doit être placée sur l'appareil ou à proximité.

Ne pas laisser l'appareil sans surveillance lorsqu'en fonctionnement.

L'appareil ne doit pas être exposé à des éclaboussures. Ne placez pas d'objet rempli de liquide sur l'appareil.

Cet appareil est lourd. Veillez à l'installer dans un endroit sûr d'où il ne peut pas tomber ou basculer. Faites-vous aider pour déballer, déplacer et installer l'appareil.

Ne faites jamais fonctionner l'appareil sans que tous les couvercles et les cages soient bien en place.

Les tubes chauffent suffisamment pour causer des brûlures graves. Ne jamais toucher un tube lorsque l'appareil est allumé, cela peut prendre plusieurs minutes pour qu'il refroidisse après que l'appareil est éteint.

Ne touchez pas un tube si le verre est cassé, la structure interne est traversée par des courants élevés. Débranchez l'appareil et attendre 30 minutes avant de tenter de retirer un tel tube.

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INTRODUCTION

The VAC renaissance Preamplifier Mk V is based on the world's finest audio preamplifier and is an absolutely unique component. Its unusual topology, excellent parts, and flexibility make it a pleasure to hear and operate.

The line stage is, in effect, a small Class A₁ power amplifier, capable of driving loads as low as a few hundred ohms. This is a stark contrast to normal preamplifiers, which claim a low output impedance but completely collapse when asked to deliver current. The Renaissance Mk V circuit has an internal 300 ohm output load, and is loafing with virtually any external load, delivering an effortless, musical performance.

There is no loop feedback and no coupling capacitors in the line section. All active elements are triode tubes, the purest, most linear amplifying devices yet invented. Output matching is accomplished by way of superb output transformers.

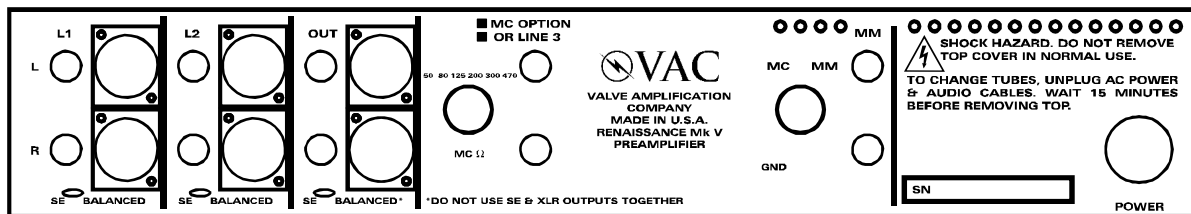
The optional phono stage uses three twin triodes operating without loop feedback. Gain is moderately high, with a very low noise floor. Low output MC cartridges are accommodated by means of high quality matching transformers, which contribute voltage gain without noise, resulting in detail that emerges from a remarkably dark and neutral background. A completely separate power transformer and filter system is provided for the phono stage, eliminating all unwanted interaction with the line stage.

Remote volume control is implemented via a motorized mechanical device. This is somewhat more expensive, but provides two major advantages. First, the Renaissance's controls are completely intuitive to use. Second, we avoid the sound degradation attendant with VCAs, relays, transistor switches, and switched resistor arrays.

Your VAC is designed not to the latest fad but to substance, for the highest possible sound quality. Time spent familiarizing yourself with this manual will be well rewarded.

INSTALLATION

- 1) Provide adequate ventilation.
- 2) Do not operate on carpet or any other surface that might block air flow.
- 3) The chassis will become warm in normal use.
- 4) Do not allow the chassis to touch any metal parts, such as the frame of an equipment rack. This might create a parallel ground path that could degrade the sound of your system.
- 5) Input connection is via single ended RCA jacks or XLR jacks; the corresponding BAL/SE switch for each line input must be set accordingly. Output can be on RCA or XLR jacks; output BAL/SE switch must be set accordingly. IMPORTANT: READ THE SECTION ON "OUTPUTS & GROUNDING SWITCH". Connect line level inputs (CD, Tuner, etc.) to the appropriate RCA or XLR input jacks on the rear panel. Note: with the exception of Phono (when fitted), all inputs are "line level"
- 6) Connect phono cables to the rear panel MM or MC inputs labeled "Phono." Connect the ground wire from the turntable or phono cable to the "Ground" terminal provided on the rear panel. Set the MM / MC switch to reflect the input jacks being used.
- 7) Connect the power cables from the power supply to the preamplifier. Note that each has a locating key and a locking collar. Be sure to insert the connector properly, and fully tighten the locking collar.
- 8) Connect the input and output cables.
- 9) Connect the power supply to the correct voltage source. Avoid power conditioners that float the ground pin. ALWAYS connect power cord to component before plugging it into an AC outlet, and make sure that unit's power switch is set to the "off" position before making the final connection. For best performance, try to route the power cord away from signal cables.
- 10) Pay close attention to power quality, and be aware that different power cords can alter the sound.
- 11) It is best to have some distance between the audio chassis and the power supply.
- 12) It is best not to place the power supply very close to a phono cartridge.



INPUTS & GROUNDING SWITCHES (back panel)

There are three line inputs. Two pairs (L1 and L2) can accept either RCA unbalanced or XLR balanced or unbalanced sources, and each has a BAL/SE switch that **MUST** be set according to the mode being used.

Units without the optional phono section have two RCA jacks labeled “MC”. These act as a line level input (L3), engaged when the SELECTOR is set to the third position. Only SE sources can be used.

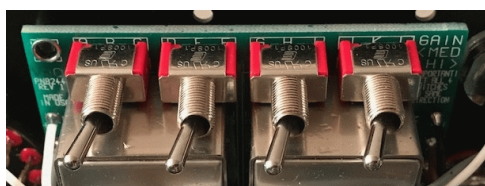
Units with phono have two sets of RCA jacks, labeled “MC” and “MM”, to accept phono cartridges of low or high output. The switch should be set to “MM” or “MC” to match the inputs used; for MC, there is also a resistive loading control. The ground lead from the turntable should be connected to the binding post located by these jacks.

OUTPUTS & GROUNDING SWITCH (back panel)

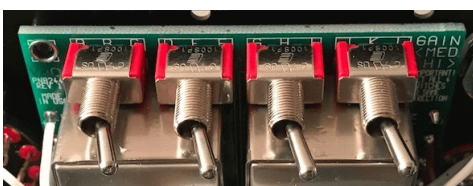
Main outputs are available as unbalanced via RCA jacks or fully balanced via XLR jacks. You may use either set, *but not both simultaneously*. The GROUND switch *must* be set correctly for the output configuration being used. Incorrect setting will result in either excessive buzz, or cause distortion of frequency response and output.

PHONO OPTION - MC GAIN SETTING (from s/n 1723701)

Inside, on the back panel, is the MC step up board, with four switches that set the step up at 18 or 24 dB. Set all four switches to the left for +18dB, to the right for +24dB. Follow the same precautions discussed under Changing Tubes when removing the cover.



Medium gain MC setting (+18 dB)



High gain MC setting (+24 dB)

Note: In the high gain setting, the resistive load is 25% of the marked values.

OPERATION

Before turning the power switch to the “on” position, you might also want to turn the “Volume” control fully counterclockwise.

Mute is automatically engaged when switching on the unit. The mute state is indicated by the red LED on the front panel; when un-muted, the LED will be green.

Allow the preamplifier to warm up for a minute before you un-mute the unit; failure to wait can cause a transient to be sent through your power amplifier that might cause damage to your loudspeakers.

As with all high fidelity products, the sound characteristic of the VAC changes somewhat as it warms up. Best sound will be achieved after about 15 minutes of operation.

Any time that the VAC has not been used for a few weeks the sound may be different. This is also normal for high resolution audio equipment. Optimum sound should return after a few hours of operation, preferably with an audio signal.

Please note that although your VAC System has been run for 48 hours at the factory, it will continue to "break in" for approximately 150 hours. Also be aware that many components display the need for a new break in period after being transported in unheated cargo aircraft.

MONO Control

A mono switch is provided on the front panel. This sums the left and right inputs together, and can be useful with older analogue records.

This switch should be left in the STEREO position in normal operation.

MUTE Control: This spring loaded toggle switch changes the units between the “Mute” and “Operate” condition. This function is duplicated on the remote control.

The mute state is indicated by the red LED on the front panel; when un-muted, the LED will be green.

REMOTE CONTROL

The remote control allows for wireless adjustment of MUTE and VOLUME.

The remote wand is powered by two “AAA” batteries. These should be of the alkaline type. You will need to install them in the wand before using the remote. Since batteries can leak, they should be removed from the wand if it is not going to be used for an extended period of time.

Mute: Pressing either side of the “Mute” button will toggle between the “Mute” and “Operate” condition. When muted, a red glow will be observed in the LED indicator. Mute is automatically engaged when the preamplifier is first switched on.

Volume Up/Down: These buttons cause a motor to turn the volume control; the more briefly you press the control, the smaller the motion of the volume control. Motorized controls offer superior sound, as well as direct visual indication of volume setting. The front panel control may also be used directly in the conventional way.

REPLACEMENT OF TUBES

The line stage uses two tubes, type 6DJ8 / ECC88 / E88CC / 6922 / 7308.

Do NOT mix brands or versions in the 6DJ8 / ECC88 / E88CC / 6922 / 7308 positions.

The optional phono stage uses three type 12AX7 tubes.

DANGEROUS VOLTAGES EXIST WITH THIS COMPONENT. YOU MUST FOLLOW THESE STEPS TO PROTECT YOUR SAFETY. Before replacing tubes, all power must be turned off. Unplug the power cord from the wall, and remove all audio interconnect cables. Wait 30 minutes before removing the top cover. Install new tubes of the appropriate types firmly in their sockets, noting the location of holes in the socket and pins of the tubes, taking care to make sure that pin pattern corresponds to holes in tube socket. Reinstall the top cover before reconnecting the unit.

NEVER INSTALL OR OPERATE THIS UNIT WITHOUT ALL COVERS IN PLACE.

In the event that trouble is encountered, check all signal, speaker and power connections. If the problem persists, follow all safety precautions stated earlier in this section, and check that all tubes are correctly seated in their sockets. If possible, try another tube. If the problem persists, please consult your VAC dealer or contact the factory directly.

For best performance we recommend that you use tubes specifically selected and tested by VAC for this application.

CARE OF CHASSIS

VAC chassis are finished in durable textured gloss paint. Cleaning with a damp cloth WHILE THE AMP IS SWITCHED OFF AND UNPLUGGED should suffice. Do not get cleaning solutions onto or into the connectors or controls.

The fascia is a hand rubbed acrylic lacquer and should be treated in the same fashion as a high quality automotive finish.

When shipping your unit, be certain to wrap the amplifier in the cloth, tissue or plastic wrap in which it was originally packaged. Given the high gloss of the lacquered finish, make sure there are no ridges or sharp surfaces in those parts of the cloth which contact the faceplate. Use of a coarser cloth or failure to otherwise protect the faceplate may result in damage to the finish. VAC is not responsible for cosmetic damage resulting from improper care or packing.

A Word About Tubes in General

Tubes are like the tires on a car; they will eventually need replacement. Murphy's Law states that a tube will probably fail right at the start of a long holiday weekend. Therefore, many audiophiles keep a spare tube of each type on hand, just in case!

VAC can test tubes for concerned customers.

WARRANTY

Your equipment is warranted for a period of thirty (30) days from the date of purchase. In addition, if the registration form is received by VAC along with a copy of your sales receipt from an authorized VAC dealer within this thirty days, the warranty will be extended to two (2) years (tubes excepted). It is the responsibility of the dealer and customer to determine suitability of this unit for a particular application. This warranty applies only to units sold in the United States of America through authorized VAC dealers and operated in the USA by the original owner. It covers factory service and, within the continental U.S., standard return shipping. For warranty information outside of the U.S. contact the importer of VAC equipment for your country. Units sold outside of the U.S. should still be registered with VAC.

Your questions and comments are always welcome. Contact:

Valve Amplification Company
1911 East Avenue North
Sarasota, FL 34234
Telephone 941/952-9695 Fax 941/952-9691
info@vac-amps.com

Detach and mail to the address above as soon as possible.

Renaissance Preamplifier Mk V Registration Form

Name _____

Address _____

Telephone _____/_____-_____ e-mail _____

Dealer name _____ City _____

Salesperson _____ Purchase date _____ Serial Number _____

How did you first learn of VAC products? _____

What other brands/models did you consider? _____

What made you decide on the VAC? _____

What else would you like us to know? _____

Optional:

What magazines do you read regularly? _____

What are your hobbies (besides filling in warranty cards)? _____

What are your favorite types of music? _____

On what format? (CD, LP, DVD, SACD, MP3, etc.) _____