

VAC VINTAGE PREAMPLIFIER Mk III

Operating Instructions

DO NOT OPEN THIS UNIT - THERE ARE NO USER SERVICEABLE PARTS INSIDE. DO NOT TOUCH TUBES UNTIL UNIT HAS BEEN SWITCHED OFF FOR 5 MINUTES. TUBES BECOME HOT IN USE. DO NOT EXPOSE THIS UNIT TO MOISTURE. DO NOT PLUG INTO AN AC SOURCE UNTIL ALL CONNECTIONS ARE COMPLETED.

Introduction

The Vintage Preamplifier features a zero-global-feedback, Class A, triode line amplifier & controller, and a Class A triode phono amplifier employing both passive and active RIAA equalization techniques. It is to be operated from the voltage labeled on the back panel, 50-60 Hz. The fuse is a slow blow type of the size labeled on the back of the unit.

Connection

1. Complete all connections before connecting the AC cord to the wall outlet.
2. At turn on, the volume control should be full counter-clockwise and the mode switch should be set to MUTE. Also, always MUTE the preamp before switching power off, to prevent damage to amplifiers or speakers.
3. Allow 30 seconds for warm up before leaving MUTE.
4. The Vintage Preamplifier inverts phase from all inputs to the main outputs. To correct for this reverse the speaker connections in both channels. Output to the tape jacks does not invert.
5. In normal operation no signal is present at the tape output jacks. This is done to ensure that no degradation of sound occurs due to input non-linearities or loading

effects of the tape recorder. To record, select the record enable position ("TAPE ON") of the TAPE MONITOR switch. If you wish to monitor the output from the recorder's monitor head (if so equipped) select the monitor position ("MON"). It is recommended that this switch not be cycled during important recordings.

6. Tube compliment is:

V1	12AX7A/E83CC	phono input amplifying triode - LOW NOISE
V2	12AX7A/E83CC	phono input amplifying triode - LOW NOISE
V3	12AX7A/E83CC	phono amplifying triode
V4	12AX7A/E83CC	phono impedance translator triode
V5	12AX7A/E83CC	phono impedance translator triode
V6	12AU7A/E82CC	line amplifying triode
V7	12AX7A/E83CC	line impedance translator triode

7. XLR balanced outputs (optional) follow the EIA standard convention, where the positive phase signal is carried on pin 2 and the inverted phase is carried on pin 3. Many manufacturers fail to follow the standard.

8. Some systems will sound different depending on the polarity of the AC line cords. Many audiophiles experiment with the relative cord polarity of their components. In general, incorrect relative power polarity will result in a somewhat thin and wispy sound. We recommend that you consult your dealer for suggestions.

Tube Types

Golden Dragon tubes are generally recommended and have been used extensively during the development of this amplifier. Please feel free to contact VAC if you require additional information or advice.

About Microphony

Every amplifying device, be it tube or transistor, produces some output with mechanical stimulation (microphony). In fact, even cables possess microphony. In the Vintage Preamplifier, V1, V2, V3, and V6 will emit a sound through the speakers if directly struck. This is a normal situation. The exact amount of sound depends on the tube type, its location in the circuit, and slight random variations in tube manufacture. When the chassis itself is struck sharply there may be either no sound or a slight sound emitted from the speaker, but it should die away rapidly. Again, this is normal and not representative of the type of

mechanical or acoustic stimulation encountered when the unit is properly installed and playing music. Replace the offending tube if excessive mechanical sensitivity or ringing occurs.

It is best not to subject the tubes to tapping or the chassis to repeated mechanical jars, as this may damage the precision of the tubes and cause them to become more microphonic.

About Noise

Every amplifying device produces some amount of noise. In fact, even a resistor produces noise in the presence of current flow. Acceptability is not a question of whether this characteristic is present but rather the degree to which it is present.

The most likely source of phono stage noise are tubes V1 & V2. The audibility of noise produced in the phono stage is influenced by the output level of your phono cartridge. Pickups with output levels lower than approximately .4 mV may be problematic. With a pickup rated at .4 mV output and low noise 12AX7s (V1, V2), the subjective level of electronic noise will be approximately 1/3 of the groove noise on a good direct to disc recording.

The most likely source of line stage noise is V6. The audibility of noise produced in the line stage is not affected by the volume control setting, and is determined by the sensitivity of the power amplifier and the efficiency of the speakers. With a speaker of extremely high efficiency (for example, a Klipschorn) the preamplifier itself may be modified by VAC for more appropriate noise and output levels. Noise should be insignificant with speakers in the typical efficiency range.

Need Help?

Please call us with any questions you may have. It is better to ask than to guess!