

Quicksilver Audio V4 Mono Amplifier

Operating Instructions

Thank you for purchasing the Quicksilver Audio V4 Mono Amplifiers. These amplifiers have been engineered to have a very wide bandwidth, extremely low distortion and superior dynamic range.

The output transformer used in this amplifier is based on the best designs of the past but uses superior new materials to achieve a very high level of performance. The high frequency characteristics of this transformer are so stable that many different output tubes may be used without the need for circuit changes or compensation adjustments.

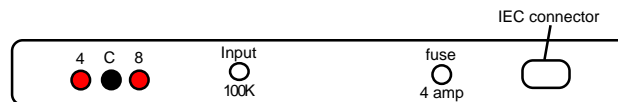
This is an all tube design and uses no circuit boards or transistors.

PLACEMENT

The V4 Mono Amplifiers should have at least 6 inches of ventilation space on either side and at least 6 inches above them. If this is not possible, then use a fan for cooling.

SPEAKER CONNECTION

Five-way binding posts are used for speaker connection. For better sonic performance, we recommend using the screw-down part of the post rather than banana plugs to connect your speaker wire. Make sure the ends of the speaker leads do not touch each other. The rating on the back of your speaker system will determine whether you use the 4 or 8 ohm tap for the positive lead. Connect the negative or ground to the black post marked **C**.



SYSTEM GROUNDING

Your Mono Amplifiers come with three pronged grounded AC plugs. In some systems, where the preamp is also grounded, a ground loop may appear as a low level hum. Plugging the amplifiers and the preamp into the same AC outlet will usually take care of this problem.

4 AMP SLO-BLO FUSE

Standard fuse value must not be exceeded. If a fuse blows, replace and check output tube bias. If there is a large change in any tube, then that tube is probably damaged. If the bias has not changed then the cause of the fuse blowing may be due to other problems, such as poor system grounding, unstable preamp, shorted speaker, etc. Interchanging the amps between channels will help localize the problem to either the system or the amplifier.

TUBES

The input tubes in this amplifier were chosen for their specific performance characteristics. These tubes should last several years or many thousands of hours. We can only guarantee the performance of this unit when used with input tubes supplied by Quicksilver.

Quicksilver ships the V4 Amplifiers with matched KT150 output tubes but the V4 can use a variety of output tubes. The output tubes do not need to be matched, however matched tubes can provide better performance.

Output tubes will need to be replaced periodically. When a degradation in sound occurs, the fuse blows repeatedly, or the tubes will not hold their bias anymore it is time for new output tubes. We recommend purchasing tubes from Quicksilver Audio or your dealer and we recommend keeping extra fuses and an extra output tube on hand.

OUTPUT TUBE BIAS SETTING

Output tube bias should be set immediately when new tubes are put in; then again in 15 minutes; and periodically the first few times of using the amplifiers. After that the bias should be checked monthly.

Recommended bias is 40 ma and maximum bias for each tube type is as follows:

EL34	40ma
KT77	40ma
6550	50ma
KT88	55ma
KT150	60ma

Bias controls are behind each tube. To check the bias push in the button for the tube you want to check and note the reading on the meter. Each tube corresponds to the black button nearest it. The amp may sound a little better with higher than 40 ma bias on some speakers and lower than 40 ma bias on others.

To adjust the bias you will need a slot-head screwdriver. Adjust by turning clockwise to increase bias; counterclockwise to decrease bias. Do this for each of the four output tubes. Actual bias is shown on the bias meter. The V4 can use a variety of output tubes. **Remember that bias set above the recommended values will wear out your tubes prematurely.**

If you depress two or more buttons at the same time the meter averages the readings of the tubes, so your meter will not be damaged. Tube biases should be checked individually.

WARNING

This device has very high internal voltages. Never operate with the bottom removed!

Never operate your amplifiers with the speakers disconnected.

To prolong the life of your amplifiers, never turn them off and then on within a short period of time (45 seconds.)

**Quicksilver Audio V4 Mono Amplifier
SPECIFICATIONS**

Power Output	170 watts into 4 or 8 ohms from 22 Hz to 40 KHz with KT150s
Power Bandwidth	18 Hz to 80 KHz
Peak Power	180 watts at 1 KHz
Input Sensitivity	1.5 volts
Input Impedance	100 K ohms
Tube Complement	1 - 12FQ7 input 1 - 12BH7 or 12FQ7 driver 4 - KT150 or KT88 outputs
Dimensions	7 7/8" high x 13 3/4" deep x 16 3/4" wide
Finish	Nickel chassis Carbide black capacitor and transformer cover
Weight	51 lbs.
Warranty	3 years parts and labor Tubes 90 days

WARRANTY

Quicksilver Audio warranties your amplifiers for a period of 3 years from the date of purchase (90 days on tubes.) Parts and labor are provided free of charge as long as the failure was not caused by misuse, accident or negligence. Shipping to the factory is not included.

Retain at least one packing carton in case a unit needs to be returned for service.

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