# Quicksilver Audio M60 Mono Amplifier Operating Instructions

Thank you for purchasing the Quicksilver Audio M60 Mono Amplifiers. The amplifiers have been engineered to have a wide bandwidth, low distortion and excellent dynamic range.

Quicksilver believes simplicity provides the best sound and reliability. The AC signal in the M60 travels through only one input tube, one driver tube, one coupling capacitor, the output tube and the output transformer. With only five devices in the signal path, very little coloration is imparted to the signal.

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

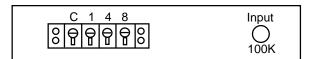
This device has very high internal voltages. Never operate with the bottom removed! Never operate your amplifers with the speakers disconnected. To prolong the life of your amplifiers, never turn them on and off within a short period of time (45 seconds.)

#### **PLACEMENT**

The M60 Mono Amplifiers should be placed where they will have plenty of air circulation. Allow at least 6 inches of ventilation space on either side and at least 10 inches above them.

# SPEAKER CONNECTION

Screw terminals are used for speaker connection because of their superior sonic performance. The output transformer wires are silver soldered directly to the screw strips eliminating any output wiring. Placing the amp directly behind the speaker with a very short speaker wire will further improve the performance. The connection to the 4 or 8 ohm tap will be determined by the rating on the back of your speaker system. The 1 ohm tap is for special applications only. The C terminal should be connected to the common, ground, or negative terminal of your speaker.



#### 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. Using an adaptor on the AC plug, to lift the ground, will solve this problem.

#### 2 AMP SLO-BLO FUSE

Standard fuse value must not be exceeded. If a fuse blows, replace and turn amp back on. Visually inspect all 4 output tubes to see if they are all glowing at the same brightness. If one tube is not glowing or is glowing red, that tube is bad. If the output tubes appear to be okay, then the cause of the fuse blowing may be due to 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.

Each M60 Amplifier is shipped with 4 matched EL34 output tubes. Best performance will result when all 4 tubes are A.C. and D.C. matched. The number on each EL34 box is the D.C. matching number for that tube.

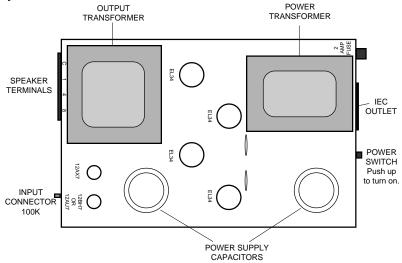
Output tubes *will* need to be replaced periodically. When a degradation in sound occurs or the fuse blows repeatedly, it is time for new output tubes. We recommend purchasing tubes from Quicksilver Audio or your dealer and we recommend keeping an extra output tube on hand in the event that one fails.

### **OUTPUT TUBE BIAS**

There are no bias adjustments in the M60. Whichever output tubes are used will all automatically adjust themselves to the necessary bias. Because of this many different output tubes may be used. The best performance and longest life will result when all 4 output tubes are matched.

Some of the output tubes that may be used in the M60 are: EL34, KT77, 6L6, 5881, 6550, KT88, KT99A.

The measured performance and the sound of the amplifiers will be slightly different with each type of output tubes used. In some cases the customer may want to change output tubes to finetune the amplifier to his system.



# Quicksilver Audio M60 Mono Amplifiers SPECIFICATIONS

Power Output 60 watts into 4 or 8 ohms

Power Bandwidth 15 Hz to 50 KHz

Peak Power 100 watts (8 ohm tap, 4 ohm load)

Peak Current 10 amperes Input Sensitivity 1.25 volts Power Consumption 160 watts at idle

280 watts at full power

Dimensions  $15^{\circ} \log x \ 9 \ 3/4^{\circ}$  wide

x 5 1/2" high

Finish Carbide black chassis

Polished nickel transformer covers

Weight 32 lbs., 36 lbs. shipping

Tube Complement 1 - 12AX7

1 - 12BH7 4 - EL34

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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