

# Quicksilver Audio M80 Mono Amplifier

## Operating Instructions

*Thank you for purchasing the Quicksilver Audio M80 Mono Amplifiers. The amplifiers have been engineered to have a very wide bandwidth, extremely low distortion and good dynamic range.*

*The front end circuitry used in this amplifier was developed by Quicksilver and is unique to the audio industry. It is D.C. coupled for low frequency stability, and nulls out any change in power supply voltages, negating the need for regulated power supplies and their inherent sonic problems.*

*The 12BH7 driver is D.C. coupled to the output tubes. The output tubes are tightly held to their operation voltages. Reliability and output tube life are improved because of no input to screen grid arc-over.*

*Superior bass performance is offered by this unit.*

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

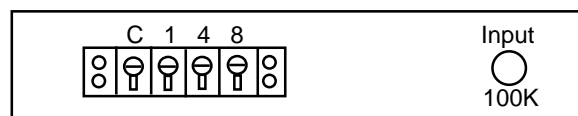
**This device has very high internal voltages. Never operate with the bottom removed!  
Never operate your amplifiers with the speakers disconnected.  
To prolong the life of your amplifiers, never turn them on and off within a short period of time (45 seconds.)**

### PLACEMENT

The M80 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.

## 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 either pair of tubes, then one tube of that pair 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.

Each M80 Amplifier is shipped with 4 matched EL34 output tubes. Best performance will result when all 4 tubes are A.C. and D.C. matched. If this is not possible, at least the 2 EL34 tubes controlled by each bias adjustment should be 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, the fuse blows repeatedly or when 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 an extra output tube on hand in the event that one fails.

## 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.

Maximum bias is 80 ma. This setting will provide the lowest distortion. Lower bias will increase tube life: the bias may be set as low as 50 ma.

To adjust the bias you will need a slot-head screwdriver and the bias meter that comes with the amplifiers.

Plug the bias meter into the socket marked "Bias 1". This will read the bias of the EL34 pair marked "1". Turn the bias control marked "Bias 1" clockwise to increase bias; counterclockwise to decrease bias.

Do the same for the EL34 pair marked "2". The two controls interact so you will need to adjust each a few times.

**Remember that bias set above the recommended values will wear out your tubes prematurely.**

**Quicksilver Audio M80 Mono Amplifiers  
SPECIFICATIONS**

Power Output	80 watts into 1, 4 or 8 ohms from 20 Hz to 20 KHz
Power Bandwidth	13 Hz to 60 KHz
Power Consumption	105 watts at idle 260 watts at full power
Input Sensitivity	1.5 volts
Dimensions	14 1/8" deep x 14 1/8" wide x 5 1/2" high
Finish	
Chassis	Polished nickel
Transformers	Black with polished nickel covers
Weight	34 lbs., 42 lbs. shipping
Tube Complement	2 - 12FQ7 1 - 12BH7 4 - EL34 1 - 5AR4/5V4
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.

Quicksilver Audio  
5635 Riggins Court, Unit 15  
Reno, NV 89502  
(775) 825-1514 / Fax 825-1552  
[www.quicksilveraudio.com](http://www.quicksilveraudio.com)