

# Quicksilver Audio M135 Mono Amplifier

## Operating Instructions

Thank you for purchasing the Quicksilver Audio M135 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.

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.

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

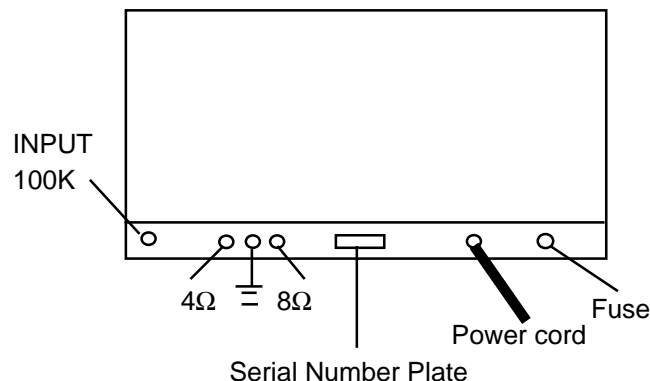
**This device has very high internal voltages. Never operate with the bottom removed!  
Never operate your amplifiers with the speakers disconnected.  
To prolong the life of your amplifiers, never turn them on and off within a short period of time (45 seconds.)**

### PLACEMENT

The M135 Mono Amplifiers should have at least 6 inches of ventilation space on either side and at least 10 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 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.



### 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 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 M135 Amplifiers with matched EL34 output tubes but the M135 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 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.

The bias must be set correctly for the type of output tube that is used. The maximum setting for each tube is as follows:

EL34	45ma
KT77	50ma
6L6	50ma
6550	60ma
KT88	60ma

Bias controls are behind the door near the right front panel handle. Open the door by applying pressure with a finger at the bottom right. To check the bias push in the control for the tube you want to check. Each tube corresponds to the control nearest it.

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 six output tubes. Actual bias is shown on the front panel bias meter. The M135 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 jacks 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.

**Quicksilver Audio M135 Mono Amplifiers  
SPECIFICATIONS**

Power Output	=135 watts into 4 or 8 ohms from 20Hz to 20 KHz
Power Bandwidth	=10 Hz to 100 KHz
Input Sensitivity	=1.33 volts
Power Supply Energy Storage	=575 joules
Dimensions	
- Chassis	= 13" deep x 17" wide x 8" high
- Front panel	=19" wide x 8 3/4" high, Rack handles 2" deep
Finish	
- Chassis	=Textured black
- Front panel	=Silver anodize, Rack handles black
Weight	=70 lbs
Tube Complement	= 1 - 12FQ7 1 - 12AU7 6 - 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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