PHONO STAGE PREAMPLIFER OPERATING INSTRUCTIONS

The preamplifier should *not* be left on all the time. It should be turned off at least once a day.

FUSE

Never use larger than a 0.5 amp fast-blo fuse. If the fuse continually blows, the preamp should be returned to Quicksilver for servicing.

NOISE

A small amount of hiss from the phono preamp is normal. If excessive noise is noticed in <u>one</u> channel, then a tube may be noisy. Try replacing the 12AX7 nearest the input first. If this makes no difference, then replace the middle 12AX7.

TUBES

We can only guarantee the performance of this unit when used with the curve-traced and matched tubes supplied by Quicksilver. The tubes should last several years or many thousands of hours. Replacement tubes should be purchased through Quicksilver Audio or a Quicksilver dealer.

INTERCONNECT CABLES

Because of the 600 ohm output impedance of the phono preamp, short cables are recommended between the Phono Preamp and the Line Preamp. Unshielded or long cables will degrade performance.

INPUT IMPEDANCE SELECTION

The internal circuit board has a switch for impedance selection(47k or 10k) and a switch for capacitance selection(470pf or 270pf). Normal input impedance is 47k and 270pf but Shure cartridges require 470pf of capacitance and Grado cartridges require 10k of impedance. 10k is also used with moving coil cartridges.

STEP-UP TRANSFORMER

For low output cartridges less than 0.5 millivolt output we recommend the Quicksilver Moving Coil step-up transformer option. This will reduce background noise and improve dynamic range.

This preamplifier is not phase inverting.