The Shure M61 Series Transistor Preamplifiers are designed to furnish the voltage gain and equalization necessary to operate magnetic phono cartridges (such as the Shure Dynetic Cartridges) and tape playback heads with standard audio amplifiers. One of the primary uses of the M61 is in conversion of Stereo systems from ceramic cartridges to magnetic cartridges. It can also be used without circuit modification as a preamplifier for microphones. Advantages include complete freedom from microphonics, extremely low noise, the use of 50 feet or more of output cable in “phono” and “tape” positions, and years of maintenance-tree performance. The operating temperature range is from 32°F. (0°C.) to 140°F. (60°C.).

The Model M61-1 operates on 105-125 volts 50-60 Hertz power line.

The Model M61-2 operates on 210-240 volts 50-60 Hertz power line.

The Model M61-3 operates on battery power.

The Model M61 Preamplifiers feature a single slide switch for selection of either phono (RIAA), tape (NAB), or a microphone (MIC) function. The RIAA position provides the Standard Equalization for phono records. The NAB position provides the Standard Equalization for tape and the MIC position provides a flat amplifier for microphones.

The preamplifier has dual input and output jacks which will accept standard phono plugs.

The input impedance is optimized for Dynetic and magnetic phono cartridges, for tape heads, and for low or medium impedance microphones.

The output load will typically be the 500,000 ohm Tuner or Ceramic input of an Amplifier. Earphones of 4,000 ohms or more nominal impedance can be connected directly, or through a 1,000,000 ohm control, to the M61 output with the following specifications obtaining down to 250 Hertz or lower.

**SPECIFICATIONS**

**Gain:**
- RIAA (Phono) 46 db (5 millivolts input produces 1.0 volt)
- NAB (Tape) 41 db (2 millivolts input produces 0.225 volt)
- MIC 63 db (2 millivolts input produces 2.8 volts)

**Frequency Response and equalization:**
- Phono: Standard RIAA equalization
- Tape: Standard NAB equalization
- MIC: Response ±2 db from 20 Hz. to 15,000 Hz.

**Input Impedance:**
- Phono end tape: Approximately 50,000 ohms at 1,000 Hz.
- Microphone: Approximately 20,000 ohms at 1,000 Hz.

**Output Impedance:**
- Low output impedance (less than 1,000 ohms at 10,000 Hz. for phono end tape functions)

**Channel Separation:**
- 50 db or better (at 1,000 Hz.)
Caution: The use of the M61 Stereo Preamplifier with other power amplifiers of the transformerless (AC-DC) type may be a shock hazard.

A suitable power line isolation transformer should be used.

Connections: a. Set selector switch to the desired function. This automatically selects the proper equalization or frequency response for both channels.

b. For the Phono (RIAA) position, connect the signal leads from the phono cartridge to the jacks marked “IN” at channel “A” and channel “B”. For the microphone position using two separate microphones, connect the cable from one microphone to jack marked “IN” at channel “A”. The cable from the other microphone should connect to the jack marked “IN” at channel “B”. For single microphone application connect to either channel “A” or “B”.

Attention must be given to information contained in the data sheets of the phono cartridge, tape head, or microphone regarding their connections, phasing, and grounding.

c. Connect the jacks marked- “OUT” of channel “A” and “B” to the corresponding input jacks of the power amplifier or preamplifier or to the earphones. (Parallel the outputs for monaural earphones). If it is

found necessary to “ground” the M61 Preamplifier chassis, a wire can be connected to one of the screws holding the bottom plate to the chassis.

d. If AC power operated, insert the M61 power line cord in a proper power outlet preferably controlled by the power amplifier’s On-Off switch. Be sure power switch on preamplifier is in the ON position. If the battery power supply is used, an ON-OFF switch is provided.

Guarantee: This Shure High Fidelity Component is guaranteed to be free from electrical and mechanical defects for a period of one year from date of shipment from the factory, provided all instructions are complied with fully. In case of damage, it is essential that you carefully repack the unit and return it to the factor for repair. Our guarantee is voided if the assembly has been subjected to unreasonably rough handling.