The SE22 is a two-channel, solid-state, equalized preamplifier/line amplifier designed to provide the highest quality disc reproduction for broadcast and recording studio applications. While primarily designed for stereo use, it may be very effectively utilized for two separate monophonic channels.

Features include:
- Precise RIAA/NAB equalization.
- Completely solid state.
- High-impedance inputs properly match almost all magnetic disc reproducers.
- Individual high- and low-frequency equalization trimmers on each channel.
- Individual channel level controls.
- Extremely low noise and rf susceptibility.
- Full line output capability.

SPECIFICATIONS

Frequency Response
RIAANAB disc playback characteristic within +1 dB from 30 to 15,000 Hz (NAB 1964 Disc Standard, recommended low frequency roll-off -6 dB/octave, 3 dB down at 20 Hz)

Gain
54 dB, adjustable

Distortion
Less than 0.5% THD at +20 dBm from 30 to 20,000 Hz

Channel Separation
10,000 Hz, 50 dB minimum
1,000 Hz, 50 dB minimum
100 Hz, 42 dB minimum

Hum and Noise
At least 60 dB below +6 dBm output (gain set for +6 dBm output with 5 mV input, 32 to 18,000 Hz bandpass filter)

Input Impedance
47,000 ohms
paralleled) as a monophonic source to one channel of the SE22, the SE22 input should be shunted with a 47,000 ohm resistor or the high frequency trimmer should be readjusted for proper high frequency equalization.

**Outputs**
Output terminals appear on the rear panel as shown in Figure C. Outputs are balanced and designed to feed a 150 ohm or 600 ohm line.

![Rear Panel](image)

**Channel Level Controls**
These controls are located on the front panel designated as “A Level” and “B Level.” They are used to adjust the overall operating level of the SE22 and to balance the individual levels of the two channels.

**Response Trimmers**
To allow for balancing the response of the two channels of a stereo cartridge, or of two monophonic cartridges, high- and low-frequency response trimmers are provided for each channel. Figure D shows the location of these controls and Figure E shows the range and character of the response change obtainable.

![Response Trimmers](image)

**220/240 Volt Operation**
The power transformer may be restrapped for operation with a 220/240 volt ac supply. To make this change, see instructions on the circuit diagram for revising the power transformer connections.

**Guarantee**
This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from the date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor.

**Shipping Instructions**
Carefully repack the unit and return it prepaid to the factory. If outside the United States, return the unit to your dealer or Authorized Shure Service Center for repair. The unit will be returned to you prepaid.

![Typical Effect of Response Trimmers](image)
NOTES:
1. EQ TRIM ± 15 kHz - R17 (R43)
2. CHANNEL "A" IS SHOWN; CHANNEL "B" IS IDENTICAL, EXCEPT USE REFERENCE DESIGNATIONS ENCLOSED IN PARENTHESES.
3. ARROWS ON POTENTIOMETERS DENOTE CLOCKWISE ROTATION, AS VIEWED FROM ACTUATORS.
4. FRONT PANEL LEVEL CONTROLS ARE R12 (R38).
5. POWER TRANSFORMER T3 IS SHOWN STRAPPED FOR 110 VOLT MAINS; FOR 220 VOLT, STRAP AS INDICATED BY BROKEN LINE.
6. "\( \text{DC} \)" DENOTES DC VOLTAGE; "\( \text{AC} \)" DENOTES AC VOLTAGE. ALL VOLTAGES MEASURED WITH SUPPLY POWER OF 120 VAC, 60 Hz, USING 10 MEGOHM VTM. AC VOLTAGES MEASURED WITH 10kV, 1kHz INPUT, WITH GAIN SET TO 45.8 dB.
7. ALL RESISTORS ARE 1/2 WATT 5% CARBON COMPOSITION. UNLESS SHOWN OTHERWISE, POTENTIOMETERS HAVE 2% TOLERANCE. VALUES ARE IN OHMS.
8. ALL NON-ELECTROLYTIC CAPACITORS HAVE VALUES GIVEN IN MFD. 1% TOLERANCE. ELECTROLYTIC CAPACITORS HAVE VALUES GIVEN IN MFD X VOLTS, AND HAVE TOLERANCE OF +50%, -10%. UNLESS SHOWN OTHERWISE.

MODEL SE22 STEREO TRANSCRIPTION PREAMPLIFIER CIRCUIT DIAGRAM