

DESCRIPTION

The ALTEC 1579B Equalized Preamplifier (see Figure 1) is a sealed, plug-in solid-state module equalized to meet the RIAA standard for use with high-quality magnetic phono pickup.

The ALTEC 1588B Microphone Preamplifier (see Figure 1) is a sealed, plug-in solid-state module with a transformer-isolated input and improved noise characteristics. The built-in transformer provides the preamplifier with a balanced and isolated input for protection from RF and other stray fields normally induced on low-level microphone lines.

APPLICATION

Both the 1579B and 1588B preamplifiers may be used with power supply voltages ranging from +12V dc to +20V dc. The 1579B draws a maximum of 10 mA dc from a 12V supply and 18 mA dc from a 20V supply. The 1588B draws a maximum of 13 mA dc from a 12V supply and 20 mA dc from a 20V supply.

The 1579B is used with an input from a magnetic phono pick-up. Wiring to the intended mounting socket for the 1579B should be in accordance with Figure 2.

The 1588B is used with an input from a microphone. Wiring to the intended mounting socket for the 1588B should be in accordance with Figure 3.

Interchangeability

The 1579B is completely interchangeable with the 1579A. The 1588B is interchangeable with the 1588A if pins 2 and 6 of the mounting socket are strapped. Most applicable ALTEC equipment of current manufacture, in which these preamplifiers may be used, have pins 2 and 6 connected, but certain older units may require this strap to be added.

The gain and subsequent overload characteristics of the ALTEC 1588B Microphone Preamplifier may be externally controlled by an external resistor. The range of gain obtainable and the resultant overload characteristics are shown in Figures 4 and 5. The difference between these figures is the operating voltage, which has an effect on the overload characteristics. Figure 4 is for a supply voltage of 15V and Figure 5 is for a supply voltage of 20V. To use the graphs for determination of the external resistance value, either the desired gain may be selected from the left side of the graph, or the overload point (in dBm) may be selected from the right side of the graph. A horizontal line is drawn from the selected point to the intersection with the curve. A vertical line from this intersection to the base of the graph gives the resistance value for operation at the selected conditions.

The following example is typical. Assume an input overload level of -6 dBm on the right side of the graph and draw a hori-

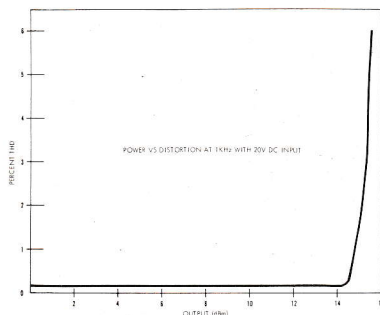
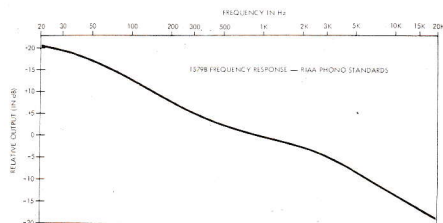
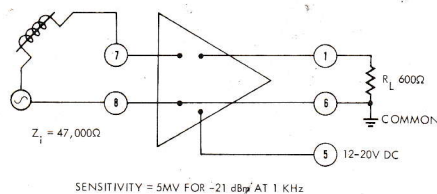


Figure 2. 1579B Pin Connections and Performance Data

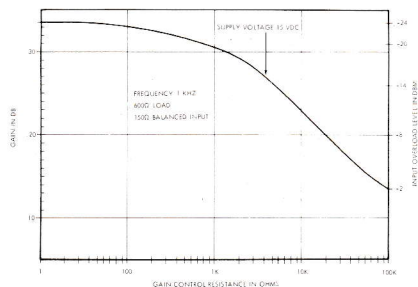


Figure 4. 1588B Input Overload and Gain versus Gain Control Resistance with 15V dc Supply Voltage

zontal line to the intersection of the curve. A line from this point to the base line shows a resistance value of 18K ohms is required. For this value a gain of 20.5 dB is obtained from the 1588B.

The external resistor is connected between pins 2 and 6 of the octal mounting socket. The resistor may be mounted directly on the socket. If it is desired to include a switch on the control panel, it is recommended the resistor be placed on the switch and then connected from the switch to the socket by either a twisted pair or a shielded pair. On some ALTEC products, such as the 352B, 1592B, etc., the SPEECH/MUSIC switch may be used for this purpose. If speech/music selection is not required, short circuit the 1 μ F capacitor and use the other side of the DPDT switch.

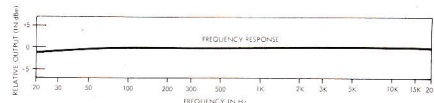
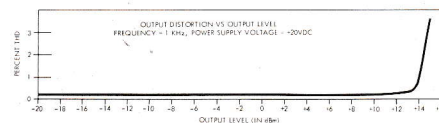
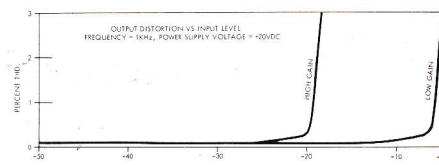
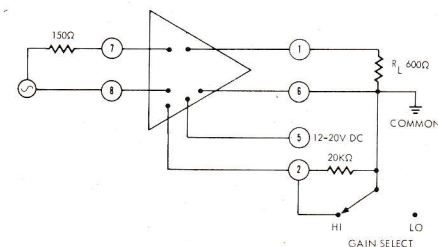


Figure 3. 1588B Pin Connections and Performance Data

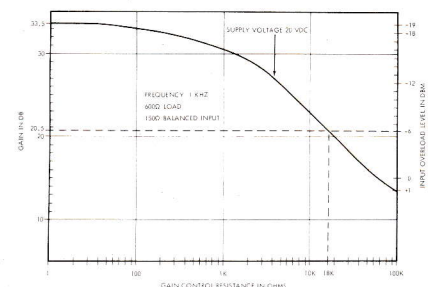


Figure 5. 1588B Input Overload and Gain versus Gain Control Resistance with 20V dc Supply Voltage

INSTALLATION

Each preamplifier should be carefully inserted in its mounting socket to prevent possible damage to the locating key or connector pins of the plug and/or socket.

MAINTENANCE

The 1579B and 1588B preamplifiers are sealed units and should be repaired only by an ALTEC Qualified Service Representative. For factory service, return the unit to:

ALTEC Customer Service/Repair
1491 N. Main Street
Orange, CA 92667

For additional information or technical assistance, call (714) 774-2900, or Telex 65-5415.