

## OPERATING INSTRUCTIONS

impedance requirements of the input system into which the microphone will connect, then following the procedure outlined in the following illustration, Fig. 1, select the proper connections.

**Note:— The microphone is shipped with leads connected for 30/50 ohms.**

\*INCLUDES SINTERED BRONZE FILTER

### SPECIFICATIONS

- Type:** Moving Coil Dynamic
- Pickup Pattern:** Omnidirectional
- Frequency Response:** 35 to 20,000 cycles
- Output Impedance:** 30/50, 150/250 and 20,000 ohms (selection by connections in microphone cable plug)
- Output Level:** -55 dbm/10 dynes/cm<sup>2</sup>
- Hum:** -120 db (Ref.: 10<sup>-3</sup> Gauss)
- Dimensions:** 1 1/8" diameter at top (1 1/2" largest diameter) 7 1/2" long not including plug
- Weight:** 8 ozs. (not including cable and plug)
- Finish:** Two-tone baked enamel, black and dark green
- Mounting:** Separate "Slip-On" adapter No. 13798 furnished. Adapter has standard 5/8"-27 thread. (Calibration Chart included with each 684A)

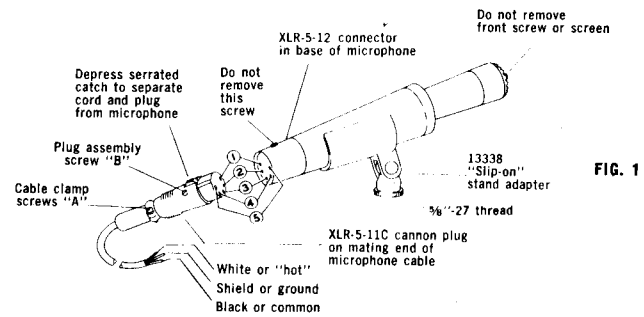
### DESCRIPTION

This microphone is the nearest approximation to the laboratory quality of the famous 21D ALTEC condenser type. Developed to meet the requirements for a professional dynamic microphone—the ALTEC Model 684A has a polar pattern omnidirectional in character with wide uniform frequency response from 35 to 20,000 cycles.

The rugged moving coil design assures long life and uninterrupted operation. The "new" ALTEC "Golden" diaphragm and pressure element is further protected by the famous ALTEC Sintered Bronze Filter against contamination of moisture, dirt, dust and foreign particles. Model 684A is conical in shape and finished in non-glare TV dark green and black preventing unwanted light reflections when on camera or distractions to recording artists. It is comfortably balanced for hand held use, such as in interview shows, or may be used with "Slip-on" Adapter No. 13798 for attaching the microphone to any 5/8" x 27 thread microphone stand. The microphone is supplied with fifteen feet two conductor, shielded microphone cable.

### IMPEDANCE SELECTION

Before placing the microphone in service determine the



### TERMINAL LEGEND

Pin No. 1—Ground (shield)  
Pin No. 2—Common (black)  
Pin No. 3—30/50 ohms (white)  
Pin No. 4—150/250 ohms (white)  
Pin No. 5—20,000 ohms (white)  
Microphone is shipped with all connections made for 30/50 ohms operation. To select other available impedances perform the following in the XLR-5-11C plug.  
(1) Loosen two cable clamp screws "A".

(2) Remove plug assembly screw "B" and slide plug housing along cable.

(3) For 30/50 ohms white lead is connected to Pin No. 3.

(a) To select 150/250 ohms, remove white lead from Pin No. 3 and connect to Pin No. 4.

(b) To select 20,000 ohms impedance connect white lead to Pin No. 5.

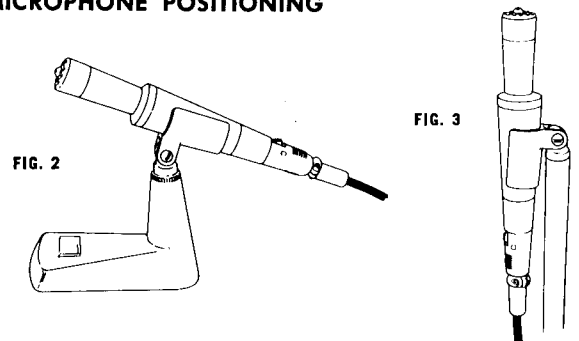
Note: No connection changes should be attempted in the XLR-5-12 connector.

Note: For unbalanced systems, connect black lead (common) Pin No. 2, and shield (ground) together on Pin No. 1.

### CALIBRATION CHART

A calibration curve on this microphone will be found on the inside cover of the storage case. It provides an accurate performance record of the microphone. This calibration is made in the ALTEC Anechoic Chamber equipped with an accurately controlled transducer as a sound source. The performance is recorded on ALTEC measuring equipment by an automatic servo-driven charting pen. The ALTEC calibration standards are cross-checked at regular intervals by independent acoustical laboratories.

### MICROPHONE POSITIONING



The ALTEC Model 684A having an omnidirectional polar pickup pattern should be positioned on the microphone stand as shown in Fig. 2. If it is desired to group the performers around the periphery of the microphone it may be positioned as illustrated in Fig. 3.

Should your microphone, through accidental damage, become inoperative it may be replaced by your ALTEC Distributor under an exchange plan or may be returned, transportation charges prepaid, for exchange. Service Manager: ALTEC LANSING CORPORATION, 1515 South Manchester Avenue, Anaheim, California