

\*INCLUDES SINTERED BRONZE FILTER

#### **SPECIFICATIONS**

Type: Cardioid Dynamic Frequency Response: 40 to 16,000 cycles

Output Impedance: 30/50, 150/250 and 20,000 ohms

(selection by connections in microphone cable plug)

Output Level:  $-54 \text{ dbm}/10 \text{ dynes/cm}^2$ 

Pickup Pattern: Cardioid

**Hum:**  $-120 \text{ db } (\text{Ref.: } 10^{-3} \text{ Gauss})$ 

Dimensions: 11/2" diameter at top, 71%" long

not including plug

Weight: 11 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 685A)

### **DESCRIPTION**

PROFESSIONAL QUALITY — Telecasting — Broadcasting — Recording — Sound Reinforcement — for the discriminant purchaser is embodied in the 685A ALTEC Cardioid Microphone. Frequency response, of this model, extends beyond the range of most cardioid microphones, being uniform from 40 to 16,000 cycles. Featuring excellent front-to-back discrimination, Model 685A exceeds the most exacting design factors. It embodied the "new" ALTEC "Golden" diaphragm and the diaphragm and acoustical element are protected against contamination of dust, dirt, moisture and foreign materials by the famous ALTEC Sintered Bronze Filter. Model 685A is finished in "non-glare" dark green and black enamel to eliminate undesirable reflections from studio and stage lights. Quick and easy removal of the microphone from the stand is made possible by the No. 13798 "slip-on" stand adapter. The microphone is complete with fifteen feet, two conductor shielded microphone cable.

## IMPEDANCE SELECTION

Before placing the microphone in service determine the impedance requirements of the input system into which



685A

"Cardioid" **Professional Dynamic Microphone** 

# **OPERATING INSTRUCTIONS**

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 150/250 ohms.
XLR5-12 connector in base of microphic Do not remove front screw or screen Depress serrated catch to separate cord and plug from microphone Plug assembly screw "B" "Slip-on" stand adapter Cable clamp screws "A" 5/a"-27 thread FIG. 1

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

(2) Remove plug assembly screw
"B" and stide plug housing
along cable.
(3) For 150/250 ohms white lead
is connected to Pin No. 4.

Shield or ground

Black or common

- (a) To select 30/50 ohms, remove white lead from Pin No. 4 and connect to Pin No. 3.
  (b) To select 20,000 ohms impedance connect white lead to Pin No. 5.

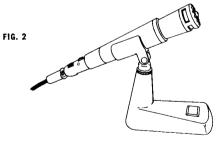
No connection changes should be attempted in the XLR 5-12 connector.

For unbalanced systems, for unbalanced systems, connect black lead (common) and shield (ground) together at amplifier input end of microphone cable, or strap pin No. 1 to pin No. 2 of microphone cannon plug XLR-5-11C.

### **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



Model 685A has a cardioid polar pickup pattern and therefore must be positioned on the microphone stand as illustrated in Fig. 2. A cardioid microphone is sensitive to sound only on its frontal area and must be used in the position shown. This feature eliminates many unwanted audience sounds as well as minimizing the problems of "feedback" in public address, paging and sound systems.



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