

The Cardiline\* Model 642 is a highly directional dynamic microphone utilizing a combination of the characteristics of cardioid and distributed front opening designs. The cardioid action gives the microphone essentially unidirectional characteristics at frequencies up to 500 cps. At this point the distributed front opening takes over for the balance of the range to which it responds providing directional characteristics illustrated in the polar diagram, Figure 3.

Benefits derived from this design include wider range response, higher level and greater directivity than has ever before been incorporated in one microphone of this type. These features make possible a working distance which is two or three times that of conventional directional microphones.

Greatly reduced susceptibility to mechanical shock transfer is inherent in the design of this unit and problems of wind noise are greatly reduced.

Combined, these features make the Model 642 an ideal choice for boom use, or for other applications where added working distance is required.

For wide-range response and comparatively small size, plus greatly increased directivity and working distance, the Model 642 has no equal.

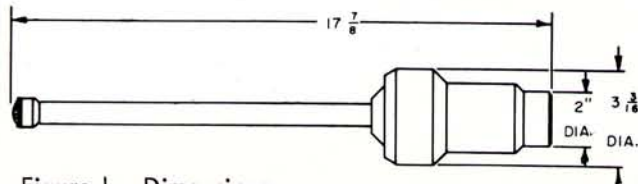


Figure 1 - Dimensions

\* U. S. Patent No. 3,095,484

## SPECIFICATIONS

Element: Dynamic

Frequency Response: 30 to 10,000 cps or choice of 5 or 10 db low frequency reduction steps with external screwdriver slot adjustment. Positions — F = Flat 1 = First position rolloff, 2 = Second position rolloff. (See Figure 2)

Polar Pattern: Cardiline Unidirectional (Figure 3)

Impedance: 50, 150, and 250 ohms. Impedance changed by means of external screwdriver slot adjustment.

Output Level: -48 db re 1 mw/10 dynes/cm<sup>2</sup>

EIA Sensitivity Rating: -142 db — 150 ohm

Hum Pick-up Level: -120 db m. Re .001 gauss

Diaphragm: E-V Acoustalloy®

Magnetic Circuit: Ceramic Indox V and Armco magnetic iron in non-welded circuit.

Case Material: Cast Aluminum

Dimensions: Length, 17-7/8 inches

Maximum diameter, 3-3/16 inches

Finish: High abrasion-proof, non-reflecting gray

Net Weight: 3 lbs., 4 oz.

Cable: 20 feet, three-conductor, shielded, broadcast type. Equipped with UA-3-11 Cannon conductor, which mates with UA-3-14 supplied on the microphone.

Microphone Connector: Microphone supplied with Cannon UA-3-14. Can be easily changed to a Cannon XL-3-14.

Available Accessories: Model 322 stand clamp  
Model 327 combination shock mount and windscreen.

Warranty: Two year unconditional warranty with a life-time warranty against defects in workmanship and materials.



Note: A number of specially designed accessories are available for use with the Model 642. One of these depending on the application, is necessary for proper mounting of this microphone. The Model 322 stand clamp is intended for mounting the 642 to a floor stand. The Model 356 shock mount adapts the 642 for use with floor stand on boom. The Model 324 shock mount is designed for boom use only and will readily accept the Model 326 windscreen. The Model 327, which consists of the Model 324 and 326, is a combination shock mount and windscreen.

### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a highly directional dynamic type, with a combination of cardioid and distributed front opening actions and with a frequency response of from 30 to 10,000 cps. From rear above 500 cps the microphone shall exceed cancellation of 20 db.

The diaphragm shall be nonmetallic Acoustalloy and shall have a magnetic shield to prevent dust and iron particles from reaching the diaphragm. The available impedances shall be 50, 150, and 250 ohm. It shall be possible to select impedance by means of an external screwdriver slot adjustment. Line shall be balanced to ground and phased.

The output level shall be -48 db, with 0 db equalling 1 mw/10 dynes/cm<sup>2</sup>. The magnetic circuit shall be a non-welded circuit and employ ceramic Indox V and Armco magnetic iron.

The case shall be made of cast aluminum. The microphone shall have a maximum diameter of 3-3/16 inches, a length of 17-7/8 inches and a weight of 3 lbs., 4 oz. without cable. Finish shall be high abrasion-proof, non-reflecting gray. A 20 ft. three-conductor, synthetic rubber jacketed, broadcast type cable shall be provided. The microphone shall have a built-in cable connector similar or equivalent to the Model UA-3-14 which will mate with a connector similar or equivalent to Model UA-3-11 on the cable. Electro-Voice Model 642 is specified.

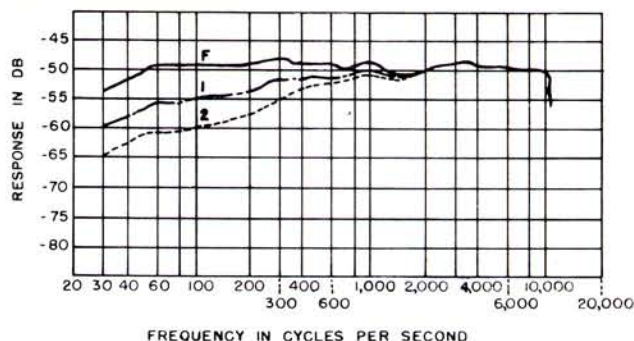
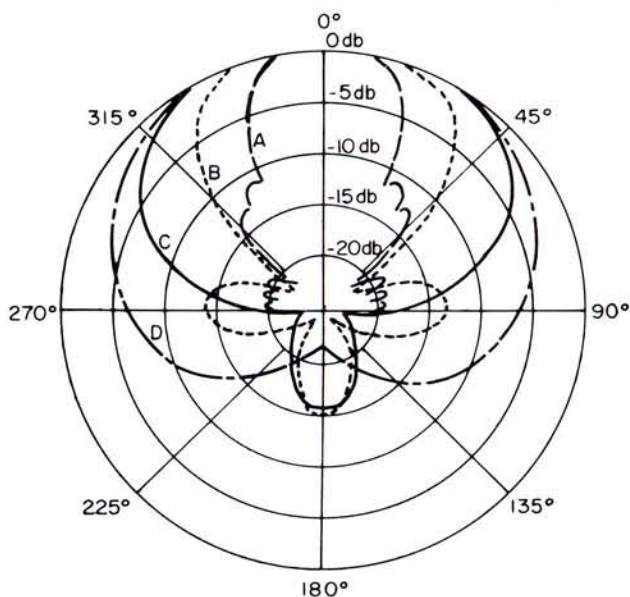


Figure 2 - Response



A-10,000 cps C-1,000 cps  
B- 2,500 cps D- 100 cps

Figure 3 - Polar Pattern

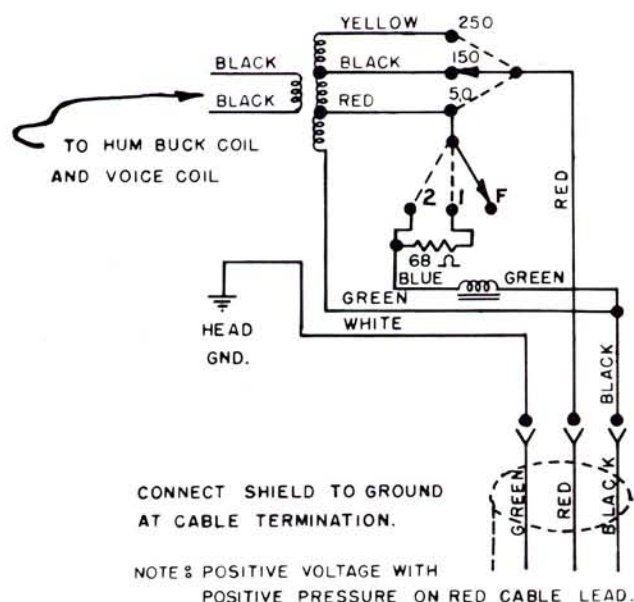


Figure 4 - Wiring