



**DESCRIPTION AND APPLICATIONS**

Designed for specialized and extended long-range pickup, the model 643 Cardiline\* microphone combines the best characteristics of cardioid and distributed front-opening designs. This microphone provides a cardioid pickup pattern up to 100 cps and is highly directional over the balance of its range. (see Fig. 4) The microphone includes integral two-position low frequency tilt-down and cutoff filters for suppression of room reverberation and retention of "presence".

- The microphone comes equipped with a sharp cut-off, high-pass filter with high attenuation of frequencies below 100 cps, located at the rear of the microphone, under the bar. It is important that the input impedance of the filter be adjusted to equal the microphone's impedance. An external switch is provided for this purpose. The "off" position switches the microphone straight through.

**INSTRUCTIONS**

- Attach front tube section to rear section with red tabs matching.
- The microphone balance may be adjusted by loosening the two screws on the swivel mount and sliding the bar until the desired balance is achieved.
- The bass frequency control is located on the back of this microphone. It may be adjusted with a screwdriver. Positions: F = Flat; 1 = First Position Rolloff; 2 = Second Position Rolloff (See Figure 3)
- To change impedance, remove the three screws in the Bass Control Switch Plate and remove this assembly. The terminal board is on the rear of the bass control switch. The jumper wire connected to the 150-ohm tap can be resoldered to the desired tap.
- Instructions for replacement of wind screen components are furnished with replacement kit.

**SPECIFICATIONS**

Element: Dynamic  
 Output Level: -48 (1 mw/10 dynes)  
 Frequency Response: Flat from 30 to 10,000 cps or choice of 5 or 10 db low frequency reduction steps with external screwdriver slot adjustment. Position — F = Flat, 1 = First Position Rolloff, 2 = Second Position Rolloff, (See Figure 3)  
 Sharp cutoff highpass filter provided to eliminate frequencies below 100 cps with use of external switch.  
 Polar Pattern: Cardioid-line  
 Diaphragm: Acoustalloy®  
 Impedances Available: 50, 150, 250 ohms  
 Switches: Low Frequency Reduction  
 Cable Connector: Cannon UA-3-11 (furnished)  
 Cable: 20 ft. cable furnished  
 Case and Frame Material: Aluminum  
 Finish: Grey Metalustre  
 Net Weight: 12 lbs.  
 Hum Pickup Level: -125 db (re.001 gauss field)

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

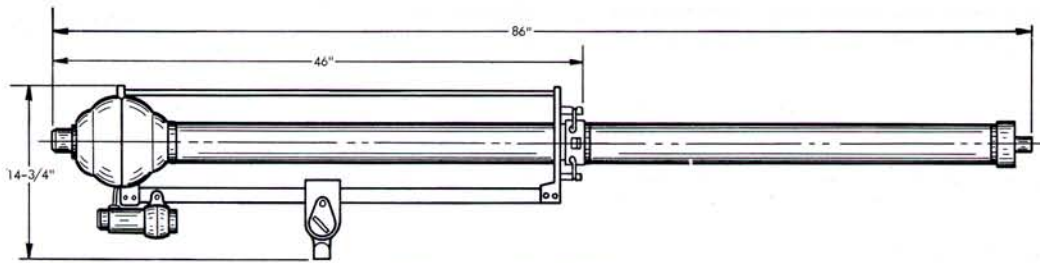


FIG. 1 - DIMENSIONS

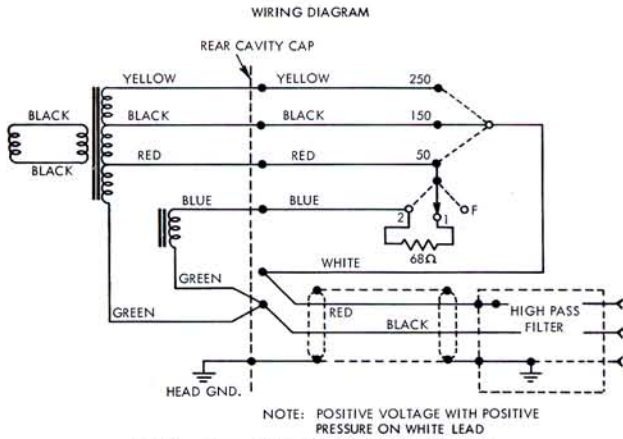


FIG. 2 - WIRING DIAGRAM

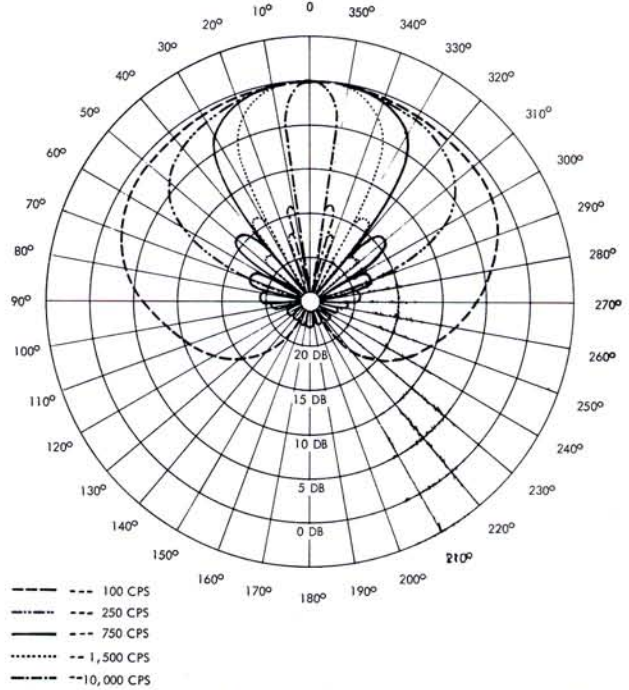


FIG. 4 - POLAR PATTERN

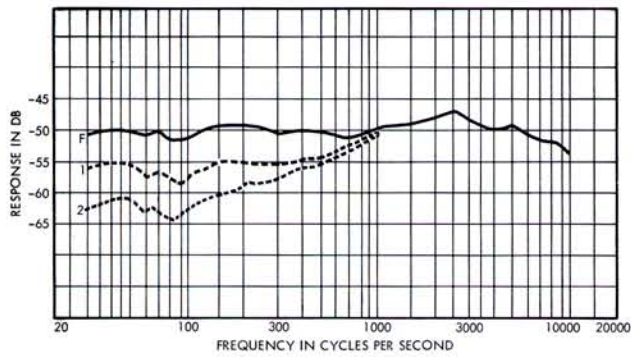


FIG. 3 - FREQUENCY RESPONSE

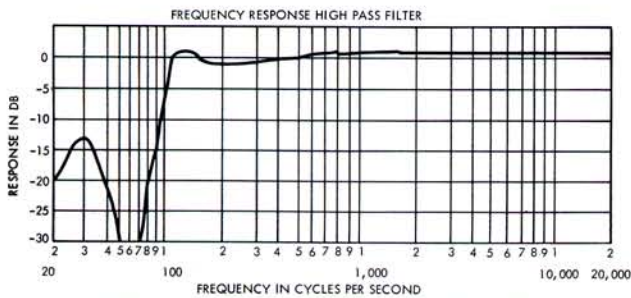


FIG. 5 - FREQUENCY RESPONSE  
Model 513 Filter

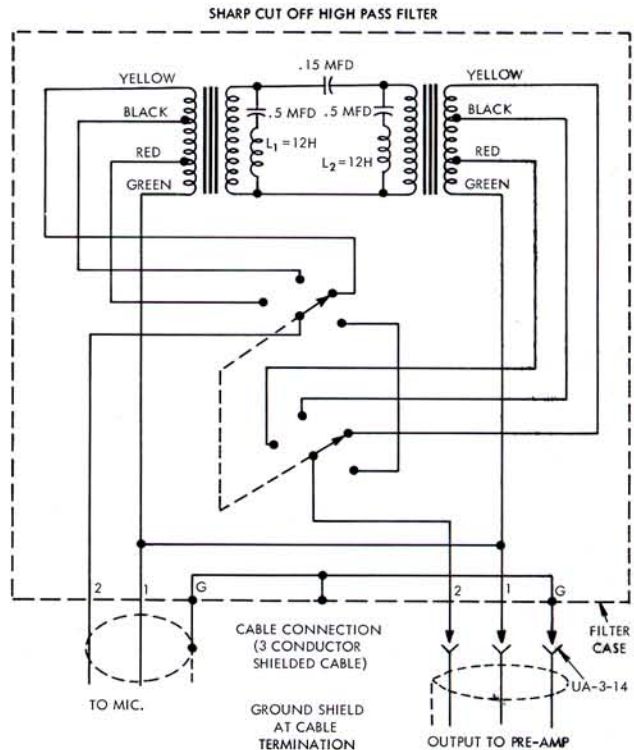


FIG. 6 - WIRING DIAGRAM  
Model 513 Filter