

**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 Hz and is highly directional over the balance of its range (See Figure 4). The microphone includes integral two-position, low frequency tilt-down and cutoff filters for suppression of room reverberation and retention of "presence."

**INSTRUCTIONS**

1. Attach front tube section to rear section with red tabs matching.
2. 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.
3. 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).
4. 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.
5. Instructions for replacement of wind screen components are furnished with replacement kit.
6. The microphone comes equipped with a sharp cutoff high-pass filter with high attenuation of frequencies below 100 Hz, 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.

**SPECIFICATIONS**

<b>Generating Element:</b>	Dynamic
<b>Frequency Response:</b>	Flat from 30 to 10,000 Hz or choice of 5 or 10 dB low frequency reduction steps with external screwdriver slot adjustment. (See Figure 3)
<b>Polar Pattern:</b>	Cardioid-line
<b>Impedances Available:</b>	50, 150, or 250 ohms
<b>Output Level:</b>	-48 dB (1 mw/10 dynes)
<b>Hum Pickup Level:</b>	-125 dB (Ref. .001 gauss)
<b>Diaphragm:</b>	Electro-Voice Acoustalloy
<b>Case and Frame Material:</b>	Aluminum
<b>Dimensions:</b>	See Figure 1
<b>Finish:</b>	Gray Metalustre
<b>Net Weight:</b>	12 pounds
<b>Switches:</b>	Low Frequency Reduction
<b>Cable:</b>	18', two-conductor, shielded, broadcast type cable, synthetic rubber jacketed
<b>Cable Connector:</b>	Switchcraft A3F furnished

**643 CARDILINE MICROPHONE**

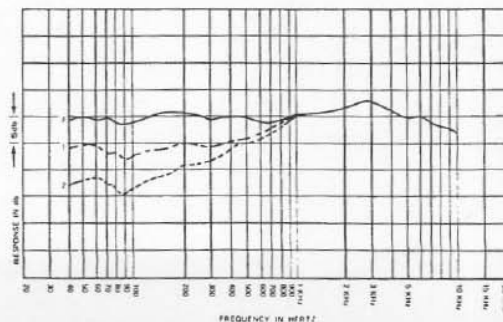


Figure 1 - Frequency Response

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

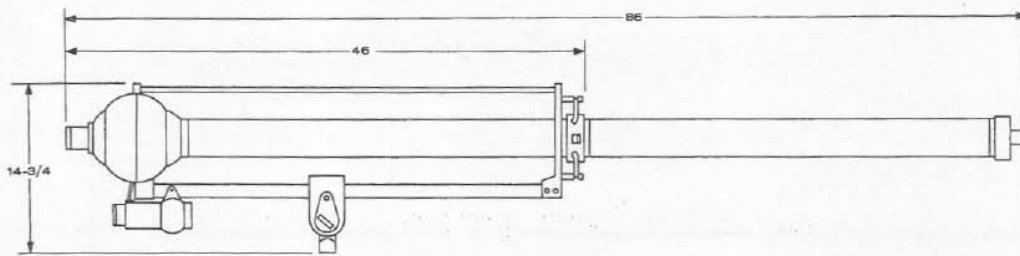


Figure 2 - Dimensions

**WARRANTY**

Electro-Voice Professional Broadcast and Recording Microphones are guaranteed unconditionally against malfunction for two years from date of purchase. Within this period Electro-Voice will, at its option, repair or replace any E-V professional microphone exhibiting any malfunction regardless of cause, including accidental abuse. This warranty does not cover finish or appearance. Also, every Electro-Voice microphone is guaranteed for the life of the microphone to be free of factory defects in materials and workmanship, and will be repaired or replaced (at our option) at no charge if exhibiting malfunction from this cause. Microphones for warranty repair must be shipped prepaid to Electro-Voice, Inc., or its authorized service agency, and will be returned prepaid.

For correct shipping address and instructions on return of Electro-Voice products for repair and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone: 616/695-6831).

Electro-Voice also maintains complete facilities for non-warranty service.

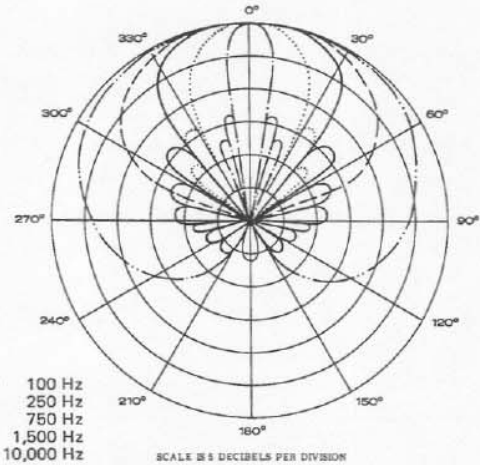
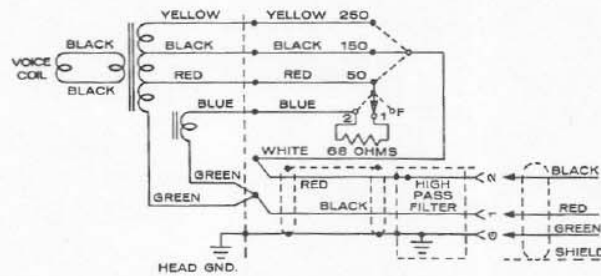


Figure 3 - Polar Pattern



POSITIVE PRESSURE ON GENERATING ELEMENT CAUSES POSITIVE VOLTAGE ON RED CABLE LEAD, REF. TO BLACK CABLE LEAD.

Figure 4 - Wiring Diagram

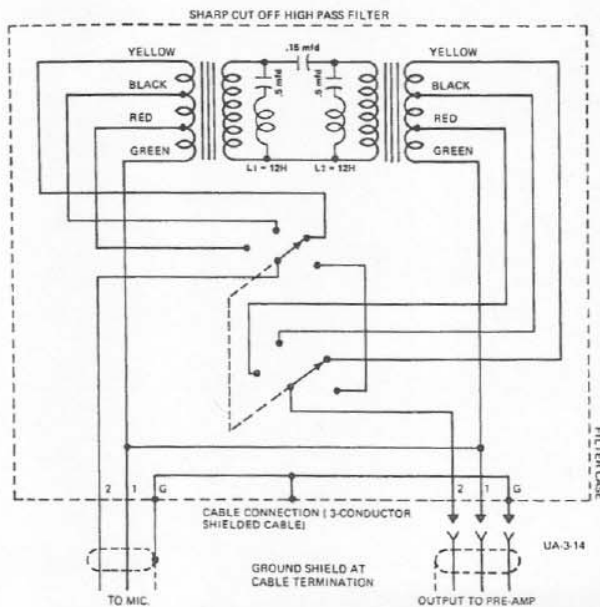


Figure 5 - Wiring Diagram (model 513 filter)

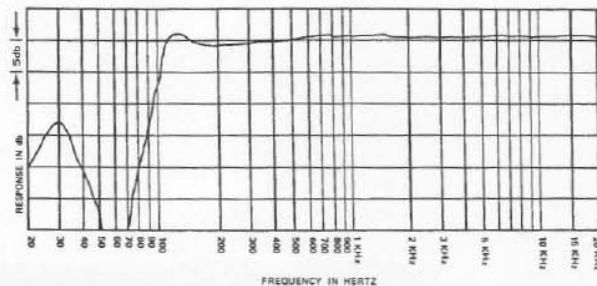


Figure 6 - Frequency Response (model 513 filter)

