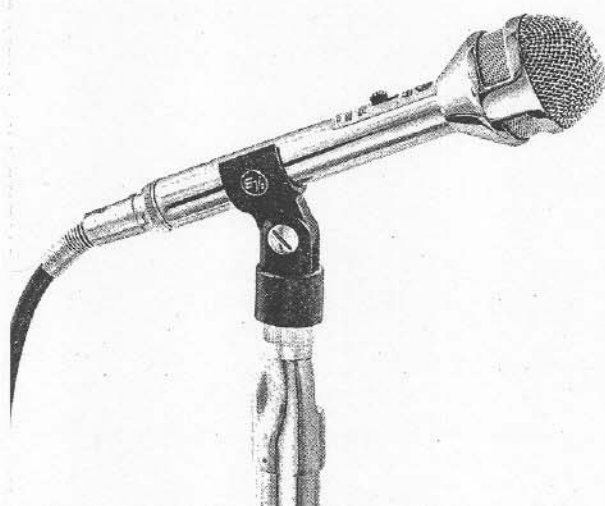


Figure 1 - Dimensions

DESCRIPTION

The Electro-Voice Model 627 is a dynamic cardioid microphone created especially for the more difficult public address applications where the control of feedback is a major problem and small size is important.

The Model 627 features the exclusive non-metallic Electro-Voice acoustalloy[®] diaphragm that assures very smooth frequency response, yet is virtually impervious to damage from extremes of temperature and humidity. The transducer assembly utilizes a mechanical nesting design concept. The internal parts are nested, one within another, resulting in a nearly solid mechanical structure that is highly resistant to damage from mechanical shock. As part of this assembly, an integral shock absorber isolates the transducer assembly from mechanical noises to prevent transmission of these noises to the microphone signal. The internal filter allows close talking and prevents accumulation of dirt and magnetic particles on the diaphragm.

The styling of the sturdy, pressure die-cast case emphasizes the trend toward functional simplicity in modern design. Finish is either satin chrome or non-reflecting matte satin nickel.

SPECIFICATIONS

Generating Element: Dynamic
 Frequency Response: 80 - 11,000 Hz (see response curve, Figure 1)
 Polar Pattern: Cardioid
 Impedance: High impedance or 150 ohms (specify when ordering)
 Low impedance balanced to ground
 Output Level:
 Hi-Z: -58 db (0 db = 1 volt/dyne/cm²)
 Lo-Z: -58 db (0 db = 1 mw/10 dyne/cm²)

EIA Sensitivity Rating:

Hi-Z: -153 db, Lo-Z: -151 db

Diaphragm: Electro-Voice Acoustalloy[®]

Case: Pressure die-cast zinc

Finish: Chrome or Matte Satin Nickel

Accessories Included: 310 adapter

Switch: On - Off

Dimensions: 1-19/32" dia., 6-7/16" long (excluding cable connector), 3/4" shank dia.

Net Weight: 6 oz. (excluding cable)

Cable Connector: 80M (Amphenol) Hi-Z

80-MC2M (Amphenol) Lo-Z

Cable: Hi-Z, 15' single conductor, shielded, synthetic-rubber jacketed.

Lo-Z, 15' two-conductor, shielded, synthetic-rubber jacketed.

Optional Accessories: Model 311 "snap out" clamp

APPLICATIONS

The Model 627 frequency response has been carefully shaped (above 500 Hz) to maintain "presence" for vocal and musical pickup. Low-frequency response varies with distance from sound to the microphone as shown on the response curve (Figure 3). Maximum bass response is produced in close-up use with the microphone at two inches from the sound source. (Figure 3-A). Minimum bass response is experienced at distances greater than 24". (Figure 3-B).

Useful special effects can be created by imaginative application of the variable low-frequency response:

1. By working closer to the microphone (than would otherwise be natural), the human voice will sound more robust.
2. "Feedback" in a public address system is sustained by the reflection of sound back into the

microphone. As the artist moves closer, the level of his voice (at the microphone) increases and the microphone's signal to the amplifier is increased. For a constant volume of sound from the system, the amplifier gain setting must be reduced. This results in a reduction of the system sensitivity to reflected sound, hence a reduction of the tendency to "feedback".

The Model 627 is 10 db more sensitive at 2" than it is at 24" to a 100 Hz tone. (The advantage is even greater at 200 Hz). Further, sensitivity of the microphone at the rear to a 100 Hz tone is reduced by approximately 18 db (compared to sensitivity 2" in front). System sensitivity reduction (because of close working) added to the advantage resulting from the unique low-frequency characteristic of the Model 627, make it an exceptionally effective tool for stage and night club use.

3. For musical pickup, the variable bass response can be utilized to achieve "clean" bass pickup at distances of 12" or more. By moving the Model 627 to a few inches from the instrument, bass will be increased.

CAUTION NOTES

With the sound source (lips) closer than 2", bass response is increased dramatically (even more than is shown in Figure 1-A). If too much signal is generated at the microphone, overloading in the amplifier input circuits may occur, causing severe distortion.

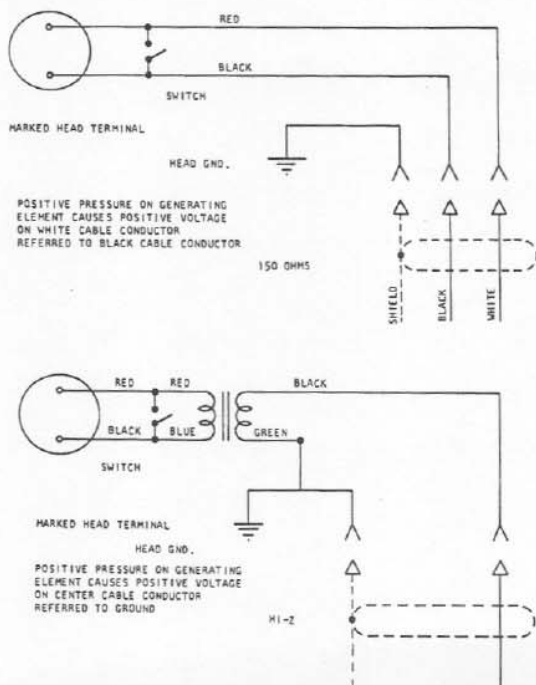


Figure 2 - Wiring Diagrams

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Response shall be 80 to 11,000 Hz, specially shaped above 500 Hz to maintain presence for vocal and musical pickups, and shall vary inversely with distance below 500 Hz. 100 Hz response with sound source 24" from microphone shall be nominally 10 db lower than response with sound source 2" from microphone. Response at front of microphone at 1,000 Hz shall be nominally 18 db greater than response at rear.

The microphone shall be available in high impedance and low impedance. Output level for high impedance shall be -58 db and EIA sensitivity rating shall be -153 db (0 db = 1 volt/dyne/cm²). Output level for low impedance shall be -58 db and EIA sensitivity rating shall be -151 db (0 db = 1 mw/10 dynes/cm²). The microphone shall have a non-metallic Acoustalloy[®] diaphragm. An "On-Off" switch shall be provided so connected that transducer is "shorted" when switch is in "Off" position. A fifteen foot (single conductor for Hi-Z, or two conductor for Lo-Z, shielded, synthetic rubber-jacketed cable with Amphenol (80-MC-2M for Lo-Z or 80-M for Hi-Z) connector installed at microphone end shall be provided. Low impedance connections shall provide balanced line configuration.

The case shall be pressure-cast zinc. Dimensions shall be: 1-19/32" diameter (major), 6-7/16" long, not including cable connector, with shank diameter 3/4". Net weight (less cable) shall be 6 oz. Finish shall be satin chrome (or matte satin nickel - specify). An Electro-Voice Model 310 stand clamp adapter shall be furnished. The Electro-Voice Model 627 (high or low impedance, specify one) is specified.

WARRANTY

The Electro-Voice Model 627 is guaranteed against defects in workmanship and materials.

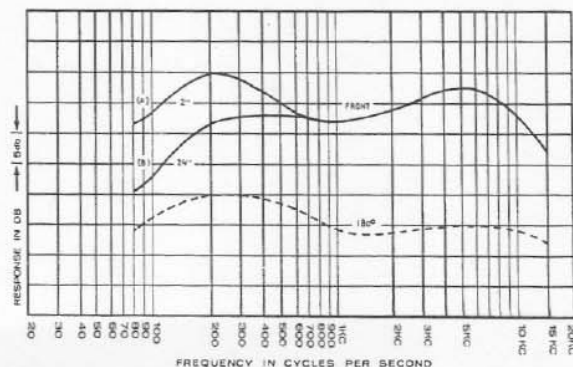


Figure 3 - Frequency Response Characteristics