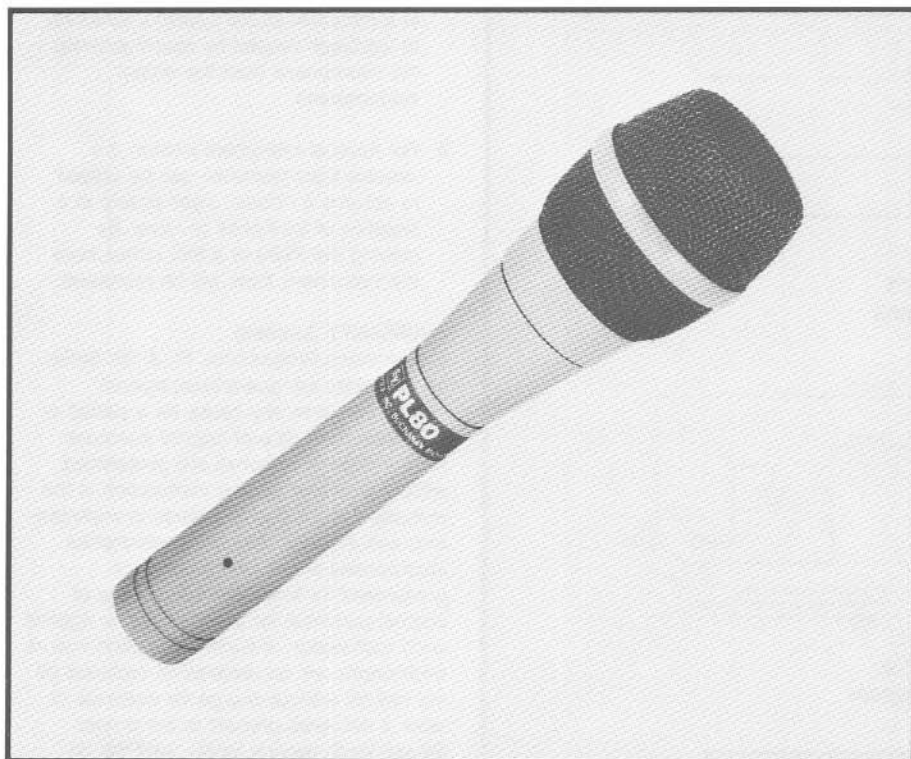




Electro-Voice®

a MARK IV company

Model PL80

Dynamic Super Cardioid Vocal Microphone

SPECIFICATIONS

Generating Element:

Dynamic

Frequency Response (see Figure 3):

60 to 17,000 Hz

Polar Pattern (see Figure 4):

Supercardioid

Impedance:

150 ohms balanced

Output Level:

-56 dB

(0 dB = 1 mW/10 dynes/cm²)

EIA Sensitivity:

-150 dB

Pop Filter:

Built-in Acoustifoam™

Grille Screen Material:

Memraflex

Case Material:

Die-cast zinc and aluminum

Dimensions:

191 mm (7.5 in.) long,

50.8 mm (2.0 in.) maximum diameter

25.4 mm (1.0 in.) shank diameter

Net Weight:

350 g (12.3 ounces)

Finish:

Snow gray body with contrasting charcoal grille

Accessories Included:

301 stand adapter

Zippered vinyl carrying case

Optional Accessories:

376 windscreen

380 attenuator

541—25 ft professional cable with

A3F-type connector at mic end

542—25 ft professional cable with

A3F & A3M-type connectors

543—25 ft professional cable with

switch connector at mic end

544—50 ft professional cable with

A3F & A3M-type connectors

DESCRIPTION AND APPLICATIONS

The Electro-Voice PL80 is a single-D dynamic supercardioid microphone designed for the professional vocalist. All parameters of the PL80 were developed to provide maximum enhancement of the performer's voice in hand-held applications. The single-D design provides the up-close bass boost (proximity effect) preferred by many entertainers. Also, Electro-Voice engineers, after an intensive period of analysis and testing, perfected a new microphone measuring procedure. Traditional measurements (such as those shown in Figure 3) are of limited design value because they do not adequately relate to the sound of a vocal microphone in actual use. In contrast, our new procedure produces a measurement which correlates precisely with the sound quality of the microphone. The procedure utilizes a computer-generated Fast Fourier Transform (FFT) of the complex vocal waveform. The transformation provides a visual display of the separate frequency components which make up the waveform. The fundamental and all harmonics as well as the relative strength of each component are displayed. Appropriately processed, this information, for the first time, provides an efficient and truly effective design guide that relates directly to the "sound" desired by the performer. Our application of the FFT technique is fundamentally related to the uniquely superb sound of the PL80.

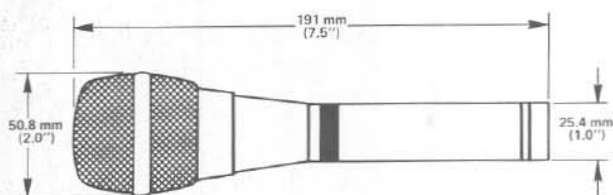
The tight supercardioid directional characteristic, unusually uniform over the entire frequency range (see Figures 3 and 4), provides high feedback resistance when working close to sound reinforcement speaker and sound monitors. A built-in Acoustifoam™ blast filter enables close talking or singing without worry of "P-popping" or other excessive breath and sibilant noise. An effective shock mount keeps handling noise to a minimum. The PL80 is ruggedly designed, featuring parts of aluminum and die-cast zinc. The Memraflex grille screen resists deformation.

USING THE VARIABLE LOW-FREQUENCY RESPONSE (PROXIMITY EFFECT)

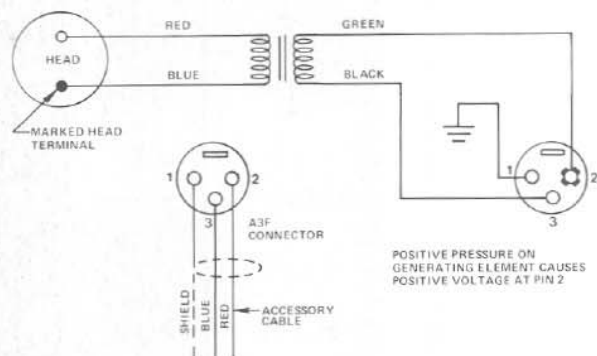
The PL80's low-frequency response varies with distance from the sound source to the microphone as shown in Figure 3. Maximum bass response is produced in close-up use with the microphone 1/4-inch from the sound source. Minimum bass response is experienced at distances greater than 24 inches.

Useful special effects can be created by an imaginative application of the PL80's proximity effect:

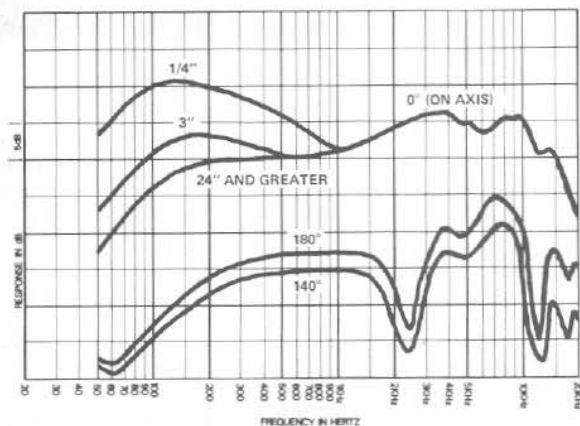
1. By working closer to the microphone, the human voice will sound more robust.
2. Working close to the PL80 provides a reduced tendency to PA system feedback over and above that provided by the supercardioid directional characteristic alone. When close-talked, the substantial bass boost provides an increase in overall microphone output level. The mixer gain may be proportionately reduced, resulting



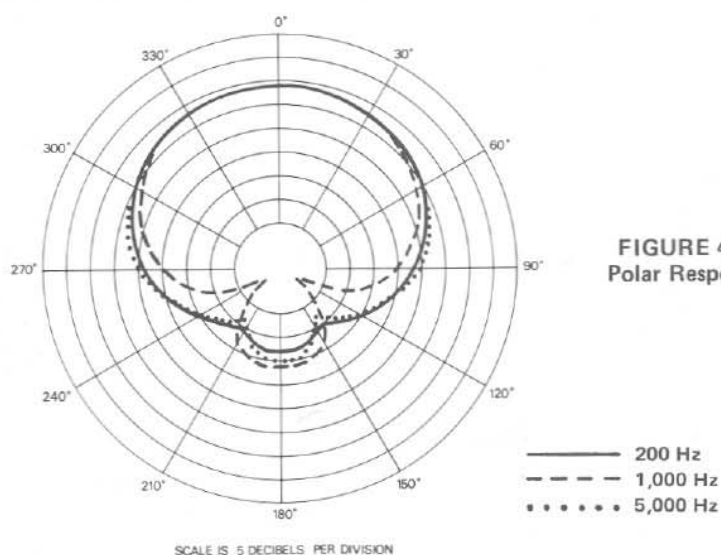
**FIGURE 1 —
Dimensions**



**FIGURE 2 —
Wiring Diagram**



**FIGURE 3 —
Frequency Response**



**FIGURE 4 —
Polar Response**

2. Working close to the PL80 provides a reduced tendency to PA system feedback over and above that provided by the super-cardioid directional characteristic alone. When close-talked, the substantial bass boost provides an increase in overall microphone output level. The mixer gain may be proportionately reduced, resulting in a reduction of the system's sensitivity to feedback caused by sound entering the microphone from the distant loudspeakers.
3. For musical instrument pickup, the variable bass response can be utilized to achieve a "clean" bass pickup at a distance of 24 inches or more. By moving the PL80 to a few inches from the instrument, bass will be increased.

WARRANTY (Limited) —

Electro-Voice Pro-Line Microphones (excluding Model PL88) are guaranteed unconditionally against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and materials. If such malfunction occurs microphone will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. (Any active electronics incorporated in a microphone are guaranteed for three years from date of original purchase against such malfunction.) Warranty does not cover finish, appearance items, cable, cable connectors, or switches. Defect guarantee does not cover malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

The PL88 is guaranteed for two years from date of original purchase against defects in workmanship and materials.

For repair information and service locations, please write: Service Dept., Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone: 616/695-6831) or Electro-Voice West, 8234 Doe Avenue, P.O. Box 3297, Visalia, CA 93277 (Phone: 209/651-7777).

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

Specifications subject to change without notice.