

FIGURE 1 – Dimensions

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model DS35 is a dynamic Single-D cardioid microphone created especially for professional applications. The Single-D design emphasizes low frequencies when used “close up.” Perfect for the exacting needs of high quality sound reinforcement and other professional performer applications where proximity effect or “bass boost” is desired, the DS35 is ruggedly designed and attractively styled. The broadcast painted finish of fawn beige Micomatte minimizes glare for camera use.

A new microphone head design and an exclusive Volumetric-hologram designed diaphragm provide exceptionally wide, linear response at all angles of incidence for extremely high gain before feedback in sound reinforcement applications and virtual elimination of off-axis coloration. Research has, for the first time, produced a wide-range, very smooth response Single-D cardioid microphone.

The head subassembly is shock-mounted in the case by a newly designed pneumatic shock absorber which very effectively isolates the transducer assembly from mechanical noises. A blast filter is integral with the microphone to allow close talking without excessive “P-popping” and also prevents dirt and magnetic particles from accumulating on the diaphragm.

SPECIFICATIONS

Type:	Dynamic
Frequency Response:	60 to 17,000 Hz
Polar Pattern:	Cardioid
Impedance:	150-Ohms balanced

Output Level:	-60 dB (0 dB = 1 mw/10 dynes/cm ²)
EIA Sensitivity Rating:	-152 dB
Diaphragm:	Acoustalloy with laminated Volumetric dome
Case:	Turned Steel
Finish:	Fawn beige Micomatte
Accessories Included:	Model 312A Clamp
Dimensions:	7¼” (184mm) long, 1-7/8” (48mm) max. dia. ¾” (19mm) shank diameter
Net Weight:	9.2 ounces (261g)
Cable:	15’ (457cm), 2-conductor, shielded, synthetic rubber jacketed with Switchcraft A3F connector.

USING THE VARIABLE LOW FREQUENCY RESPONSE

The DS35’s low frequency response varies with the distance from the sound to the microphone as shown in the response curve (Figure 3). Maximum bass response is produced in close-up use with the microphone one-quarter-inch from the sound source (Figure 3/A). Minimum bass response is experienced at distances greater than 24” (61 cm) (Figure 3/C). Useful effects can be created by imaginative application of the variable low-frequency response:

1. By working closer to the microphone than might otherwise be natural, the human voice will sound more robust, although intelligibility may be adversely affected.
2. Feedback in a public address system is sustained by reflection of sound into the microphone. For all microphones, 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 proportionately reduced. This results in a reduction of the system’s sensitivity to reflected sound, hence a reduction of the tendency to feedback.



The variable low-frequency response of the DS35 provides a further feedback-reducing advantage in close-talking applications. At one-quarter-inch, low-frequency response is greatly enhanced, while response to distant sound (as from sound system loudspeakers) is unaffected. The result is a reduced tendency to feedback, over and above that provided by the cardioid directional characteristic alone.

In short, system sensitivity reduction because of close working, added to the advantage resulting from the bass boosting low-frequency characteristic of the DS35, makes this instrument an exceptionally effective tool for stage and nightclub use.

- For musical pickup, the variable bass response can be utilized to achieve "clean" bass pickup at distances of 12" (305cm) or more. By moving the DS35 to a few inches from the instrument, bass will be increased.

CAUTION NOTES: With the sound source (lips) closer than 2 inches, bass response is increased dramatically (as shown in Figure 3/A/B). If too much signal is generated at the microphone, overloading in the amplifier input circuits may occur, causing severe distortion.

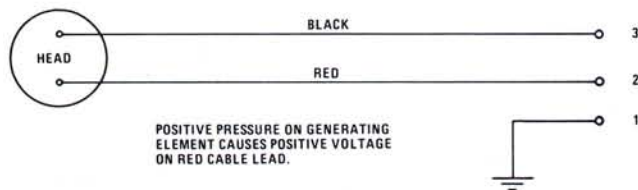


FIGURE 2 – Wiring Diagram

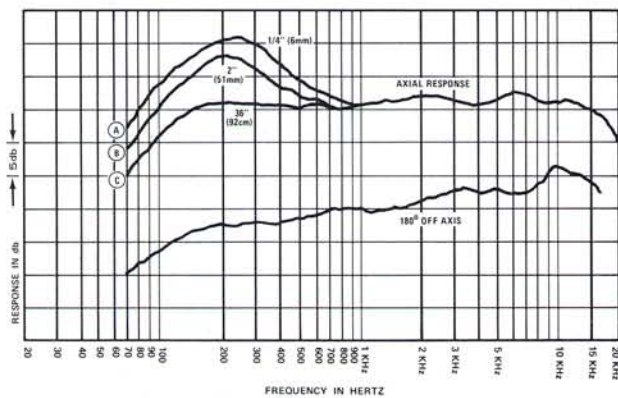


FIGURE 3 – Frequency Response

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Frequency response shall be 60 to 17,000 Hz, specially shaped above 1000 Hz to maintain presence for vocal and musical pickups, and below 1000 Hz shall vary inversely with distance. Response at the front of the microphone at 1000 Hz shall be nominally 18 dB greater than response at the rear.

The microphone shall have an output of -60 dB (0 dB = 1 mw/10 dynes/cm²). The microphone shall have an

Acoustalloy diaphragm with laminated Volumetric dome. An integral blast filter shall be provided. A 15-foot (457cm), 2-conductor shielded, synthetic rubber-jacketed cable with Switchcraft A3F connector installed in the microphone end shall be provided. Low impedance connections shall be balanced line configuration.

The case shall be machined steel. Dimensions shall be 7¼" (184mm) long, 1-7/8" (48mm) diameter, ¾" (19mm) shank diameter, and weight shall be 9.2 ounces (261g). A Model 312A clamp shall be provided. Finish shall be fawn beige Micomatte.

The Electro-Voice Model DS35 is specified.

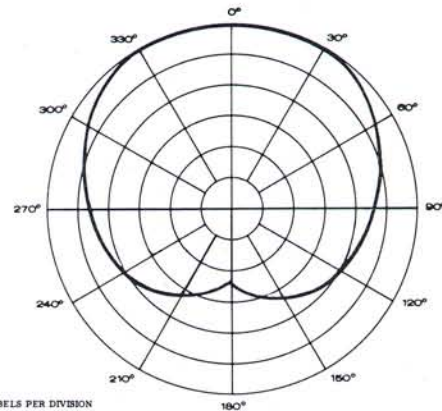


FIGURE 4 – Polar Response

WARRANTY

Electro-Voice Professional Broadcast, Recording, and Sound Reinforcement Microphones are guaranteed unconditionally against malfunction from any cause for a period of two years from date of original purchase. Also, every Electro-Voice microphone is guaranteed for the life of the microphone against malfunction 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. Warranty does not cover finish, appearance items, cables, cable connectors, or switches and lifetime warranty 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.

For correct shipping address, 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 of E-V products.