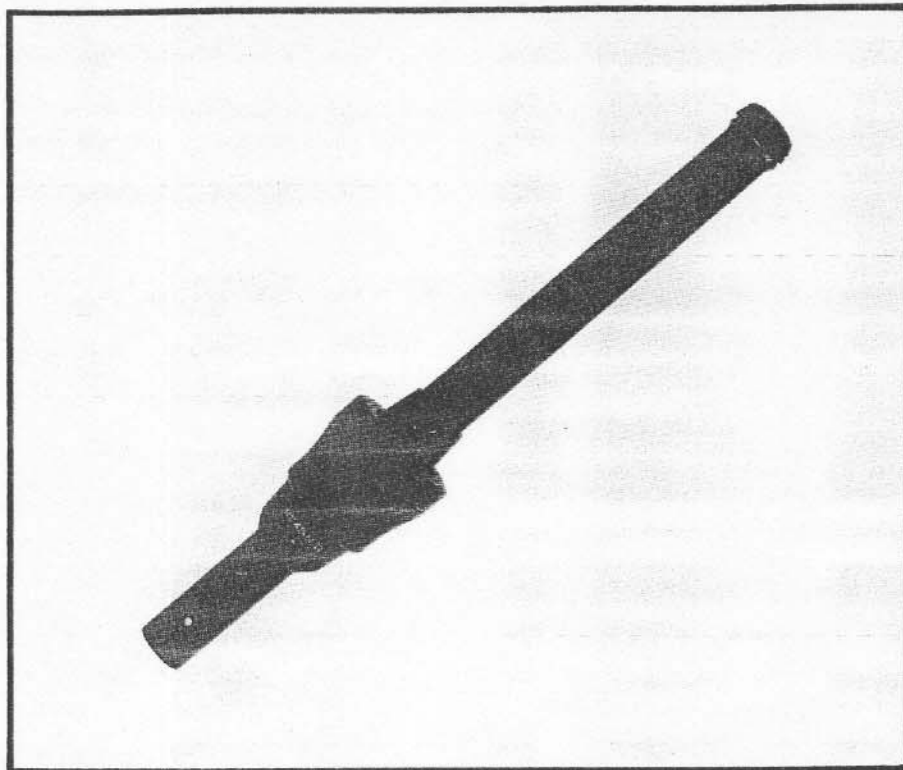




Electro-Voice®

a MARK IV company

Model RE45N/D Cardiline® N/DYM™ Dynamic Shotgun Microphone

SPECIFICATIONS

Generating Element:
Dynamic

Frequency Response:
150 to 15,000 Hz (Far)
50 to 15,000 Hz (Close)
(See Figure 1)

Polar Pattern:
Cardioid-line
(See Figure 3)

Impedance:
600 ohms (nominal)

Output Level:
5 mV/Pascal at 1,000 Hz

Sensitivity:
- 50 dB at 1,000 Hz
(0 dB = 1mW/10 dynes/cm²)

Hum Pickup Level:
- 130 dBm typical at 60 Hz
in a 1 m OE field

Magnetic Circuit:
N/DYM™ magnet in a non-welded circuit

Case Material:
Aluminum, steel and high performance
engineering plastics

Dimensions:
292 mm (11.50 in.) long
48 mm (1.87 in.) diameter

Finish:
Black, non-reflecting

Net Weight:
212 g. (7.5 oz.)

Microphone Connector:
A3M

Accessories Included:
Warm-Grip™ handle
323 stand clamp
Zippered vinyl carrying case
Windscreen

Optional Accessories:
307 shock mount
312 microphone clamp
380 attenuator
PLC-25X cable
PLC-25P cable

DESCRIPTION AND APPLICATIONS

The Model RE45N/D is a highly directional microphone utilizing a combination of characteristics of cardioid and distributed front opening designs. The microphone incorporates a revolutionary neodymium alloy magnet to provide high sensitivity and low weight. The exceptional sensitivity of the RE45N/D combined with the inherent low noise of a dynamic transducer insures a high signal-to-noise ratio necessary for those long reach applications. The transducer and integral high pass filtering have been designed to reduce most low frequency handling noises found in handheld applications.

The cardioid action gives the microphone uniform characteristics for frequencies up to 1,500 Hz. For frequencies above 1,500 Hz

the distributed front openings take effect providing narrower directional characteristics as illustrated in the polar pattern, Figure 3. Extra care has been taken in adjusting the directional pattern of this microphone to provide smooth off-axis frequency response. Older design wave-interference microphones often have large peaks and dips in the off-axis response. The irregular off-axis response of the older designs can create problems as the rejection varies widely as the microphone is moved only slightly due to the lobing of the polar pattern. The smooth RE45N/D polar pattern makes the aiming of the microphone at the desired sound source less critical than those older design shotgun microphones while still providing better directivity than that of conventional unidirectional microphones.

Benefits derived from this new design include wide range response, smooth polar response, high sensitivity and high directivity. These features make possible a working distance which is two to three times that of conventional directional microphones. The RE45N/D has been especially designed for handheld use and includes a switchable 250-Hz high-pass filter to further reduce wind and handling noise. The removable Warm-Grip™ handle is designed to fit over the microphone connector and the short handle of the microphone.

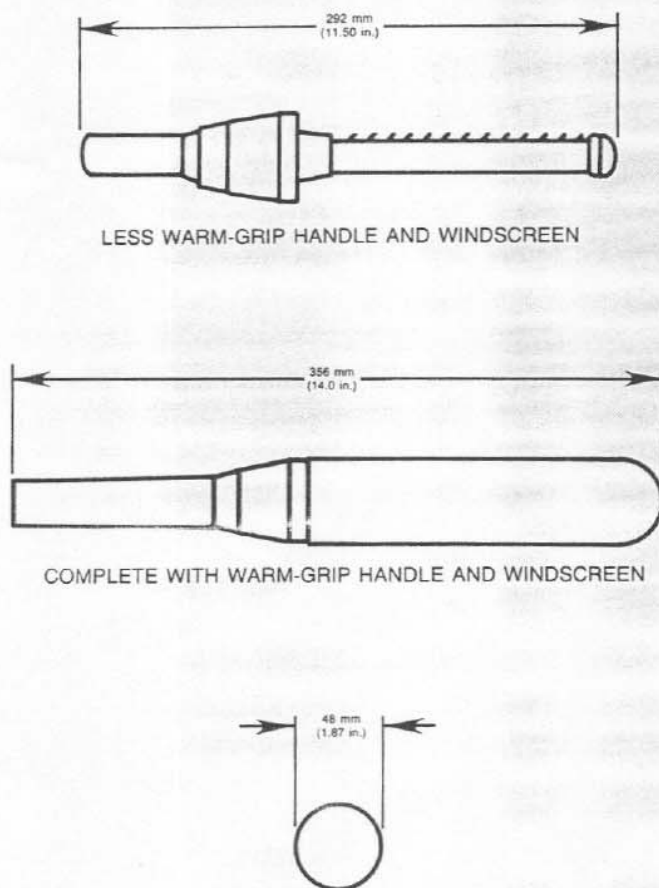
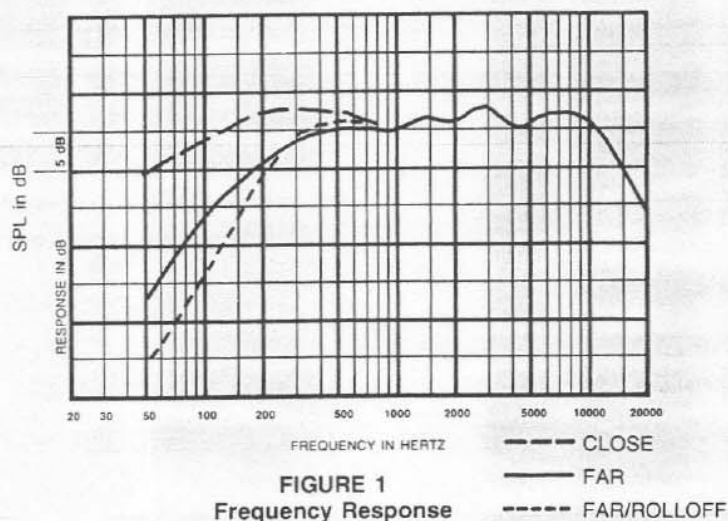


FIGURE 2 — Dimensions

APPLICATIONS NOTES

The RE45N/D is shipped with a windscreen. If the microphone is to be used outdoors it is recommended that the supplied windscreen be used. This windscreen comes with a self-adhesive ring for attaching to the RE45N/D microphone for better shielding. The windscreen will only have to be removed for occasional cleaning or special mounting applications.

The RE45N/D may also be used with the supplied model 323 stand clamp for fixed applications such as podiums. Here the higher directivity will reduce the chance of feedback and the shape of the low frequency response prevents boominess. The tube and handle, less the Warm-Grip™, fit in most standard 3/4-inch stand clamps such as Electro-Voice model 312. Without the windscreen, the RE45N/D can be used with the model 307 shock mount. For more secure permanent mounting the model 310 clamp fits over the handle portion of the RE45N/D.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a highly directional dynamic type with a combination cardioid and distributed front opening principles and with a frequency response from 150 to 15,000 Hz. From the sides, above 2,000 Hz, the microphone shall exceed cancellation of 10 dB.

Sensitivity shall be 5 mV/Pascal or greater. The transducer shall employ a hum-buck coil with a resulting -130 dBm at 60 Hz in a 1 m OE field.

The diaphragm shall be nonmetallic Acoustalloy® and shall have a shield to prevent dust and iron particles from reaching the diaphragm. Impedance shall be 600 ohms. Line shall be balanced to ground and phased.

The output level shall be -50 dB with 0 dB = 1mW/10 dynes/cm². The magnet circuit shall be a nonwelded circuit and employ a neodymium alloy magnet.

Case parts shall be made of aluminum, steel and high performance engineering plastics. The microphone shall be a maximum length of 11.50 in. (292 mm) with a maximum diameter of 1.87 in. (48 mm) without windscreen and without cable. Finish shall be black, non-reflecting. The microphone shall have a built-in cable connector similar or equivalent to the Switchcraft A3M, which will mate with the connector similar or equivalent to the Switchcraft A3F. The Electro-Voice Model RE45N/D is specified.

WARRANTY (Limited)

Electro-Voice Professional, PL & BK Series Microphones (excluding the Model PL88)* are guaranteed against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones (excluding the Model PL88)* are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and material. Any active electronics incorporated in the microphone are guaranteed for three years from date of original purchase for parts and labor against such malfunction. 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 extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized warranty service agencies will void this guarantee. A list of authorized warranty service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice, Inc., 3810 148th Avenue, N.E., Redmond, WA 98052 (AC/206-881-9555) and/or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

*The Model PL88 is guaranteed for two years from date of original purchase against malfunction due to defects in workmanship and materials.

Service and repair address for this product:
Electro-Voice, Inc., 600 Cecil Street,
Buchanan, Michigan 49107.

Specifications subject to change
without notice.

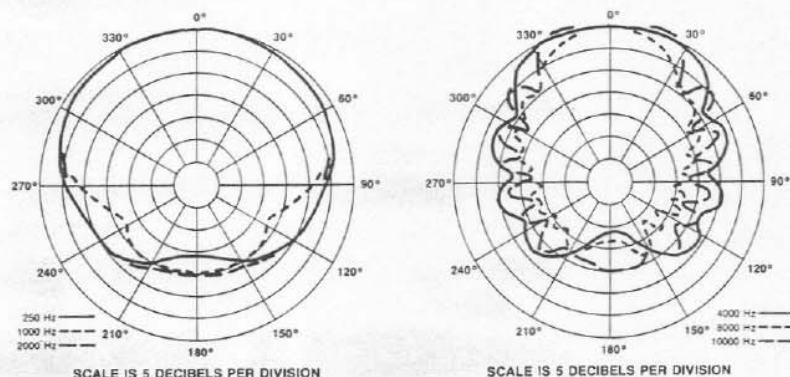


FIGURE 3 — Polar Response

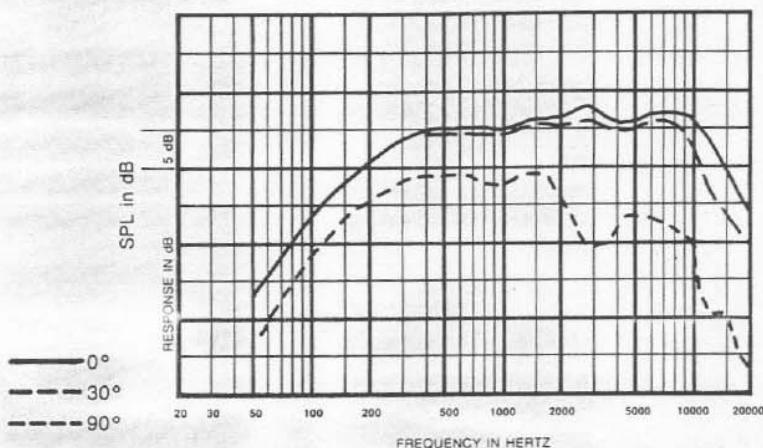


FIGURE 4 — Off-Axis Frequency Response

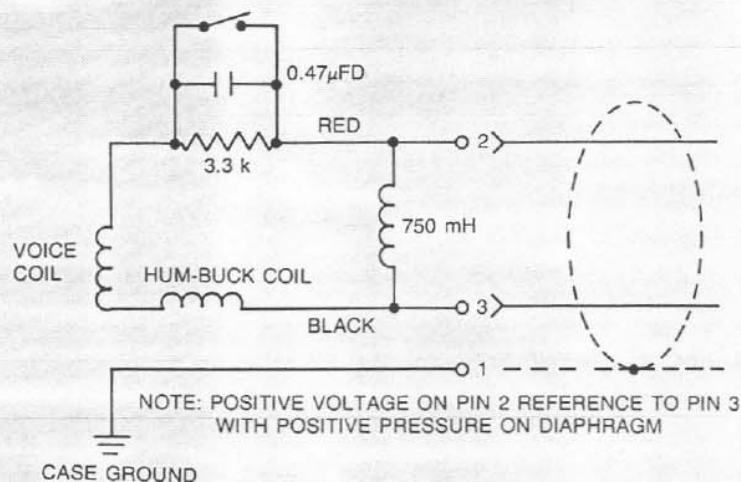


FIGURE 5 — Wiring Diagram