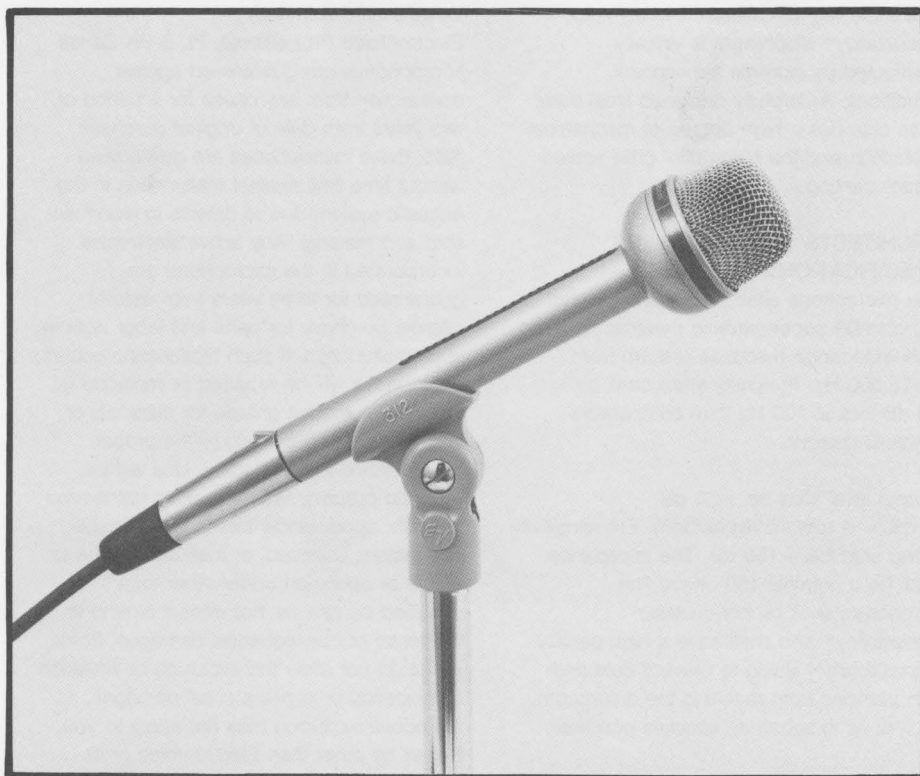




Electro-Voice®
a MARK IV company

Model RE18

Variable-D®

Dynamic Super-Cardioid

Microphone

SPECIFICATIONS

Element:

Dynamic

Frequency Response:

80-15,000 Hz

Polar Pattern:

Super-cardioid

Impedance:

Lo-Z (150 ohms nominal)

Output Level:

-57 dB

(0 dB = 1 mW/10 dynes/cm²)

EIA Sensitivity Rating:

-150 dB

Hum Pickup Level:

-125 dBm

(re: .001 gauss field)

Diaphragm:

Electro-Voice Acoustalloy®

Case Material:

Steel

Dimensions:

178 mm (7.0 in.) long

41 mm (1.63 in.) maximum diameter

19 mm (0.75 in.) shank diameter

Finish:

Fawn beige

Net Weight:

230 g (8 oz) without cable

Cable:

4.6 m (15 ft), two-conductor shielded, rubber-jacketed, broadcast-type cable with Switchcraft A3F connector

Accessories Furnished:

Model 312B stand adapter

Protective vinyl carrying pouch

Optional Accessories:

Model 313A shock mount

Model 340 security clamp

Model 381 switch/connector assembly

Model 400 desk stand

Model 422 desk stand

Model 423A desk stand

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE18 is a shock-isolated Variable-D® dynamic super-cardioid microphone created for the most exacting professional use. The transmission of hand, stand, and mechanically generated lecturn noises is sharply reduced, making the RE18 ideally suited for broadcasting and high-quality sound reinforcement.

The RE18 is much like the Model RE16, except that it employs a new and unique internal shock mount and a refined, low-profile blast filter. All of these features are provided in a small package with functional, "easy-to-hold" styling. The attractive fawn beige finish is ideal for today's on-camera use. The RE18 is also at home in the recording studio and in the field with news and sports broadcasters.

The dynamic element and the complex acoustic ports of the Variable-D RE18 are completely shock isolated from the steel outer case. The unique isolation system utilizes butyl rubber doughnuts and viscous damping fluid to provide a degree of shock isolation unknown in a microphone housed in such a small outer case (3/4-inch diameter). The butyl rubber not only acts as a spring in the isolation system but also serves as a mechanical damper which converts shock energy to heat.

The integral blast filter, smaller than that of the RE16, but of equal effectiveness, provides excellent control of vocal "P-pops." Design refinements include three-stage construction and the use of both standard and high-density Acoustifoam™. The RE18 has a Memraflex grille that bounces back to retain its shape.

The RE18's Variable-D design essentially eliminates proximity effect. All Single-D microphones exhibit bass-boosting proximity effect when the microphone is used within a working distance of about twelve inches. At a 1/4-inch working distance, the RE18's Variable-D design reduces proximity effect to less than 5 dB at 100 Hz, compared to the Single-D microphone's typical 15 dB at 100 Hz. The result is a consistent sound quality regardless of working distance and a high degree of clarity when used up close.

The RE18's super-cardioid polar response provides two nulls at about 150 degrees off axis (see Figure 2). Typical cardioids have a single null at 180 degrees off axis. The super-cardioid pattern provides greater rejection in the microphone's rear hemisphere, advantageous on a boom and in many on-stage applications.

A "hum-buck" coil has been added to the RE18 (see Figure 4) which, in addition to its screw-machined steel outer case, ensures rejection of hum when subjected to heavy alternating magnetic fields from stage lighting, power transformers, and many other conditions that can occur in remote operation. The "hum-buck" coil in the RE18 gives an additional 25 dB of hum rejection. Hum pickup level is -125 dBm in a .001 gauss field.

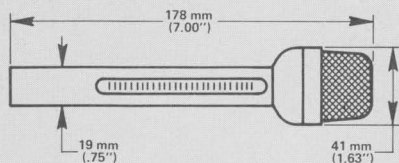


FIGURE 1 - Dimensions

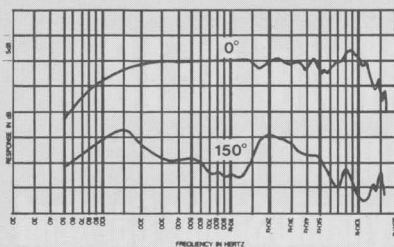


FIGURE 2 - Frequency Response

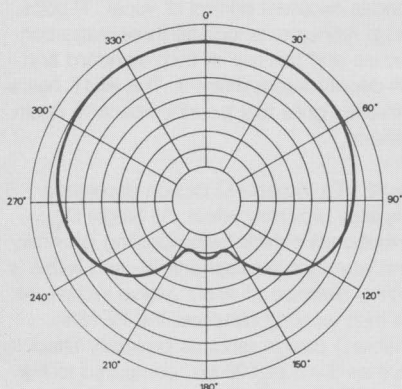


FIGURE 3 - Polar Response

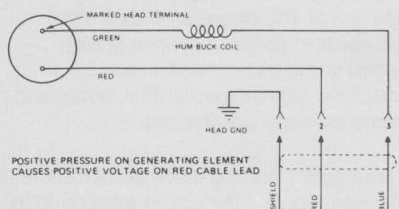


FIGURE 4 - Wiring Diagram

The exclusive non-metallic Electro-Voice Acoustalloy® diaphragm is virtually unaffected by extreme atmospheric conditions. A carefully designed steel outer case provides a high degree of mechanical protection and the Memraflex grille screen resists denting.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a shock-isolated Variable-D® super-cardioid dynamic type with wide-range response uniform from 80-15,000 Hz. Proximity effect shall be 10 dB less at 100 Hz than comparable Single-D designs.

Output level shall be -56 dB (0 dB = 1 mW/10 dynes/cm²). EIA sensitivity rating shall be -150 dB. The impedance shall be a nominal 150 ohms. The diaphragm shall be non-metallic Acoustalloy® and shall have a high-density Acoustifoam™ shield to prevent dust and iron particles from reaching the diaphragm, as well as to act as an effective pop filter.

A hum-buck coil shall be provided in series with the microphone element. Hum pick-up level shall be -125 dBm in a .001 gauss field. The hum-buck coil shall decrease hum pickup by at least 25 dB.

The case shall be made of steel. The microphone shall have a maximum diameter of 41 mm (1.63 in.), with a 19 mm (0.75 in.) diameter shank, and a maximum length of 178 mm (7.0 in.), not including cable connector. Finish shall be fawn beige.

A 4.6 mm (15 ft), 2-conductor shielded, broadcast-type, rubber-jacketed cable with Switchcraft A3F connector installed shall be provided. The microphone shall have a built-in cable connector to mate with the Switchcraft A3F. A Model 312B stand clamp and a vinyl protective pouch shall be supplied. The Electro-Voice Model RE18 is specified.

WARRANTY (Limited)

Electro-Voice Professional, PL & BK Series Microphones are guaranteed 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 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); 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.

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

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ OKLAHOMA CITY, OK ■ GANANOQUE, ONT.
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