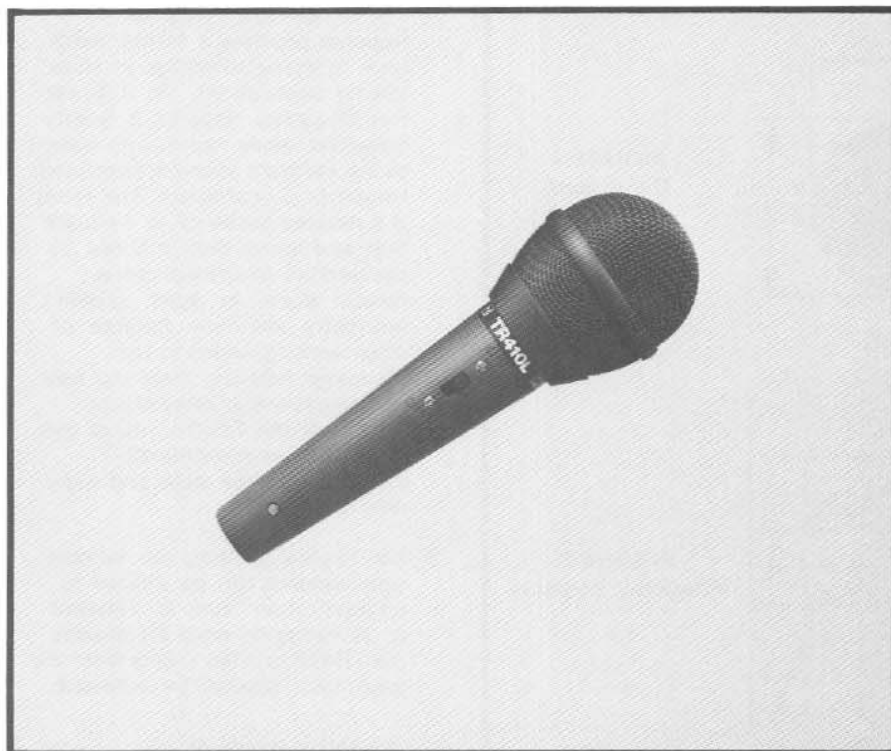




Electro-Voice®
a gulton company

Model TR410 Dynamic Cardioid Microphone

SPECIFICATIONS

Generating Element:
Dynamic

Frequency Response:
80 to 12,000 Hz (see Figure 2)

Polar Pattern:
Cardioid (see Figure 3)

Impedance:
Low Z, balanced

Output:
-61 dB
(0 dB = 1 mW/10 dynes/cm²)

EIA Sensitivity:
-155 dB

Diaphragm:
Tough, non-metallic Acoustalloy®

Case:
Rugged pressure cast zinc body with steel screens

Finish:
Armourmatte

Dimensions:
55.0 mm (2.16 in.) diameter
168.0 mm (6.63 in.) long

Net Weight:
252 g (8.9 oz)

Connector:
Standard three pin audio at mike (XLR)

Accessories Furnished:
358 stand adapter
458 zippered protective vinyl carrying pouch

Optional Accessories:
376 windscreen
379 color coded windscreens
541 - 25 ft professional cable with A3F type connector at mike end
542 - 25 ft professional cable with A3F & A3M type connectors
543 - 25 ft professional cable with switch connector at mike end
544 - 50 ft professional cable with A3F & A3M type connectors

GENERAL

The Electro-Voice Model TR410 microphone features a rugged dynamic element in a resilient internal mounting that greatly reduces output noises due to handling and mechanical shock. The smooth wide range response and cardioid pickup pattern combine to produce excellent results in especially difficult situations where feedback is a problem. A steel and die cast zinc case completes the rugged assembly of this economical microphone. From hand or stand, vocal, instrumental, or P.A. your Electro-Voice TR410 is built to give you years of dependable service.

DESCRIPTION AND APPLICATIONS

The new Electro-Voice TR410 combines high output level and smooth frequency response in an economical but handsomely designed product. These models are single-D cardioid microphones which emphasize low frequencies in the same manner most entertainer mikes do when held "close-up". A fine choice for sound reinforcement, public address and other applications where quality and price are of prime consideration. The TR410s use the broadcast standard three pin audio connector.

A new head design provides wide linear response for effective gain before feedback in sound reinforcement applications. An extremely effective shock absorber isolates the transducer assembly from mechanical noises. An internal Acoustifoam™ filter allows close talking without excessive

"P-popping" and prevents dirt and magnetic particles from accumulating on the diaphragm.

Using The Variable Low Frequency Response

The low frequency response of the TR410 varies with the distance of the sound to the microphone as shown in the response curve (Figure 2). Maximum bass response is produced in close up use with the microphone 1/4 inch from the sound source (Figure 2A). Normal bass response is experienced at distances greater than 24 inches (Figure 2C). Intermediate working distance shown in Figure 2B.

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

1. By working closer to the microphone, 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 in the system's sensitivity to reflected sound, hence a reduction of the tendency to feedback.

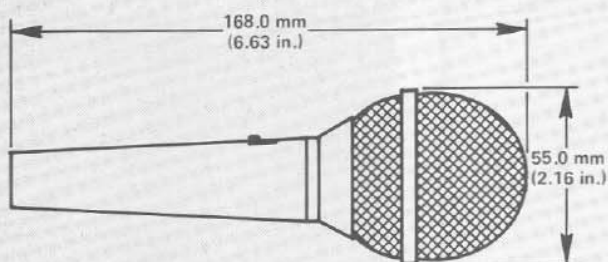


FIGURE 1
Dimensions

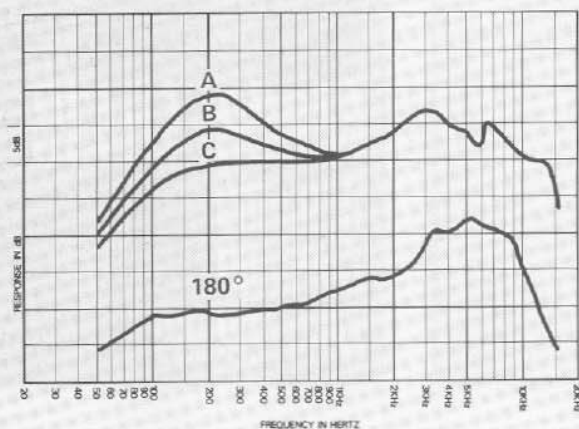


FIGURE 2
Frequency Response

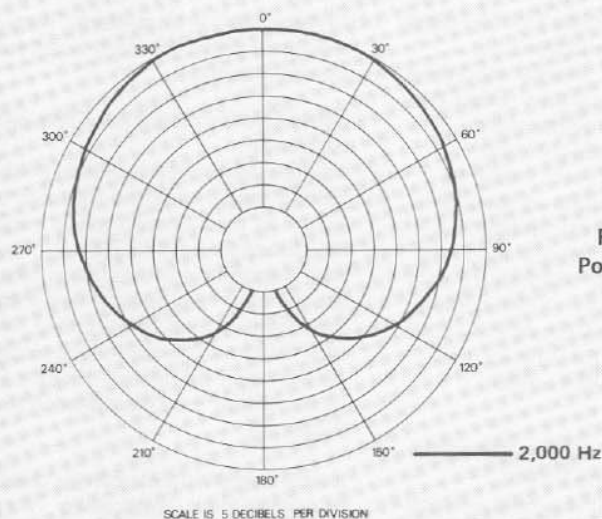


FIGURE 3
Polar Response

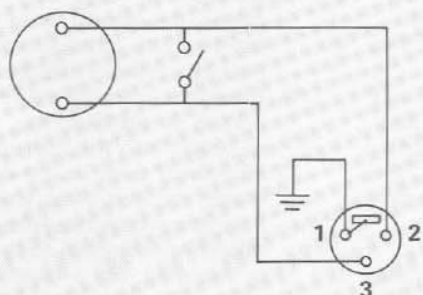


FIGURE 4
Wiring Diagram, Lo-Z

The variable low frequency response provides a further feedback reducing advantage in close talking applications. At 1/4-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 TR410, makes this instrument 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 at distances of 24 inches or more. By moving the TR410 to a few inches from the instrument, bass will be increased.

WARRANTY (Limited) —

Electro-Voice TR Microphones are guaranteed unconditionally against malfunction from any cause for a period of two years from date of original purchase. 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, cable, cable connectors, or switches. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

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.