

## OMNIDIRECTIONAL ELECTRET CONDENSER MICROPHONE

### SPECIFICATIONS

Generating Element:	Electret Condenser
Frequency Response:	30 – 15,000 Hz
Power Supply:	Internal 1½ volt battery (size AA, not included)
Amplifier:	FET impedance converter
Output Level (1000 Hz):	-50 dB (0 dB = 1 mw/10 dynes/cm <sup>2</sup> )
EIA Sensitivity:	-142 dB
Impedance:	250 ohms, unbalanced
Polar Pattern:	Omnidirectional
Equivalent Noise:	33 dB SPL (0 dB = .0002 dynes/cm <sup>2</sup> , "A" weighted)
Switch:	On/Off
Pop Filter:	Built-in Acoustifoam™ filter
Cable Connector (in microphone):	None
Cable:	18-ft., single-conductor shielded, rubber-jacketed, permanently strain- relief molded to the microphone.
Stand Adapter:	Model 312A clamp
Case:	Aluminum
Finish:	Beige anodized with gray enamel trim
Net Weight:	9 oz. (with battery and cable)

Current Drain:	.5 ma (approximately 1200 hours battery life)
Dimensions:	8-5/16" L., not including cable strain relief (shank diameter 7/8")

### DESCRIPTION AND APPLICATIONS

The Electro-Voice Model 1710 is an electret condenser microphone with an omnidirectional polar pattern. The 1710 represents state-of-the-art design combining a condenser generating element with the ruggedness of a dynamic microphone. Frequency response, transient response, sensitivity, and polar uniformity are of high quality and make the 1710 suitable for all types of use. Serious home recording, sound reinforcement, and public address yield excellent results when using this instrument.

The 1710 features a rugged aluminum case with permanent anodized finish and gray enamel trim. An on/off switch is provided on the barrel of the microphone. The very low mass of the generating element acts as an effective shock mount which keeps "handling noise" and other mechanically-transmitted noises to a minimum. A

**Electro-Voice**  
a GULFON subsidiary

built-in blast filter enables close talking or singing without worry of "P-popping" or other excessive breath and sibilent noises. An 18-foot, single-conductor shielded, rubber-jacketed cable is permanently strain-relief-molded to the microphone. Microphone output is 150-ohms, unbalanced. The 1710's high output is 7 dB higher than many dynamic microphones and will very likely be sufficient for use with "medium" or "high" impedance microphone inputs which are generally less sensitive than their low-impedance counterparts.

The unique electret condenser generating element of the 1710, unlike most condenser elements, is impervious to humidity and/or temperature extremes (0 degrees F. to 110 degrees F.). The microphone offers extremely high output for highest possible signal-to-noise ratio in your recordings.

#### OPERATING AND MAINTENANCE INSTRUCTIONS

You have purchased one of the finest electret condenser microphones available. A little care will allow you continued use of this precision instrument for many years.

Your electret condenser microphone should not be left in the open sun or other hot environments where temperatures may approach or exceed 110° Fahrenheit for any period of time. Following this suggestion will prolong the life of the generating element.

If you feel your unit is malfunctioning, have it examined and repaired only by an Electro-Voice authorized repair service station.

Unlike normal condenser microphones, the electret condenser does not need a polarizing voltage because a permanent charge is captured in the diaphragm material. However, a small voltage with very low current drain is necessary to power the FET impedance converter which must be used to lower the extremely high impedance of the electret head. You may gain access to the battery compartment by unscrewing and pulling away the rear sleeve of the microphone, exposing the battery clips. A 1½-volt (AA size) battery should be inserted, being sure to follow the polarization label. With the very small current drain (.5 ma), it is common to have 1200 hours or more battery life (approaching the shelf life of the average battery).

#### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an omnidirectional electret condenser type with response 30 to 15,000 Hz.

The microphone shall have a 250-ohm low impedance unbalanced output, with an output level of -50 dB (0 dB = 1 mw/10 dynes/cm<sup>2</sup>), and EIA sensitivity rating of -142 dB. The microphone shall have an electret condenser generating element whose output shall not be appreciably affected by temperature extremes from 0 degrees Fahrenheit to 110 degrees F. and/or by humidity

extremes. An on/off switch shall be provided. An 18-foot, single-conductor shielded, synthetic rubber-jacketed cable permanently strain-relief molded to the microphone shall be provided.

The case shall be aluminum with beige anodized finish and gray enamel trim. Dimensions shall be 8-5/16" long, not including cable strain relief, with a shank diameter of 7/8". Net weight (including battery and cable) shall be 9 ounces. The Electro-Voice Model 312A stand adapter shall be furnished.

The Electro-Voice Model 1710 is specified.

#### WARRANTY

Each Electro-Voice microphone is guaranteed for the life of the microphone to be free of factory defects in materials and workmanship and will, at our option, be repaired or replaced at no charge if exhibiting malfunction from this cause. Microphones for warranty repair must be shipped prepaid to Electro-Voice, Inc., or its authorized service agency. They will be returned prepaid. This warranty does not cover finish or appearance.

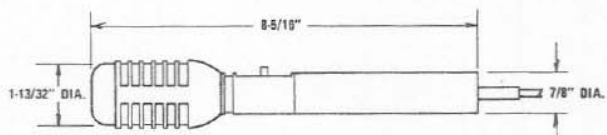


FIGURE 1-DIMENSIONS

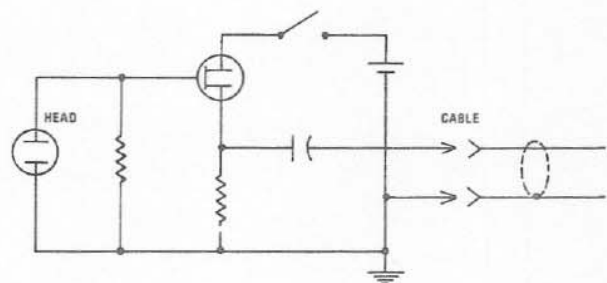


FIGURE 2-WIRING DIAGRAM

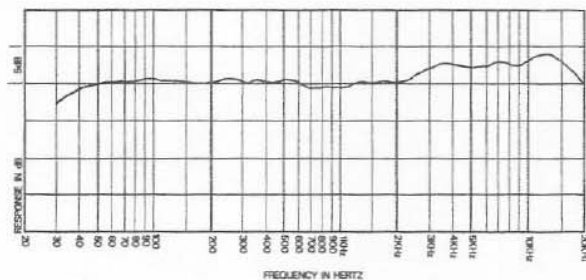


FIGURE 3-RESPONSE CURVE