

The Electro-Voice Model 910 (Fig. 1) is a Crystal or pressure type microphone. A crystal attached to the diaphragm generates a voltage in accordance with the variation in the applied sound pressure.

This compact, sturdily designed microphone is useful for public address work, recording, amateur, and general communication service.

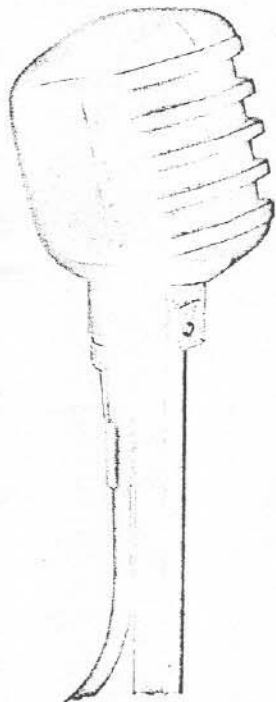


Fig. 1

ACOUSTICAL:

The frequency response is rising from 50 to 7,000 c.p.s. This adds crispness and clearness to speech or music.

At low frequencies the Model 910 has a non-directional pick-up pattern that becomes directional at high frequencies. (See Fig. 2. This characteristic is a function of the diameter of the case and does not class the Model 910 as a directional microphone. It does, however, provide a means for minimizing high frequency feed-back.

It is recommended that the Model 910 be fed into the grid of the first tube

across a resistance from .5 to 2 megohms. Better response at the low frequencies is possible with a higher value of resistance.

PHYSICAL:

The case of the E-V Model 910 is made of the highest quality, high impact, pressure cast metal. It is of modern design having a 15° fixed tilt for effective aiming at the sound source.

The cable connector is a pressure type, easily replaceable in the field.

The diaphragm is an exclusive E-V design operating as a pure piston, thereby eliminating "breakup" and distortion on high frequencies. It is treated to resist corrosion.

ELECTRICAL:

The Model 910 has an exceptionally high output level making it possible to operate the gain control of the amplifier in a lower position, thus reducing tube noise.

It is recommended that the output of the Model 910 be fed into the grid of the first tube across a resistance from .5 to 2 megohms.

A slightly rising response from 50 to 7,000 c.p.s. adds crispness and clearness to speech or music.

APPLICATION:

Because of its size, rugged construction and mounting, the E-V Model 910 is recommended for indoor or outdoor use, auditorium, stage, paging, church pulpits, fixed emergency, intercommunication, amateur, and recording.

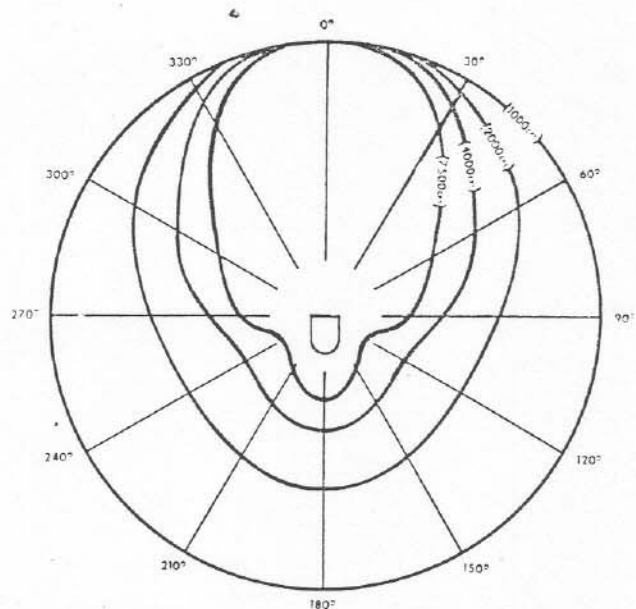


Fig. 2. Directivity Pattern of Model 910

MECHANICAL:

CABLE: Supplied with 8 or 20 feet of well shielded, low-loss, synthetic rubber jacketed, cable. Additional cable reduces the output level but does not distort frequency curves. (See Table 1.)

CASE: The case is made of the highest quality pressure cast metal.

Electro-Voice TECHNICAL DATA SHEET No. 51, MODEL 910 CRYSTAL TYPE MICROPHONE

FINISH: The Model 910 is finished in durable satin chromium. Wiping with a soft cloth is all that is necessary to maintain its rich lustre.

NET WEIGHT: $1\frac{1}{4}$ pounds.

DIMENSIONS: See Figure 3.

SPECIFICATIONS:

OUTPUT LEVEL RATING: Voltage: 48 db below 1 volt/dyne/cm². Voltage developed by normal speech (10 dynes/cm²): .0394 volt.

FREQUENCY RESPONSE: 50-7,000 c.p.s.

TABLE 1. CABLE LOSS	
Cable Length in Feet	DB Loss in Level
20	.8
40	1.4
60	2.0
100	3.2
150	4.4
200	5.6

IMPEDANCE: Hi-Z. Can be used with any standard amplifier implying high impedance input.

POLAR PATTERN: Non-directional at low frequencies becoming directional at higher frequencies.

CRYSTAL CARTRIDGE GRILLE: Made of spun glass with extreme uniformity of thread size and mesh. Chemically inert and non-hygroscopic.

TEMPERATURE: Crystal microphones should not be exposed to an ambient temperature of more than 125° F. or, indirect sunlight, closed automobiles, or show windows in hot weather.

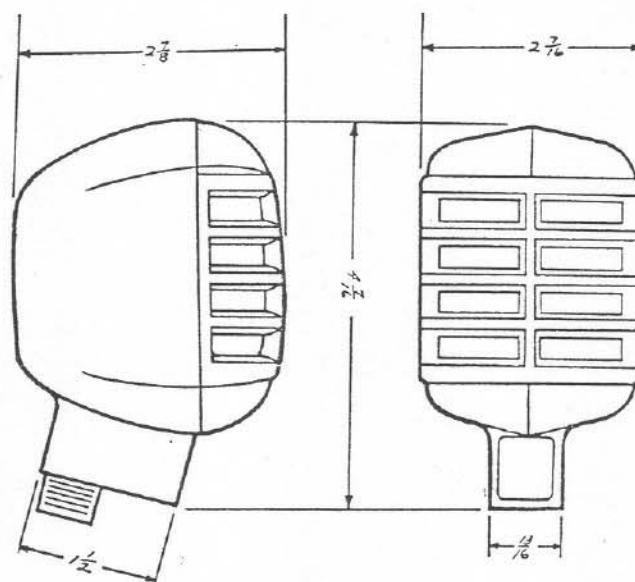


Fig. 3. Mechanical Dimensions Model 910

WARRANTY: The Model 910 is guaranteed against defects in workmanship or materials for a period of one year. Damage to the crystal element due to exposure to temperature exceeding 112° F. is not covered by this guarantee.

LICENSED under Brush patents.