

### **DESCRIPTION AND APPLICATIONS**

The Electro-Voice model 924 is a crystal, omnidirectional microphone providing smooth response from 60 to 10,000 Hz. It is excellent for home recording, paging, public address, and amateur radio. The model 924 is easy to hold by hand or to use as a lavalier microphone because of its small size. It is ideal for use wherever microphone concealment, individual mobility, or free movement of the hands is desired.

The microphone is equipped with a pop-proof wire mesh grill which minimizes wind and breath blast. It is supplied complete with neck cord, support clip, and 18-foot single-conductor cable.

The model 924 should be connected for operation into a load the value of which is not less than 500,000 ohms. An even higher resistance value will further enhance low-frequency response. The microphone lead is connected to the grid of the input tube and the cable shield is connected to chassis ground. The crystal may be seriously damaged if connected to amplifier loudspeaker terminals or power supply unit carrying a high voltage.

#### **CAUTION NOTES**

Crystal microphones should not be exposed to temperatures higher than 112°. Do not place in direct sunlight, closed automobiles, or show windows in hot weather for extended periods of time.

Crystal and ceramic microphone elements function as voltage generators. Use of extremely long cables results in relatively severe attenuation of the signals generated by these devices. Generally, cables longer than 20 feet should not be used. Attenuation resulting from the use of longer cables is illustrated below:

| Cable Length in Feet | Loss of Level, in db |
|----------------------|----------------------|
| 20                   | 0.8                  |
| 40                   | 1.4                  |
| 60                   | 2.0                  |
| 100                  | 3.2                  |
| 150                  | 4.4                  |
| 200                  | 5.6                  |

# **SPECIFICATIONS**

| ELEMENT: | Crystal |
|----------|---------|
|          |         |

FREQUENCY RESPONSE: 60 - 10,000 Hz POLAR PATTERN: Omnidirectional

IMPEDANCE: Hi-Z

OUTPUT LEVEL: -60 db

(0 db = 1 volt/dyne/cm $^2$ ) EIA SENSITIVITY: -160 db DIAPHRAGM: Aluminum

CASE: Pressure Cast
DIMENSIONS: 1-17/32" dia. x 3-5/32" length

FINISH: Satin Chrome

NET WEIGHT: 10 oz. including cable CABLE: 18-foot, single-conductor, shielded

rubber-jacketed

ACCESSORIES INCLUDED: Neck cord and

support clip

TEMPERATURE: Crystal microphones should not be exposed to temperatures higher than 112°F.

## ARCHITECTS' AND ENGINEERS' **SPECIFICATIONS**

The microphone shall be an omnidirectional type with uniform frequency response from 60 to 10,000 Hz. The diaphragm shall be aluminum. Output level shall be -60 db  $(0 \text{ db} = 1 \text{ volt/dyne/cm}^2)$ . EIA sensitivity rating shall be -160 db. The case shall be pressure cast. The microphone shall have a diameter of 1-17/32 inches, and a length of 3-5/32 inches. Net weight shall be 10 oz. including cable. Finish shall be satin chrome. An 18-foot, single conductor, shielded, rubber jacketed cable shall be furnished. Lavalier neck cord and support clip shall be supplied. The Electro-Voice model 924 is specified.



Figure 2 - Dimensions

#### WARRANTY

The Electro-Voice model 924 microphone is guaranteed against defects in materials and workmanship for one year. Damage to the crystal element because of exposure to excessive temperatures is not covered by this warranty.

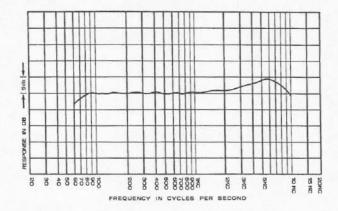


Figure 1 - Frequency Response

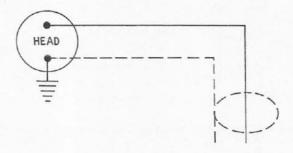


Figure 3 - Wiring Diagram