

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model 631A is a dynamic omnidirectional microphone designed to yield outstanding performance in demanding public address and semi-professional recording applications. Created particularly for close working, hand-held situations, it is equally effective for musical pickup on a table or floor stand. A unique new concept utilizes a sealed magnetic "on/off" switch inside the microphone case. A magnetic actuator outside the case is easily removable without tools-leaving the microphone connected for the "on" mode of operation.

The 631A features the exclusive non-metallic Electro-Voice Acoustalloy of diaphragm which permits very smooth response over a wide frequency range and withstands extremes of humidity, temperature, and corrosive effects of salt air-making it nearly indestructible with normal use. The microphone utilizes the mechanical nesting principle whereby internal parts are nested one within another, resulting in an assembly that is nearly indestructible.

A specially designed internal shock absorber dramatically reduces pickup of cable and other mechanical noise generated by external contact. The integral four-stage pop and dust filter ensures unusual freedom from noise generated by the movement of air over the microphone surfaces. A professional-type 3-pin A3M connector is built into the microphone allowing easy connect and disconnect.

SPECIFICATIONS

Generating Element: Frequency Response:

Dynamic 80 to 13,000 Hz

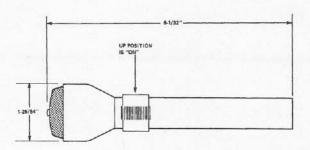


FIGURE 1 - Dimensions

Polar Pattern: Omnidirectional Impedance: Hi-Z (nominally 25,000 ohms),

and Lo-Z (150 ohms)

Output Level,

Hi-Z: $-55 \text{ dB} (0 \text{ dB} = 1 \text{ volt/dyne/cm}^2)$ Lo-Z: $-55 \text{ dB} (0 \text{ dB} = 1 \text{ mw}/10 \text{ dynes/cm}^2)$

EIA Sensitivity Rating,

Hi-Z: $-151 \, dB$ Lo-Z: $-149 \, dB$ Diaphragm: Acoustalloy ® Case Material: Diecast Zinc Finish: Satin Chrome or Matte Satin Nickel Dimensions: 6-1/32"1, 1-25/64" dia. (major),

34" shank diameter Net Weight: 6 ounces, less cable Switch: Magnetic On/Off Connector in Mike: Switchcraft A3M

Cable,

Low Impedance: 15-foot, 2-conductor, shielded synthetic rubber-jacketed broadcast type with Switchcraft A3F connector at mike end High Impedance: 15-foot, 1-conductor, shielded

synthetic rubber-jacketed broadcast type with Switchcraft A3F connector at mike end Accessories Furnished: Model 312 stand mounting clamp

WIRING

The Model 631A (high impedance) is supplied with a 15-foot, one-conductor cable with Switchcraft A3F connector installed at the microphone end. To connect the free end of the cable to the proper plug for mating with your microphone input, the outer sheath (shield) of the cable, just under the synthetic rubber jacket, is at ground potential, and it should be connected to that portion of the plug which completes the ground or chassis part of the circuit (i.e., the outer shell for standard phone plug). The shielded inner conductor is the "hot" side of the microphone circuit. (For phone plug, inner conductor should be connected to center contact.)

The Model 631A (low impedance) is supplied with a 15-foot, two-conductor, shielded cable with Switchcraft A3F connector installed at the microphone end. The connector for mating with your microphone input should provide one pin for connection of the cable shield to chassis ground and two additional pins for connection of the two cable conductors to the microphone input. The two cable conductors with the microphone, form a circuit that is "balanced" to ground.

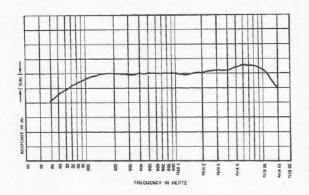


FIGURE 2 - Frequency Response

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an omnidirectional dynamic type with wide range frequency response from 80 to 13,000 Hz. It shall have a non-metallic Acoustalloy diaphragm and magnetic shield to prevent dust and magnetic particles from reaching the diaphragm. A four-stage pop filter shall be provided for maximum reduction of effects of wind and breath blasts.

The microphone shall be available in high impedance and low impedance. Output level for high impedance shall be -55 dB and EIA sensitivity rating shall be -151 dB (0 dB = 1 volt/dyne/cm²). Output level for low impedance shall be -55 dB, and EIA sensitivity rating shall be -149 dB (0 dB = 1 mw/10 dynes/cm²). A magnetic type on/off switch shall be provided, so designed that the external actuator may be removed without tools leaving the microphone in the "on" mode. The entire switch assembly shall be contained within the microphone case. A fifteen-foot, one-conductor (on Hi-Z), shielded, synthetic rubber jacketed cable with Switchcraft A3F connector installed at the microphone end shall be provided. Low-impedance connections shall provide balanced line configuration.

The case shall be pressure-cast zinc. Dimensions shall be 6-1/32" long and diameter (major) shall be 1-25/64" with %-inch shank diameter. Net weight, less cable, shall be 6 ounces. An Electro-Voice Model 312 stand clamp adapter

shall be furnished. Finish shall be satin chrome (or matte satin nickel).

The Electro-Voice Model 631A 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.

For correct shipping address and instructions on return of Electro-Voice products for repair and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone: 616/695-6831).

Electro-Voice also maintains complete facilities for non-warranty service.

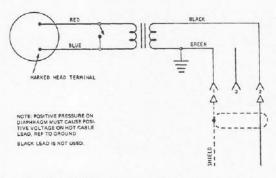


FIGURE 3 - Wiring Diagram for Hi-Z

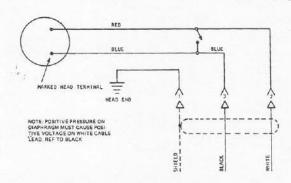


FIGURE 4 - Wiring Diagram for Lo-Z