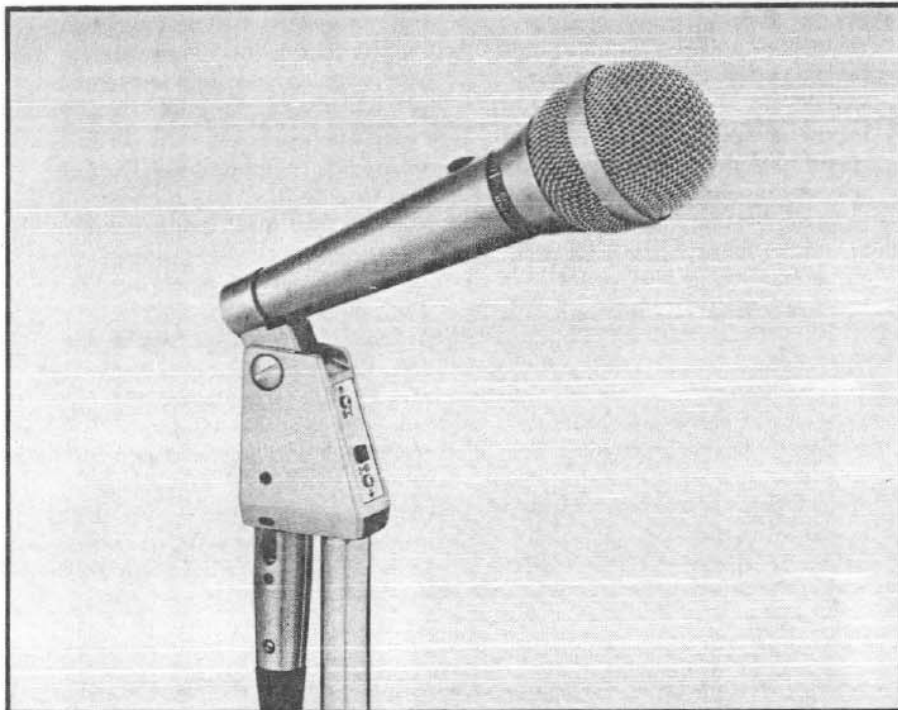


**Electro-Voice**<sup>®</sup>  
a gulton company



## Model 672 Single-D Cardioid Microphone

### SPECIFICATIONS

**Element:**

Dynamic

**Frequency Response:**

60–14,000 Hz

**Polar Pattern:**

Cardioid

**Impedance:**

150 ohm/Hi-Z, Selectable

**Impedance Change:**

Switch on stud

**Output Level,**

**Low Impedance:**

–60 dB (0 dB = 1 mW/10 dyne/cm<sup>2</sup>)

**High Impedance:**

–61 dB (0 dB = 1 v/dyne/cm<sup>2</sup>)

**EIA Sensitivity Rating,**

**150 ohm:**

–154 dB

**Hi-Z:**

–156 dB

**Diaphragm:**

Laminated Mylar/Acoustalloy<sup>®</sup>

**Switches:**

On/Off (lockable)

Impedance change

**Case:**

Zinc die cast

**Finish:**

Satin chrome

**Microphone Connector:**

Switchcraft A3M or equivalent

**Dimensions:**

171.5 mm (6 3/4") long

49 mm (1-31/32") largest diameter

**Weight:**

439.4 g (15.5 oz) — excluding cable

**Cable:**

4.6 m (15 foot), two-conductor, shielded, synthetic rubber-jacketed, with Switchcraft A3F connector at microphone end

### DESCRIPTION & APPLICATIONS

The Electro-Voice Model 672 is a newly designed Single-D cardioid microphone which emphasizes low frequencies when used "close up." Perfect for the exacting needs of high quality sound reinforcement, public address, and other applications, the 672 is ruggedly designed and attractively styled.

A new head design and an exclusive Volumetric-hologram designed diaphragm provide exceptionally wide, linear response at all angles of incidence for high gain-before-feedback in sound reinforcement applications, and virtual elimination of off-axis coloration. The head subassembly is user replaceable. As part of this assembly, a newly designed 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.

The microphone is equipped with a lock to keep the on/off switch in the "on" position if this is desired.

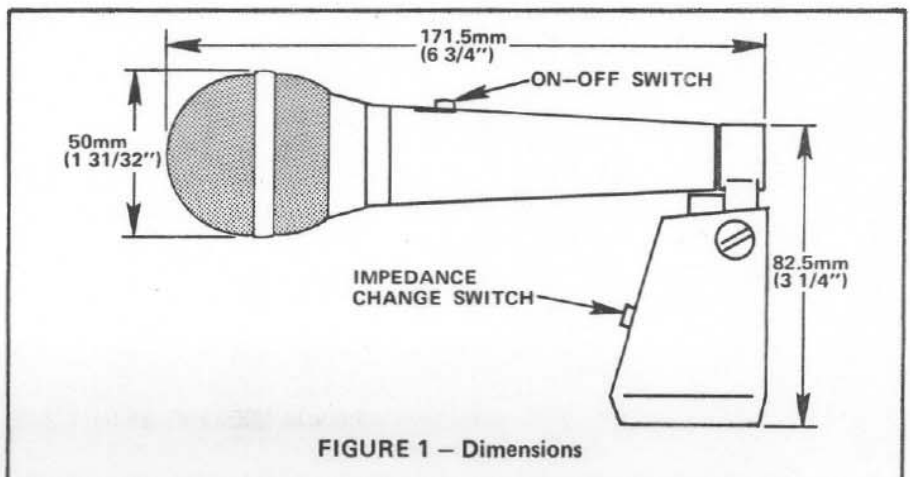


FIGURE 1 – Dimensions

### Utilizing The Locking Feature:

To lock the on/off switch in the "on" position, first turn switch on. Next, using a sharp object such as a nail file or a small screwdriver, slide lock to a position behind the switch actuator (See Fig. 2).

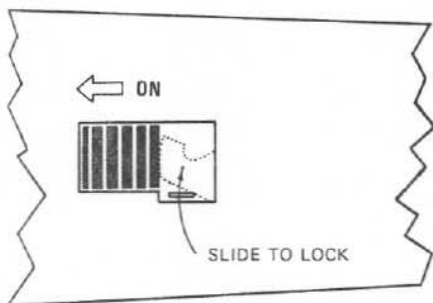


FIGURE 2 — Locking Feature

### Impedance Change Instructions

The impedance change switch is located in the microphone stud and is locked into position by the switch plate. This is to prevent accidental changing of impedance. Remove switch plate by loosening the two screws on the switch plate. Throw switch to opposite direction (up position is Lo Z, down position is Hi Z). Rotate switch plate so that the hole is aligned with the switch handle and the printing faces out. Put switch plate into position and tighten screws. (See figure 3)

### Using The Variable Low-Frequency Response:

The 672's low-frequency response varies with the distance from the sound to the microphone as shown in the response curve (Fig. 4). Maximum bass response is produced in close-up use with the microphone 1/4" from the sound source (Fig. 4/A). Minimum bass response is experienced at distances greater than 24" (Fig. 4/C).

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 micro-

phones, 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 of the system's sensitivity to reflected sound, hence a reduction of the tendency to feedback.

The variable low-frequency response of the 672 provides a further feedback reducing advantage in close talking applications. At 1/4", 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 672 makes this instrument an exceptionally effective tool for stage and nightclub use.

3. For musical pickup, the variable bass response can be utilized to achieve "clean" bass pickup at distances of 24" or more. By moving the 672 to a few inches from the instrument, bass will be increased.

**Caution notes:** With the sound source (lips) closer than 2", bass response is increased dramatically (as shown in Fig. 4/A/B). If too much signal is generated at the microphone, overloading in the amplifier input circuits may occur, causing severe distortion.

### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Frequency response shall be 60–14,000 Hz, specially shaped above 1,000 Hz to maintain presence for vocal and musical pickups, and below 1,000 Hz shall vary inversely with distance. Response at the front of the microphone at 1,000 Hz shall be nominally 20 dB greater than response at rear.

The microphone shall be a switchable impedance type (high impedance or 150 ohm balanced low), with impedance switch located in the stud. Output level for high impedance shall be -61 dB (0 dB equaling 1 v/dyne/cm<sup>2</sup>). Output level for low impedance shall be -60 dB (0 dB equals 1 mW/10 dynes/cm<sup>2</sup>). Microphone shall have a laminated Mylar/Acoustalloy® diaphragm. The microphone connector shall be a Switchcraft A3M or equivalent. An on/off switch shall be provided and so connected that the transducer is "shorted" when switch is in off position. A 15 foot two-conductor shielded, synthetic rubber-jacketed cable with Switchcraft A3F connector installed at the microphone end shall be provided. Low-impedance connection shall provide balanced line configuration.

The case shall be die cast zinc. Dimensions shall be 171.5 mm (6-3/4") long, 49 mm (1-31/32") diameter. Net weight (less cable) shall be 439.4 g (15.5 oz). Finish shall be satin chrome.

The Electro-Voice Model 672 is specified.

**WARRANTY (Limited)**—Electro-Voice microphones are guaranteed for the life of the microphone against malfunction due to defects in workmanship and materials. 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, cables, cable connectors, or switches and does not cover malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

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.

Specifications subject to change without notice.

