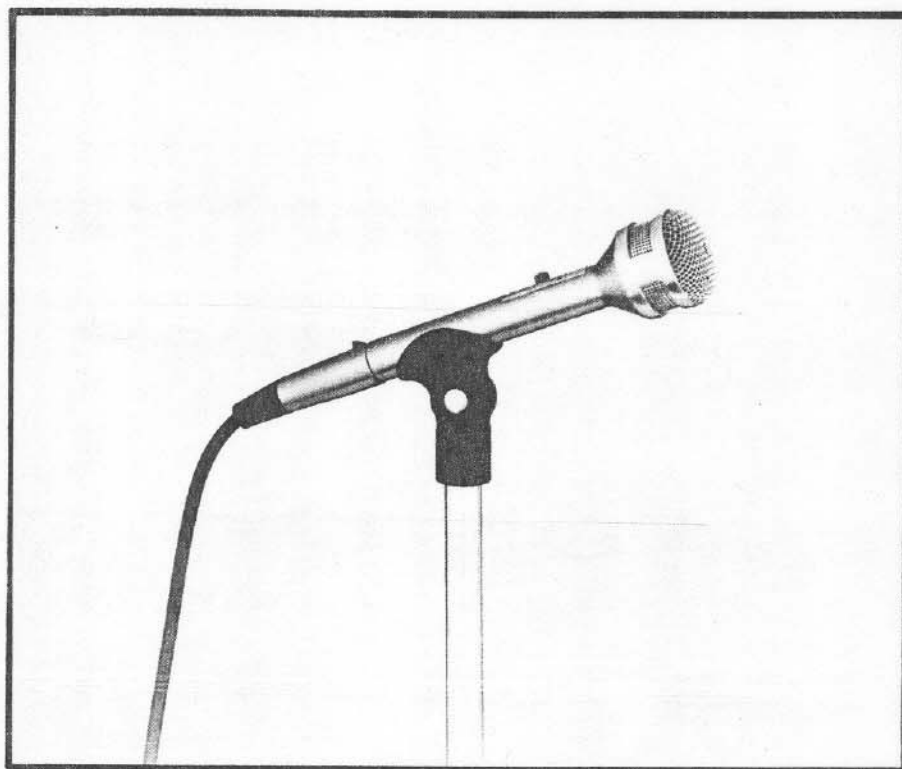




Electro-Voice®
a gulton company

Model 627C

Dynamic Cardioid Microphone

SPECIFICATIONS

Element:
Dynamic

Frequency Response:
60 to 13,000 Hz, See Figure 3

Polar Pattern:
Cardioid

Impedance:
150 ohms/Hi-Z, Selectable

Impedance Change:
Combined with on/off switch
(See instructions)

Output Level,
Low Impedance:
-58 dB
(0 dB = 1 mW/10 dynes/cm²)

High Impedance:
-58 dB
(0 dB = 1 volt/dyne/cm²)

EIA Sensitivity Rating:
-151 dB for 150 ohms
-153 dB for Hi-Z

Diaphragm:
Electro-Voice Acoustalloy®

Switch Type:
On/off

Case:
Pressure die cast zinc

Finish:
Satin Chrome

Dimensions:
40.4 mm (1.59 in.) diameter
152.4 mm (6.00 in.) long (excluding
cable connector)
19 mm (.75 in.) shank diameter

Weight:

212.6 g (7.5 ounces) - excluding cable

Cable:

4.56 m (15 ft), two-conductor,
shielded, vinyl-jacketed, with
Switchcraft A3F connector at
microphone end

**LC FOLLOWING MODEL
NUMBER INDICATES MICRO-
PHONE LESS CABLE**

Connector in Mike:

Switchcraft A3M

Accessories Furnished:

Model 312 stand adapter

Optional Accessories:

310 clamp, black
310A clamp, grey
312A clamp, grey
313A shock mount clamp
337 grey windscreen
340 security clamp
380 attenuator
422 desk stand
458 simulated leather zippered
carrying case
PLC-25X 25 ft cable with A3F and
A3M connectors
PLC-25P 25 ft cable with A3F &
1/4 in. phone plug connectors
PLC-25T 25 ft cable terminated with
A3F connector at one end and
unterminated at the other end

DESCRIPTION & APPLICATIONS

The Electro-Voice Model 627C is a "single-D" dynamic cardioid microphone that emphasizes low frequencies when used "close up." The 627C was created specially for those public address and recording applications where this specialized low-frequency characteristic is desired.

The 627C features dual impedance output with impedance change function combined with the on/off switch.

The 627C also features the exclusive non-metallic Electro-Voice Acoustalloy® diaphragm that assures smooth frequency response yet is virtually impervious to damage from extremes of temperature and humidity. The transducer assembly utilizes a mechanical nesting design. The internal parts are nested, one within another, resulting in a nearly "solid" mechanical structure that is highly resistant to damage from mechanical shock. As part of this assembly, an integral shock absorber isolates the transducer assembly from mechanical noises to reduce transmission of these noises to the microphone signal. An internal Acoustifoam™ filter allows close talking without excessive "breath popping" and prevents dirt and magnetic particles from accumulating on the diaphragm.

The case, finished in satin chrome, is constructed of high-strength, pressure-cast zinc and is designed for balanced and unobtrusive hand-held use. A professional-type 3-pin A3M connector is built into the microphone allowing easy connect and disconnect.

GENERAL: The cardioid directional characteristic of the 627C with reduced pickup at the sides and rear of the microphone, decreases the likelihood of feedback in public address applications. Radiation of sound-system loudspeakers should strike the 627C from its relatively "dead" rear in order to take maximum advantage of the cardioid directional pattern. Speaker radiation striking the front of the 627C will not be cancelled, and feedback is more likely to result.

USING THE VARIABLE LOW-FREQUENCY RESPONSE: The 627C's low-frequency response varies with distance from sound to the microphone as shown in the response curve (Figure 3). Maximum bass response is produced in close-up use with the microphone one-quarter-inch from the sound source (Figure 3/A). Minimum bass response is experienced at distances greater than 24-inches (Figure 3/C).

Useful special effects can be created by imaginative application of the variable low-frequency response:

1. By working closer to the microphone than might otherwise be natural, 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 back into the microphone. For all microphones, 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 system's sensitivity to reflected sound, hence a reduction of the tendency to feedback.

The variable low-frequency response of the 627C provides a further feedback-reducing advantage in close-talking applications. At one-quarter-inch, 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 627C, make 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 twelve inches or more. By moving the 627C to a few inches from the instrument, bass will be increased.

IMPEDANCE CHANGE

The impedance change is essentially automatic. When connected into a low-Z balanced or unbalanced input the switch position for "on" is toward the front of the microphone and "off" toward the rear. See Figure 4. When connected into a high-Z input the situation is reversed and the "on" position is toward the rear of the microphone while the "off" position is toward the front.

Figure 5 shows wiring connections for common type of connectors used with high and low impedance inputs.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Response shall be 60 to 13,000 Hz, specially shaped above 1000 Hz to maintain presence for vocal and musical pickups, and below 1000 Hz, shall vary inversely with distance. 100 Hz response with sound source 24-inches from the microphone shall be nominally 14 dB lower than response with sound source one-quarter-inch from microphone. Response at front of microphone at 1,000 Hz shall be nominally 20 dB greater than response at rear.

An on/off switch shall be provided. The microphone shall be dual impedance with impedance selection incorporated into the on/off switch, either with or without cable as specified. LC suffix on model number denotes microphone

less cable. Output level for high impedance shall be -58 dB and EIA sensitivity rating shall be -153 dB (0 dB = 1 volt/dyne/cm²). Output level for low impedance shall be -58 dB and EIA sensitivity rating shall be -151 dB (0 dB = 1 mW/10 dynes/cm²). The microphone shall have a non-metallic Acoustalloy diaphragm. A 4.56 m (fifteen-foot), two-conductor, shielded, vinyl jacketed cable with Switchcraft A3F connector installed at microphone end shall be provided. Low impedance connections shall provide balanced line configuration.

The case shall be pressure-cast zinc. Dimensions shall be: 40.4 mm (1.59 inch) diameter (major), 152.4 mm (6.00 inches) long, not including cable connector with a shank diameter of 19 mm (.75 inch). Net weight (less cable) shall be 212.6 g (7.5 ounces). Finish shall be satin chrome. An Electro-Voice Model 312 stand adapter shall be furnished.

The Electro-Voice Model 627C is specified.

WARRANTY (Limited)

Electro-Voice Commercial/Concert Series Microphones are guaranteed for two years from date of original purchase against 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 or 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 repair information and service locations, please write: Service Dept., Electro-Voice, Inc., 600 Cecil St., Buchanan, Michigan 49107 (Phone: 616/695-6831) or Electro-Voice West, 8234 Doe Ave., P. O. Box 3297, Visalia, CA 93277 (Phone: 209/651-7777).

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

Specifications subject to change without notice.

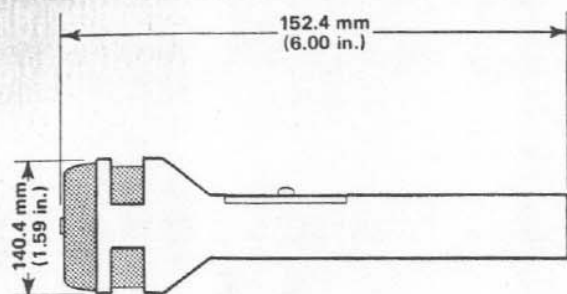


FIGURE 1 – Dimensions

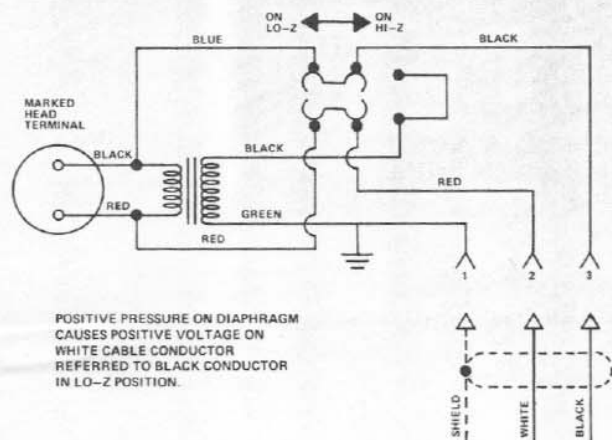


FIGURE 2 – Wiring Diagram

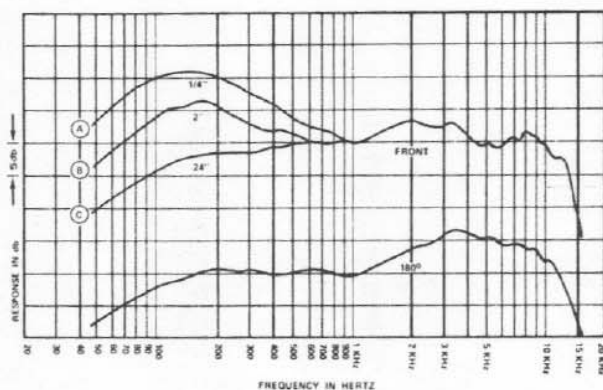


FIGURE 3 – Frequency Response Characteristics

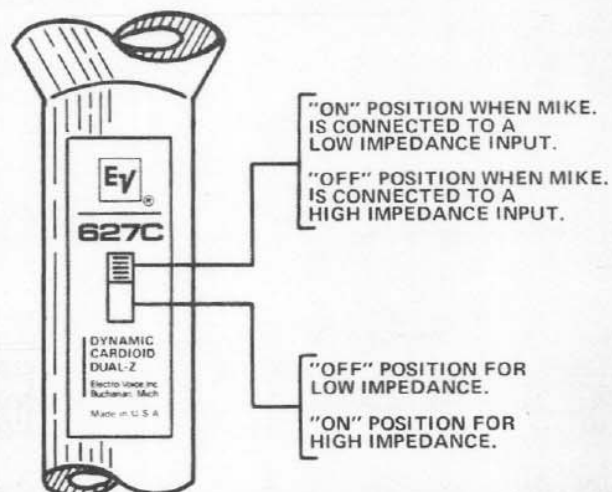
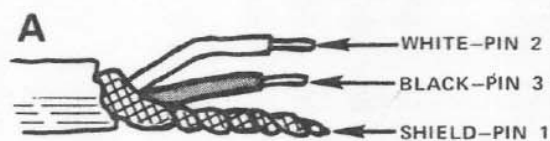


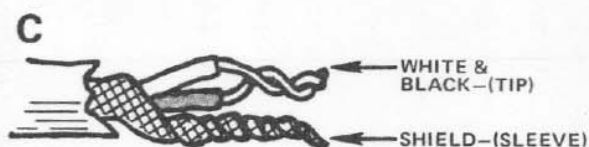
FIGURE 4 – Impedance Selection



BALANCED LO-Z USING A SWITCHCRAFT
A3M OR EQUIVALENT.



UNBALANCED LO-Z USING A
STANDARD PHONE PLUG.



HI-Z USING STANDARD PHONE PLUG.

FIGURE 5 – Wiring Connections to Popular Connectors