

Electro-Voice®
a gulton company

Model 637/637S Gooseneck-Mounted Paging Microphone

SPECIFICATIONS:

Generating Element:

Moving coil dynamic

Frequency Response:

70-10,000 Hz

Polar Pattern:

Omnidirectional

Impedance:

150 ohms

Output Level:

-62 dB (0 dB = 1mW/10 dynes/cm²)
.87 mv/Pascal@1 kHz

Diaphragm:

EV Acoustalloy®

Case Material:

Die-cast zinc

Finish:

Chrome plating

Dimensions:

40 mm (1.57 in.) diameter
597 mm (23.5 in.) long
(includes 18 in. gooseneck)

Mounting:

5/8 in.-27 thread or 2-3/4 in.
diameter metal flange

Net Weight,

637S:

800 g (29 oz) including cable

637:

750 g (28 oz) including cable

Switch,

637S:

DPDT push to talk
Activates mike in depressed
position and switches relay
circuit

637:

None

Cable,

637S:

1.8 m (6 ft) four-conductor
two-shielded, PVC jacketed
(grey)

637:

1.8m (6 ft) two-conductor
shielded, PVC jacketed (black)

DESCRIPTION AND APPLICATIONS

The Models 637 and 637S are durable, shock-mounted gooseneck supported microphones featuring an extended frequency response for intelligibility and combining attractive styling with ruggedness and high output level. The 637 and 637S are ideally suited for use in bank drive-ups, fast-food restaurants, supermarkets, and other commercial applications. The replaceable motor element is shock mounted in a die-cast metal case. Attached to the metal case is an 18-inch flexible gooseneck terminating in a metal flange for surface mounting. The flange is slotted to provide the option for cable exit above the mounting surface. The

microphone can be removed from the gooseneck and mounted on any 5/8 in.-27 external thread. Sealed to prevent vapor penetration, the 637S also provides a replaceable leaf-type switch designed to operate more than one million cycles. As shipped, the 637S may be used as direct, bolt down replacements for most gooseneck paging applications.

The omnidirectional polar characteristic of these microphones, combined with their special frequency response, yields excellent voice intelligibility without the low-frequency accentuation and breath pops of a directional microphone.

By combining an effective internal shock-mount with the inherent low shock sensitivity of an omnidirectional design, these microphones greatly reduce mechanically produced sounds caused by the user grasping and moving the microphone.

Model 637S

The 637S includes a DPDT leaf-type switch which provides push-to-talk operation by activating or deactivating the microphone and the included relay switching circuit. An integral four-conductor cable is provided with the 637S for ready connection to the input circuit.

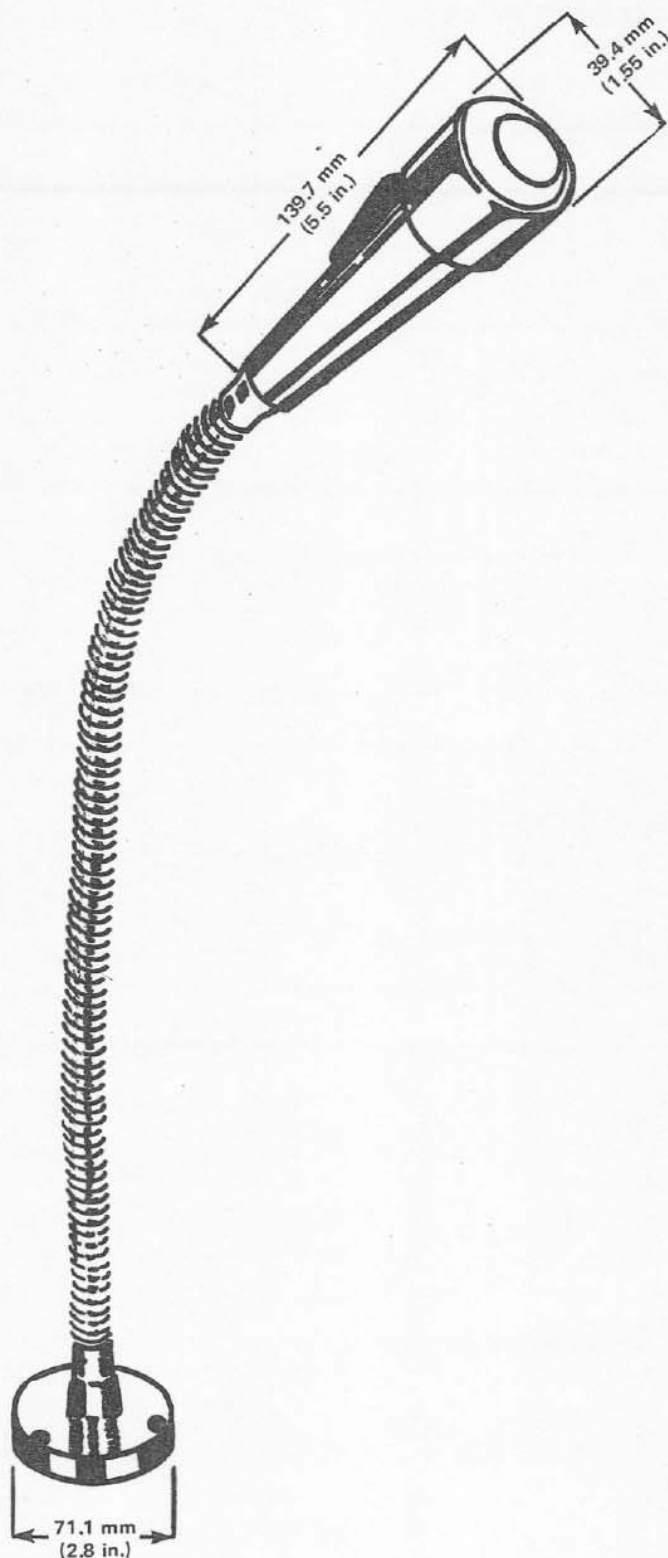


FIGURE 1 — Dimension Drawing

The 637S is shipped with the switch wired for parallel operation of several microphones. The relay contacts are activated in the depressed "push-to-talk" position.

TO CHANGE TO NORMALLY CLOSED OPERATION

For operation of a single microphone and if shorting of the microphone element is necessary, the switch wiring must be changed to short the microphone connection in the "off" or non-depressed position.

To change the switch wiring, the switch assembly must be accessed. First remove the two cross recessed screws from the switch plate then carefully lift the switch assembly from the microphone case by moving the switch assembly up and forward. If the switch assembly does not easily lift from the microphone, check to insure that there is sufficient slack on the cable. Unsolder the red wire, coming from the cable bundle, (not the red wire from the motor element) and resolder this red wire to the switch tab above and to the left of the original position. To reassemble, reverse the disassembly procedure, being careful to dress the motor element leads beside the switch blades to prevent mechanical interference with the blade movement. Finally, the rubber gasket seal must be repositioned beneath the switch plate.

Motor Element Replacement

The motor element used in the 637 and 637S is replaceable and can be removed through the front opening of the microphone. It is first necessary to disconnect the motor element leads from their termination points by removing the switch plate from the microphone, as instructed previously, and unsoldering the motor element leads from the switch assembly. Next, remove the grille screen by squeezing the screen and working the edges of the grille from the groove in the periphery of the case. The microphone element and shock mount can now be withdrawn through the front opening of the microphone.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

Model 637

The Model 637 microphone shall be an omnidirectional, dynamic type with uniform frequency response from 70 to 10,000 Hz. The diaphragm shall be of non-metallic Acoustalloy®. The microphone impedance shall be 150 ohms. Output level shall be -62 dB with 0 dB equaling 1 mW/10 dynes/cm². Dimensions shall be 40 mm (1.57 in.) diameter and 597 mm (23.5 in.) long. The microphone shall include an 18 in.

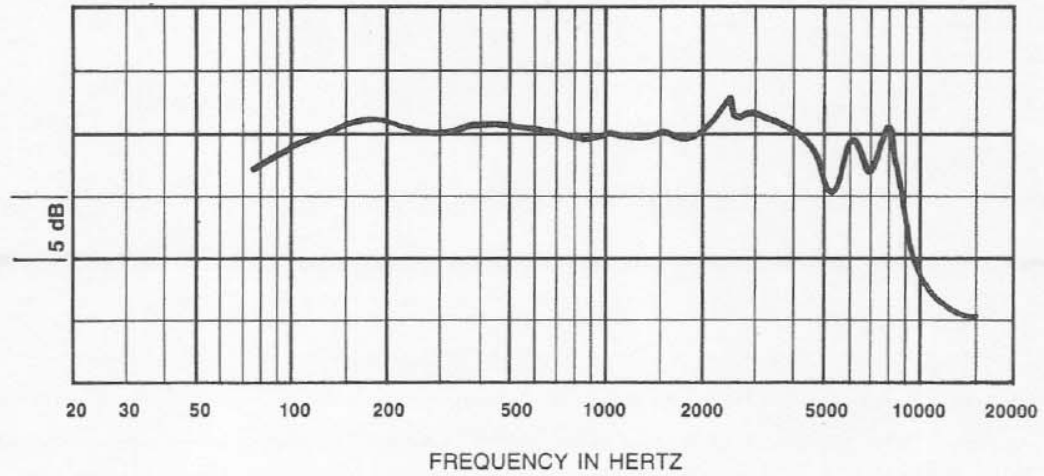


FIGURE 2 — Near-Field Frequency Response
1½-Inches from Artificial Voice

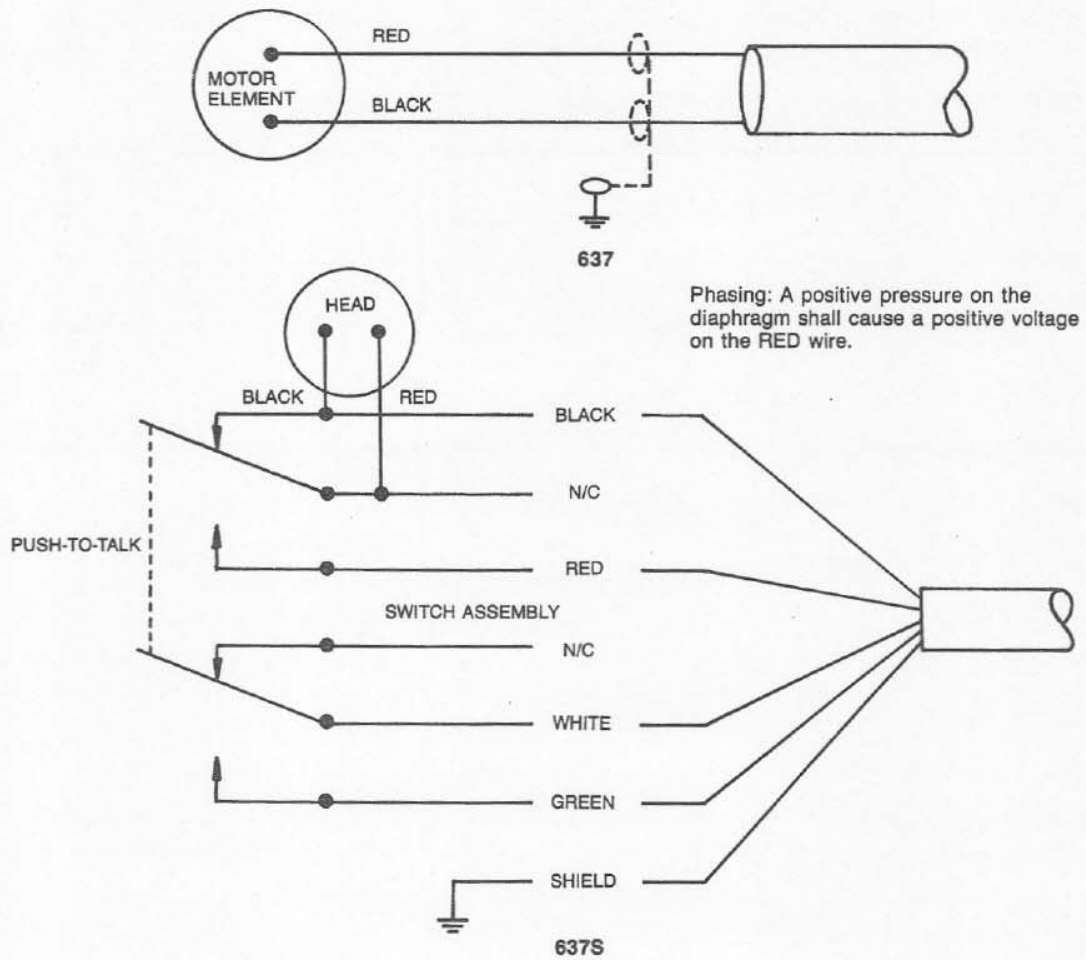


FIGURE 3 — Wiring Diagrams

gooseneck and mounting flange accessories, and shall include the options of complete concealment of cable when mounted or cable exit from the mounting flange.

The microphone shall be of all metal construction, including a chrome plated zinc die-cast and 2¾-inch diameter mounting flange. A locking nut shall be provided to allow rotation of the microphone case. The rear cavity of the microphone shall be sealed to prevent vapor penetration. The motor element shall be shock mounted from the case and shall be replaceable. A 1.8 m (6 ft) two-conductor shielded, vinyl jacketed cable shall be included.

The Electro-Voice Model 637 is specified.

Model 637S

The Model 637S microphone shall be an omnidirectional, dynamic type with uniform frequency response from 70 to 10,000 Hz. The diaphragm shall be of non-metallic Acoustalloy. The microphone impedance shall be 150 ohms. Output level shall be -62 dB with 0 dB equalizing 1 mW/10 dynes/cm². Dimensions shall be 40 mm (1.57 in.) diameter and 597 mm

(23.5 in.) long. The microphone shall include 18-inch long gooseneck and mounting flange accessories, and shall include the options of complete cable concealment or cable exit from the mounting flange.

The microphone shall be all metal construction, including a chrome plated zinc die-cast and 2¾-inch diameter mounting flange. A locking nut shall be provided to allow rotation of the microphone case. The rear cavity of the microphone shall be sealed to prevent vapor penetration. The motor element shall be shock mounted from the case and shall be replaceable. A 1.8 m (6 ft) four-conductor, two-shielded, vinyl jacketed cable shall be included.

The 637S shall include a replaceable double-pole, double-throw leaf switch design tested to over one million on-off cycles. The switch shall include options of microphone shorting or disconnection in the "off" position, with additional contacts to provide a short or open connection to two control wires. A rubber gasket shall seal the switch cavity.

The Electro-Voice Model 637S is specified.

WARRANTY (Limited)

Electro-Voice Commercial/Concert Microphones are guaranteed for two years from date of original purchase 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 extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee. A list of authorized warranty service agencies is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice, Inc., 3810 148th Avenue, N.E., Redmond, WA 98052 (AC/206-881-9555); and/or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ REDMOND, WA ■ GANANOQUE, ONT.
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