



**DESCRIPTION AND APPLICATIONS**

The Electro-Voice Model 619 is a dynamic omnidirectional microphone especially designed for a wide variety of communications and paging applications. It is adaptable for amateur, CB, aeronautical, and commercial base station installations, as well as for all paging applications. The wide-range smooth frequency response (70 - 10,000 Hz) makes the model 619 highly useful for group discussions such as panel shows on radio and TV, and public address applications like council and board meetings, and similar problem situations where multiple microphone installations require individual "on-off" operation.

The model 619 features the exclusive Electro-Voice Acoustalloy® diaphragm. This nonmetallic diaphragm withstands high humidity, temperature extremes, and corrosive effects of salt air. The mechanical nesting principle of design by which the internal parts of the model 619 transducer are closely fitted one within another results in a mechanical structure that is nearly impervious to damage from mechanical shock.

The attractively styled, rugged, die-cast stand is carefully balanced for hand-held use as a "grip-to-talk" microphone, yet will remain firmly positioned for "touch-to-talk" use. The lifetime switch assembly has survived many hundreds of thousands of use cycles--assuring the ultimate in reliability. Removal of one mounting screw permits changing the entire switching mode from "touch-to-talk" to

"grip-to-talk". The unique locking feature permits locking switch in the "on" position for "hands free" operation in either "grip-to-talk" or "touch-to-talk" mode.

The model 619 is shipped wired for operation of an external relay.

**SPECIFICATIONS**

Element:	Dynamic
Frequency response:	70 - 10,000 Hz
Polar Pattern:	Omnidirectional
Impedance:	Lo-Z or Hi-Z
Output level:	-57 db
EIA sensitivity rating:	-153 db Hi-Z -151 db Lo-Z
Diaphragm:	Acoustalloy®
Case:	Die-cast zinc
Dimensions:	9-3/4" h. x 4-1/2" w. x 4-3/4" d.
Finish:	TV gray and satin chrome
Net weight:	2-1/4 pounds
Switch:	DPDT, long-life switch shorts microphone in "off" position, operates external relay in "on". Note: see instructions for switch connections.
Cable:	15 ft., 4-conductor, 2-shielded (Lo Z) 6-1/2 ft., 3-conductor, 1-shielded, black plastic covered (Hi Z)

**WARRANTY**

The model 619 is guaranteed against defects in materials and workmanship.

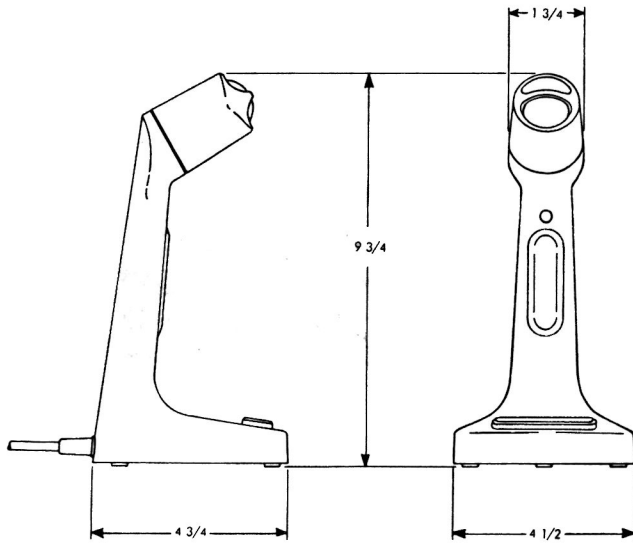


Figure 1 - Dimensions

### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an Electro-Voice Model 619 or equivalent. The microphone shall be an omnidirectional, dynamic type with wide-range uniform response from 70 to 10,000 Hz. The microphone output shall be (specify 150 ohms or high) impedance. The output level shall be  $-57$  db with 0 equaling (specify: 1 volt/dyne/cm<sup>2</sup> at high impedance or 1 mw/10 dynes/cm<sup>2</sup> at 150 ohms.) EIA sensitivity rating shall be (specify:  $-153$  db at high impedance, or  $-151$  db at 150 ohms.) The microphone case shall be pressure-cast zinc, and shall include a pressure-cast table stand integral with the microphone case. The complete assembly shall be  $9\text{-}3/4$ " high,  $4\text{-}3/4$ " deep, and  $4\text{-}1/2$ " wide.

A DPDT switch shall be provided, one section of which shall normally short-circuit the transducer when switch is in "off" position and remove short-circuit in the "on" position. (Provisions shall be made for connecting for normally open mode in "off" position and closing the microphone circuit for "on" position for multiple paging installations.) A second section of switch shall be provided with capability of function either in electronic switching mode, or for operation of external relay. A locking feature shall be provided by means of which switch may be locked in "on" position. A 15-foot black plastic jacketed, four-conductor, two shielded, cable shall be furnished with model 619 low impedance. A 6-1/2 foot, black plastic jacketed, three conductor, one shielded, cable shall be furnished with model 619 high impedance. The finish of integral stand shall be non-reflecting gray and microphone case shall be satin chrome. Net weight shall be  $2\text{-}1/4$  pounds.

The Electro-Voice model 619 (specify high or low impedance) is specified.

### CHANGING SWITCH CONNECTIONS

The switch assembly in your model 619 microphone is easily accessible for wiring revisions. Simply remove 619 bottom cover plate for access, then remove the single switch assembly "hold down" (Phillips) screw to release the assembly for easy access to switch terminals.

A. The model 619 (Lo-Z) is shipped with switch connections as shown in Figure 2. If the unit is to be used in applications such as multiple microphone paging installations (where several units are connected in parallel to a single microphone input) connections should be revised as shown in Figure 3.

1. Move yellow cable conductor from switch terminal #2 to switch terminal #3, connect green lead from microphone head to switch terminal #2. Red lead from microphone head should remain connected, with orange cable conductor, to switch terminal #1.
2. Return switch assembly to proper position and tighten switch assembly "hold down" screw.

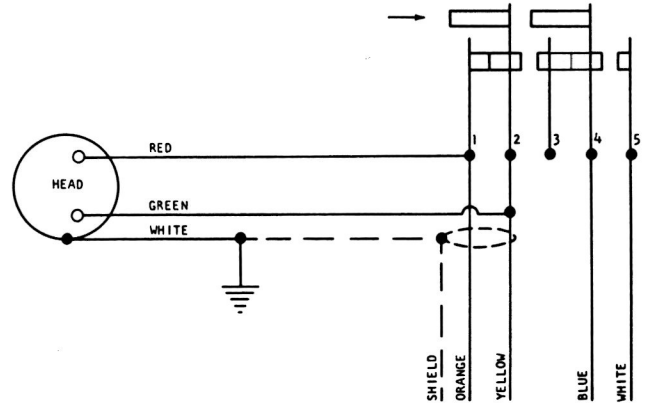


Figure 2 - Wiring Diagram, Lo-Z

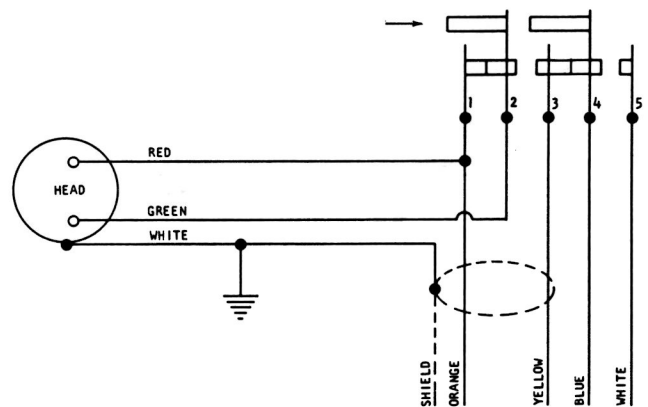


Figure 3 - Wiring Diagram

B. The model 619 (Hi-Z) is shipped with switch connected as shown in Figure 4 with red and white cable conductors connected to switch terminals #4 and #5 respectively, for operation of an external relay. To revise connections for electronic switching, perform the following steps (Figure 5) :

1. Move red cable conductor from terminal #4 to terminal #3.
  2. Connect cable shield to terminal #4.
  3. Return switch assembly to proper position and tighten switch assembly "hold down" screw.
- Replace cover plate.

Note: Circuit return for electronic switching is via the cable shield. Alternating currents substantially higher than microphone levels are likely to introduce noise into the microphone circuit and should not be switched by this means. For best results, only DC should be transmitted through the cable shield.

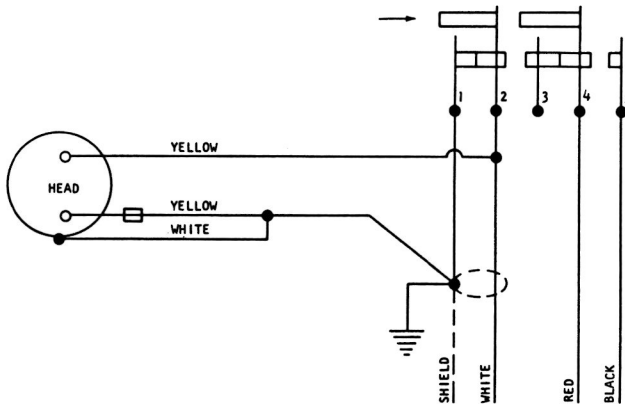


Figure 4 - Wiring, Relay Operation

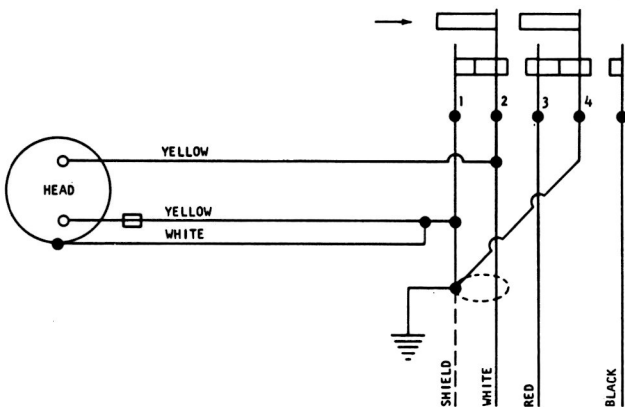


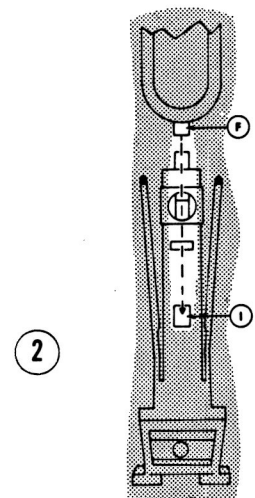
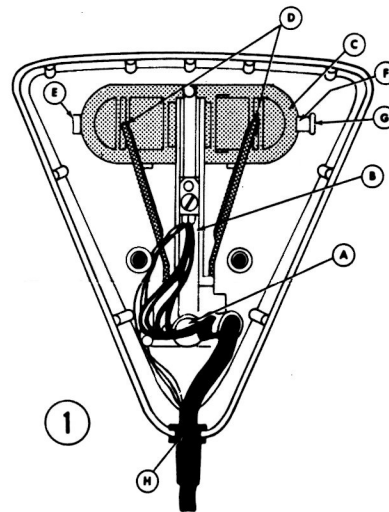
Figure 5 - Wiring, Electronic Switching

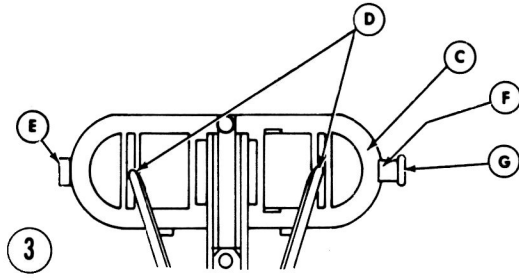
## CHANGING SWITCH LOCATION

This microphone is designed for push-to-talk or grip-to-talk operation. When received from the factory, the switch is mounted on the base for push-to-talk use. If desired, the switch may be relocated without any wiring changes to the neck of the microphone for grip-to-talk operation.

To relocate the switch, proceed as follows:

1. Remove the black plastic cover from the neck of the microphone by gently lifting one end with a flat blade. This will expose the grip-to-talk switch opening. Save the cover — it will be needed for the opening on the base of the microphone.
2. Remove two screws and the cover plate from the bottom of the microphone.
3. Slip strain relief "H", (Figure ①) from slot.
4. Remove screw "A", (Figure ①) and gently lift switch assembly "B" and red switch bar "C" away from microphone housing.
5. Separate red switch bar "C" from switch assembly by lifting switch legs "D" away from the microphone housing.
6. Rotate the red switch bar 90-degrees. Insert tab "F" on switch bar in slot "I" on switch assembly (Figure ②) Squeeze legs "D" together and insert in slot on switch bar.





Close-up view of Switchplate

7. Now turn entire switch assembly so top surface of the switch bar faces the front of the microphone and, making sure all leads are neatly positioned at back of microphone neck along rib "J", push the switch assembly into the neck until the switch button is aligned with the opening. (Fig. 4)

8. Align screw "A" with brass cable strain relief, switch mounting hole and threaded hole from which it was removed, and tighten securely.

9. Check the action of the switch to ensure that all wires are properly seated and have not become entangled in the switch assembly.

10. Make sure the cable strain relief grommet is properly seated at rear of the base, and replace bottom plate with two screws.

11. Place the black plastic cover in the opening (from which red switch bar was previously removed) on the base by inserting the two tabs into the opening and snapping into position.

The microphone is now ready for grip-to-talk operation. To restore touch-to-talk operation, perform in reverse and in reverse order, the steps outlined above.

