

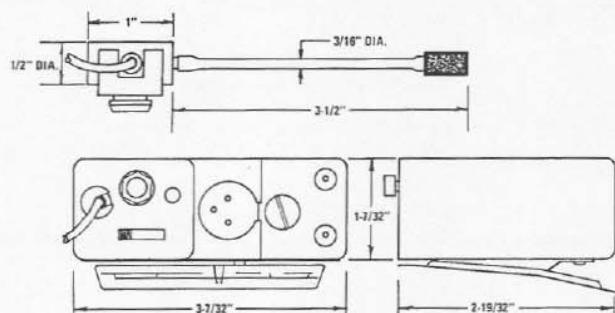
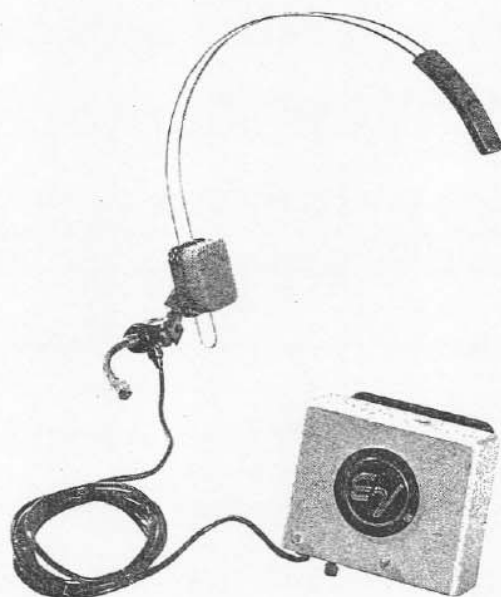


FIGURE 1 – Dimensions

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model 651C microphone represents an innovation in design which is centered around convenience for the user and sturdy, reliable operation under the most adverse conditions. The microphone always remains a constant distance from the talker's mouth, providing an extremely constant level. The close proximity to the talker's mouth provides for very high relative level over background ambient noise.

The 651C is a miniature dynamic microphone designed especially for the communicator, i.e. radio amateur, dispatch operator, floor manager, civil defense, etc. Many times hands-free operation is a major consideration. The extremely light microphone assembly mounts to most eyeglass frames or the lightweight headband which is supplied. A small tube, which conducts sound from the talker's mouth to the microphone element, extends down to the side of the mouth completely out of the field of vision. A supple lightweight cable connects the microphone to a small and versatile preamplifier box which may be attached on the person (to the belt), or secured to the accessory desk stand by means of a versatile utility clip.

The preamplifier box combines many important functions into a small easily accessible area. Since the output of the microphone element itself is lower in level than would be compatible with normal input facilities, a small pre-amplifier is provided in the preamp box which not only strengthens the signal, but adds equalization which causes the final output signal of the microphone to be shaped for maximum intelligibility.

In addition, the box houses an easily accessible push-to-

talk button for push-to-talk operation. The box also houses a standard "XLR" type connector used to connect the output cable to the unit. Additionally, the box houses two size AA cells (not supplied) necessary for powering the amplifier and an on/off test switch with its associated battery condition indicator light.

In the On position, the unit may either be used with the push-to-talk switch or as a VOX operated unit.

SPECIFICATIONS

Type:	Dynamic
Frequency Response:	200 – 4,500 Hz
Impedance:	Adjustable output level matches any standard input
Polar Pattern:	Omnidirectional (pressure mike)
Output Level,	
Microphone Cartridge:	–76 dB (0 dB=1 volt/dyne/cm ²)
Total Output (Including preamp):	2.5 volts peak to peak maximum output
Case Material,	
Microphone Element:	High impact Delrin
Preamp Box:	Steel
Finish,	
Microphone Element:	Nonreflecting black
Preamp Box:	Fawn Beige Micomatte
Transistor Amplifier,	
Voltage Gain:	Adjustable (35 dB at 1,000 Hz maximum)
Rated Supply Voltage:	3 V (2-Size AA)
Maximum Undistorted Output:	–35 dB
Current Drain:	2.5 ma
Dimensions,	
Transducer Assembly:	½" dia., 1" long
Microphone Tube:	3/16" dia., 3½" long
Preamp Box:	3-7/32" l., 2-19/32" d., 1-7/32" w.

OPERATING INSTRUCTIONS

Battery Access: After unpacking the unit, two size AA batteries should be inserted in the battery compartment. Access to the battery compartment is by removing the battery plate found directly adjacent to the connector at the base of the preamp box. A dime or other thin coin should be sufficient to loosen the fastening screw at the center of the battery plate. (See Figure 2.) The battery plate is then pulled away and the two size AA batteries are inserted, taking care to follow the polarity instructions inside the case. Replace the battery cover plate, making sure that the lead wires are not pinched in doing so. Secure the fastening screw, and the unit is ready for operation. Changing of batteries may be handled in the same way.

Function Switch: The on-off-test function switch allows the preamplifier to be turned off when not in use. The normal position for storage when not in use is in the "off" position (See Figure 2).

Just prior to actual use, the switch may be pushed through the "on" position over to "test." In the test position, the battery condition indicator switch should go on.

If the condition indicator light comes on, it may be assumed that there is a minimum of four hours battery life remaining. (Note: The test position should be for momentary battery checking only.) After testing the battery, the switch should then be returned to the "on" position for normal use.

VOX or PTT Operation: In the "on" position, the preamp is always "live" and the microphone circuit is active. Thus, any transmitter with built-in VOX equipment may be operated in the VOX mode. VOX sensitivity is, of course, adjusted in the transmitter.

The push-to-talk switch operates the separate relay circuit and may be used to throw the relay in the transmitter in the same way any normal push-to-talk switch would operate. The operator of a transmitter with built-in

push-to-talk circuitry may use his built-in switching equipment without activating the 651C's integral push-to-talk switch.

MICROPHONE PLACEMENT

The microphone may be attached either to the lightweight headband supplied or to the temple bars of regular eyeglasses. It may be operated conveniently from either side of the face. The Model 651C should be positioned so that the end of the thin tube is in the vicinity of the corner of the mouth, one-quarter-inch or so away from the face.

MICROPHONE TERMINATION

The preamplifier box has a continuously-adjustable output which enables it to work into almost any impedance, in an unbalanced configuration. Access to the 651C is through the A3M connector at the bottom of the preamplifier box. The 651C output adjustment is accessible through a small hole at the top of the preamplifier box. Normally, a level will be set up and further level adjustments may not be necessary.

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.

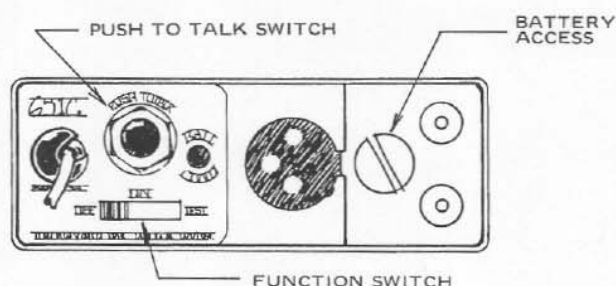


FIGURE 2 — Preamp Box

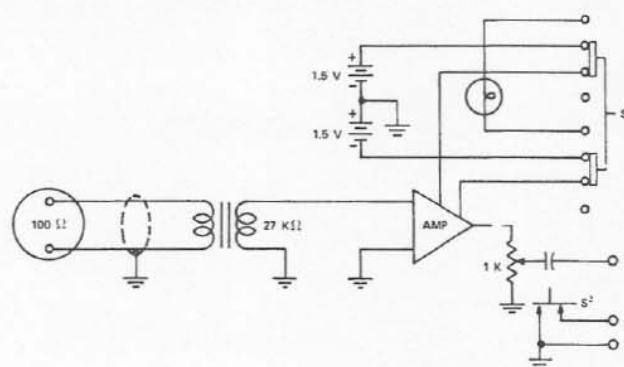


FIGURE 3 — Wiring Diagram