## TEMPORARY



### DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE51 microphone is a miniature dynamic microphone designed for professional use in broadcasting, performing, lecturing, etc., where hands-free operation is a major consideration. The extremely light microphone assembly mounts to eye glass frames or to 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 easily be concealed on a person.

The preamplifier box represents a design innovation combining 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 150 ohm balanced input facilities, a small preamplifier is provided in the preamp box which not only strengthens the signal, but adds certain equalization which causes the final output signal of the microphone to be extremely flat and of broadcast quality (the final curve is very similar to the Electro-Voice Model 635A).

In addition, the box houses an easily accessible muting button (cough button) which momentarily turns the microphone off without any noise on the audio line, and a standard XLR type connector (broadcast type) which is found on any broadcast microphone. The box also houses the two necessary pen light cells for powering the amplifier, and an on-off-test switch with its associated battery addition indicator light.

The entire RE51 microphone unit 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 extremely high relative level over background ambient noise such as crowd noise, vehicle noise, etc.

# OPERATING INSTRUCTIONS

Battery Access: After unpacking the unit, two pen light batteries should be inserted in the battery compartment. Access to the battery compartment is had 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. The battery plate is then pulled away and the two pen light 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 off-on-test function switch allows the preamplifier to be turned off when not in use to save the batteries. The normal position for storage when not in use is in the off position.

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 light should go on. If the condition indicator light comes on, it may be assumed that there is a minimum of 4 hours battery life remaining. (Note: The test position could be for momentary battery checking only.) After testing the battery, the switch should then be returned to the "on" position for normal use.

Microphone Termination: The microphone is designed to work into a standard Lo-Z balanced input. Access to the RE51 microphone is through the professional type A3M connector at the bottom of the preamplifier box. The RE51 is a variable level device. The output level can be adjusted to match the input sensitivity of the particular microphone input being used. It is also possible by this means to adjust the output to specifically match any microphone input from 50 — 250 ohms. The output adjustment is screwdriver 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.

Muting Switch: A small black button labeled "mute" is located on the bottom of the preamplifier box which, when depressed, shorts the microphone leads. This momentarily turns the microphone off without any "thump" or transient noise on the line.

Microphone Placement: The microphone may be attached either to the lightweight headband supplied, or to the temple bars of regular eye glasses. It may be operated conveniently from either side of the face. The Model RE51 should be positioned so that the end of the thin black tube is in the vicinity of the corner of the mouth, 4-inch or so away from the face.

### **SPECIFICATIONS**

Type: Dynamic Frequency Response: 60 - 10,000 Hz Impedance: Matches any Lo-Z balanced input,

50 to 250 ohms

Polar Pattern: Omnidirectional (pressure mic)

Output Level:

Microphone Cartridge: -76 dB (0 dB = 1V/dyne/cm<sup>2</sup>)
Total Output: (including preamp) -52 dB
(0 dB = 1 mv/dyne/cm<sup>2</sup>)

Case Material:

Microphone Element: High Impact Delrin
Preamp Box: Steel

Finish:

Microphone Element: Nonreflecting black
Preamp Box: Fawn beige micomatte

Dimensions:

 Transducer Assembly:
 ½" dia., 1" long

 Microphone Tube:
 3/16" dia., 3½" long

 Preamp Box:
 3-7/32" 1, 2-19/32" d, 1-7/32" w.

#### WARRANTY

Electro-Voice Professional Broadcast and Recording Microphones are guaranteed unconditionally against malfunction for two years from date of purchase. Within this period Electro-Voice will, at its option, repair or replace any E-V professional microphone exhibiting any malfunction regardless of cause, including accidental abuse. This warranty does not cover finish or appearance. Also, every Electro-Voice microphone is guaranteed for the life of the microphone to be free of factory defects in materials and workmanship, and will be repaired or replaced (at our option) 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, and will be returned prepaid.

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.