Description and Applications

The Electro-Voice RE50 and RE50/B are specially shock-isolated, omnidirectional, dynamic microphones created for the most exciting professional applications.

An advancement in shock-mounting techniques, they were designed particularly for handheld broadcast and sound-reinforcement use. All handling noise, clothing noise, and even cord shock have been isolated from the microphone element so that mechanically induced noise is greatly reduced. By use of a high-mass zinc internal acoustic chamber, shock mounted within the machined-aluminum outer casing, the RE50 and RE50/B offer a degree of isolation unprecedented in an omnidirectional dynamic microphone.

The internal transducer uses a mechanical nesting concept all its own. Each part is nested inside another so that the transducer (head assembly) is nearly a solid structure. It is highly resistant to damage from shock. The diaphragm is unaffected by temperature extremes and atmospheric conditions. A carefully designed integral windscreen and blast filter provides excellent protection from wind noise, excessive sibilance and annoying “P-popping.” The RE50 and RE50/B have a grille that bounces back to retain its shape. A four-stage pop filter prevents dust and magnetic particles from reaching the diaphragm. The RE50/B’s attractive, non-reflecting, semi-gloss black finish is ideal for on-camera use.

Architects’ and Engineers’ Specifications

The microphone shall be an omnidirectional, dynamic type with broadcast range response from 80-13,000 Hz. It shall employ a high-mass zinc acoustic chamber, integral with the head assembly that shall be shock isolated within an external aluminum case. It shall have a four-stage pop filter to prevent dust and magnetic particles from reaching the diaphragm. Nominal impedance shall be 150 ohms (such that it will match 50-, 150-, and 250-ohm inputs). The line shall be balanced to ground and phased. Output level shall be -55 dB with 0 dB equaling 1 mW/pascal. The magnetic circuit shall be a non-welded circuit and employ Alnico V and magnetic iron. The inner case shall be made of zinc and the outer case of machined aluminum.

The microphone shall have a maximum diameter of 49 mm (1.94 in.) and a length of 197 mm (7.75 in.). Shank diameter shall be 25 mm (1.0 in.). Weight shall be 269 grams (9.5 oz.). Finish shall be fawn beige (RE50), or semi-gloss black (RE50/B). The microphone shall have a built-in connector similar or equivalent to the Switchcraft A3M.

The Electro-Voice RE50 and RE50/B are specified.

Uniform Limited Warranty

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner’s manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. Exclusions and Limitations: The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner’s manual; (c) malfunction resulting from use or operation of the product other than as specified in the
product data sheet or owner’s manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than EVI Audio Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to EVI Audio Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from EVI Audio Service at 600 Cecil Street, Buchanan, MI 49107 (800/234-6831 or FAX 616/695/4743). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Electro-Voice Wired Microphones are guaranteed against malfunction from any cause for two (2) years from the date of original purchase. In addition, the Limited Warranty for the acoustic system contained in these microphones shall apply for the life of the product, defined as a period of ten (10) years from the date that the manufacture of the specific microphone has been discontinued.** Any and all active electronics incorporated in these microphones are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase.

The Limited Warranty does not extend to cables, cable connectors, or switches. Additional details are included in the Uniform Limited Warranty statement.

For warranty repair, service information, or a listing of the repair facilities nearest you, contact the service repair department at: 616/695-6831 or 800/685-2606.

**For technical assistance,** contact Technical Support at 800/234-6831 or 616/695-6831, M-F, 8:00 a.m. to 5:00 p.m. Eastern Standard time.

Specifications subject to change without notice.
RE50 and RE50/B Omnidirectional Dynamic Microphones

Figure 1—Dimensions

![Dimensions Diagram]

Figure 2—Frequency Response

![Frequency Response Graph]

Figure 3—Wiring Diagram

![Wiring Diagram]

POSITIVE PRESSURE ON GENERATING ELEMENT CAUSES POSITIVE VOLTAGE ON RED CABLE LEAD REF TO BLUE CABLE LEAD.
Specifications

Element:
Dynamic

Frequency Response:
80-13,000 Hz

Polar Pattern:
Omnidirectional

Impedance,
Low-Z:
150 ohms

Output Level (0 dB = 1 mW/pascal): 
-55 dB

Case Material:
Aluminum

Dimensions,
Length:
197 mm (7.75 in.)

Max. Diameter:
49 mm (1.94 in.)

Shank Diameter:
25 mm (1.0 in.)

Finish,
RE50/B:
Semi-gloss black

RE50:
Fawn beige

Accessory Included:
Stand adapter

Optional Accessories:
422A desk stand
423A desk stand

Net Weight:
269 grams (9.5 oz.)

Shipping Weight:
539 grams (19 oz.)