

# CO2E/CO2EX

## Miniature Condenser Lavalier Microphone

- Very Small Profile
- Omnidirectional Polar Pattern
- Extremely Rugged Cable
- Paintable Tincture™ Surface
- Back Electret Design
- Available in Black or White

### SPECIFICATIONS

#### Generating Element:

Condenser, back electret

#### Frequency Response (see Figure 1):

50-20,000 Hz

#### Polar Pattern:

Omnidirectional

#### Sensitivity,

**Open-Circuit Voltage:**

8.5 mV/pascal at 1,000 Hz

#### Equivalent Noise:

<29 dB SPL, typical, A weighted  
(0 dB = 20 micropascals)

#### Output Impedance at 1,000 Hz:

4,700 ohms

#### Polarity:

##### CO2E:

A positive pressure on the diaphragm produces a positive voltage on white lead with respect to shield

##### CO2EX:

A positive pressure on the diaphragm produces a positive voltage on output pin 2 (+)

#### Finish:

**CO2E, COEX:** Nonreflecting black

**CO2E-W, COEX-W:** White

#### Dimensions,

##### Capsule Diameter:

5.3 mm (0.21 in.)

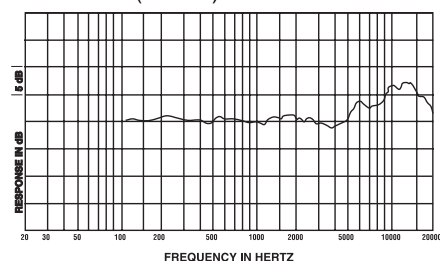


FIGURE 1 — Frequency Response

#### Cable Length,

##### CO2E:

1.6 m (5 ft), permanently attached

##### CO2EX:

1.0 m (3 ft), permanently attached

#### Net Weight,

##### CO2E:

20 g (0.7 oz)

##### CO2EX:

30 g (1.0 oz)

#### Shipping Weight:

##### CO2E:

57 g (2.0 oz)

##### CO2EX:

67 g (2.4 oz)

#### Furnished Accessories,

##### CO2E:

Single mic tie bar

##### CO2EX:

Single mic tie bar

Zippered vinyl carrying pouch

### DESCRIPTION AND APPLICATIONS

The Electro-Voice CO2E/CO2EX is an omnidirectional back-electret condenser lavalier microphone designed for the broadcast and sound reinforcement applications where acoustic feedback problems are minimal.

The frequency response of the CO2E/CO2EX microphone provides a full-range, well-balanced sound character for clean and accurate sound reproduction. The microphone's omnidirectional polar characteristic provides a uniform output regardless of the direction of the sound.

The CO2E/CO2EX microphone is designed to attach to the performer's clothing using the supplied clips (See Furnished Accessories).

The microphone's transducer is permanently attached to the shielded miniature cable. The cable is high-strength and flexible, designed to withstand the rigors of professional use. The exclusive Tincture™ surface accepts acrylic lacquer paint—to blend with any surface.

### POWERING AND OPERATION OF THE CO2/CO2EX

The CO2E may be powered by an external phantom power unit or via a wireless transmitter. The CO2E is equipped with stripped and tinned leads.

The CO2EX is powered by the external wireless transmitter through the attached TA4F connector.

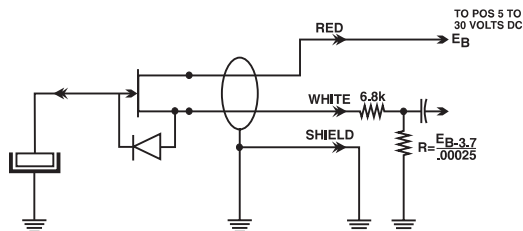
### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a miniature, back-electret condenser with an omnidirectional polar pattern. The microphone shall have a frequency response from 50 to 20,000 Hz. The product shall have a balanced output with a 100-ohm nominal impedance. The open-circuit output voltage shall be 8.5 mV/pascal. The microphone capsule shall be made of brass.

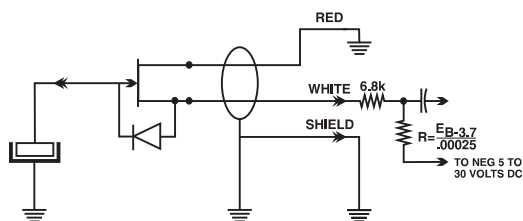
The CO2E microphone shall have stripped and tinned leads. The microphone shall be supplied with a single tie bar. The Electro-Voice CO2E is specified.

The CO2EX microphone shall be permanently connected to a TA4F connector. The microphone shall be supplied with a single tie bar and a storage pouch. The Electro-Voice CO2EX is specified.

FIGURE 2 — Typical Wiring Diagrams



POSITIVE VOLTAGE WITH RESPECT TO GROUND



NEGATIVE VOLTAGE WITH RESPECT TO GROUND

**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 Electro-Voice or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a cus-

tomers must deliver the product, prepaid, to Electro-Voice 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 Electro-Voice at 600 Cecil Street, Buchanan, MI 49107 (616/695-6831 or 800/234-6831). **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 acous-

tic 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.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (616/695-6831 or 800/234-6831).

Specifications subject to change without notice.

