

# CO2/CO2Pro

## Miniature Condenser Lavalier Microphone

- Very Small Profile
- Omnidirectional Polar Pattern
- Extremely Rugged Cable
- Paintable Tincture™ Surface
- Complete Assortment of Clips
- 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

##### Power level:

-38 dB at 1,000 Hz  
(0 dB = 1 mW/pascal)

#### Dynamic Range:

128 dB

#### Equivalent Noise:

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

#### Dynamic Range:

99 dB

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

100 ohms

#### Power Requirements:

12 to 52 V dc phantom supply

#### Current Consumption:

1.0 mA

#### Polarity:

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

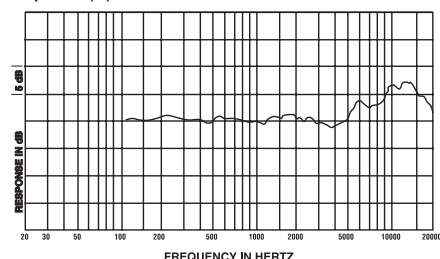


FIGURE 1 — Frequency Response

#### Finish:

**CO2, COPRO:** Nonreflecting black  
**CO2-W, COPRO-W:** White

#### Dimensions,

##### Electronics Module,

##### Length:

93 mm (3.65 in.)

##### Body Diameter:

19 mm (0.75 in.)

##### Capsule Diameter:

5.3 mm (0.21 in.)

##### Cable Length:

2.6 m (8 ft), permanently attached

#### Net Weight:

36 g (1.3 oz)

#### Shipping Weight:

238 g (8.4 oz)

#### Furnished Accessories,

##### CO2:

- Single mic tie bar
- Double mic tie bar
- Single cable holding tie bar
- Zippered vinyl carrying pouch

##### CO2Pro:

- Single mic tie bar
- Double mic tie bar
- Single cable holding tie bar
- Mic tie tack
- Cable tie tack
- Mic vampire clip
- Cable vampire clip
- Zippered vinyl carrying pouch

### DESCRIPTION AND APPLICATIONS

The Electro-Voice CO2 and CO2Pro are omnidirectional back-electret condenser lavalier microphones designed for the broadcast and sound reinforcement applications where acoustic feedback problems are minimal.

The frequency response of the CO2/CO2Pro 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 CO2/CO2Pro microphone is designed to attach to the performer's clothing using the supplied clips (See Furnished Accessories). The electronics housing features a side clip to facilitate attachment to a belt or pocket.

The microphone's transducer is attached to the electronics module by a 2.6-meter (8-foot) length of miniature cable. The cable is high-strength and flexible, designed to withstand the rigors of professional use. The exclusive Tincture™ surface accepts acrylic laquer paint—to blend with any surface.

### POWERING THE CO2/CO2PRO

The CO2 and CO2Pro are powered by an external 12- to 52-volt phantom power supply only. The electronics circuitry is wrapped with an insulated copper foil for superior emi/rfi attenuation. This module is enclosed in a housing of high-strength polycarbonate resin, forming a package that is light-weight but extremely durable for long, reliable use.

### OPERATION

To operate the CO2/CO2Pro, use high-quality balanced cable with XLR connectors to connect the electronics housing to the mixer input which is providing the phantom power. The connecting cable used should be standard two-conductor shielded type; the shield is used as ground return and must be properly connected to avoid electrical noise.

## 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 electronics housing shall be made of polycarbonate resin.

The microphone shall be permanently connected to its electronics module with a 2.6 m (8 ft) length of rugged, two-conductor, shielded, miniature audio cable. The microphone shall be supplied with tie clasps and a storage pouch. The Electro-Voice CO2 and CO2Pro is 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 Electro-Voice or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer 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 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.

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.



**ELECTRO-VOICE** a MARK IV company 600 Cecil Street, Buchanan, Michigan 49107

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