



# CM-30 CM-30W

The Crown CM-30 is a professional-quality, supercardioid condenser microphone designed for inconspicuous miking of a choir, orchestra or stage. The mic cable connects to the electronics/faceplate which fits a standard electrical outlet box. The CM-30 also can hang over conference tables or discussion groups for inconspicuous isolated miking.

Because of its supercardioid pickup pattern, the CM-30 rejects background noise and room reverberation, and improves gain-before-feedback, more than a microphone with a cardioid pattern.

The CM-30 has a smooth, wide-range frequency response for natural reproduction of the singing voice, organ or other musical instruments. Extreme low frequencies are filtered out to reduce pickup of room rumble.

The microphone output is balanced, low impedance. It is protected against static and radio frequency interference. A built-in removeable hanger allows easy position adjustment by bending the lower portion of the hanger. The CM-30 requires 12-48V phantom power. The CM-30 is black; the CM-30W is white.

## Operating Instructions

The CM-30 consists of the microphone with 30' cable and associated electronics. The electronics PC board is mounted to the provided rectangular electrical plate as shown in Fig. 4. The mating electrical backbox should be installed at the mounting location. Input and output screw terminals eliminate the need for cable connectors. The provided strain relief acts as a cable clamp when securely tightened.

A recommended microphone placement for sound reinforcement is shown in Figs. 5a and 5b. For recording or broadcast, you might want to place the microphone a few feet farther away to pick up more room acoustics. Bend the wire hanger to achieve the desired pickup angle.

## Architects' and Engineers' Specifications

The microphone shall be the Crown CM-30. It shall be a professional-quality supercardioid condenser microphone designed for inconspicuous miking of a choir or other large musical ensembles. It shall be hung from the ceiling, where its cable shall connect to electronics installed in a standard electrical outlet box.

Frequency response shall be 40 Hz to 20,000 Hz. Extreme low frequencies shall be filtered out to reduce pickup of room rumble. Open-

## MINIATURE SUPERCARDIOID CONDENSER MICROPHONE



## Specifications

**Type:** Unidirectional condenser.

**Transducer:** Electret condenser.

**Frequency Response (typical):** 40 Hz to 20,000 Hz. See Fig. 1.

**Polar Pattern:** Supercardioid (see Fig. 2).

**Impedance:** 150 ohms, balanced. Recommended minimum load impedance 1000 ohms.

**Open Circuit Sensitivity:** 10 mV/Pa\* (-40 dB re 1 volt/Pa).

**Power Sensitivity:** -37.5 dB re 1 mW/Pa.

**Equivalent Noise Level:** 28 dB SPL typical (0 dB = 0.0002 dyne/cm<sup>2</sup>), A-weighted.

**S/N Ratio:** 66 dB at 94 dB SPL.

**Maximum Sound Pressure Level:** 120 dB SPL produces 3% THD.

**Input Connectors:** Screw terminals.

**Output Connectors:** Screw terminals.

**Operating Voltage:** Phantom power, 12 to 48 volts DC, positive voltage on pins 2 and 3 with respect to pin 1 of output terminal.

**Materials:** Brass housing, steel faceplate.

**Finish:** Black (CM-30) or white (CM-30W) microphone, white faceplate.

**Weight (microphone and cable):** 4 ounces (113 grams).

**Weight (microphone, cable and circuit):** 7.5 ounces (212 grams).

**Cable:** Black (CM-30) or white (CM-30W), 30' 2-conductor shielded 0.1" diameter cable from microphone to electronics; none supplied for electronics output. Use 2-conductor shielded microphone cable.

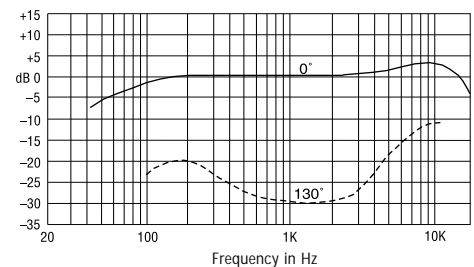
**Dimensions:** See Fig. 3 on reverse side.

**Included Accessories:** WS-5 windscreen (black or white).

**Optional Accessories:** Crown PH-1A phantom power supply (1 channel, battery or AC adaptor powered), Crown PH-4B phantom power supply (4 channels, AC powered).

\*1 pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL.

**Fig. 1** Frequency Response



**Fig. 2** Polar Response

