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CM-31 CM-31W

The Crown CM-31 is a professional-quality, supercardioid condenser microphone designed for inconspicuous miking of a choir, orchestra or stage. It also can hang over conference tables or discussion groups for inconspicuous isolated miking.

The CM-31 consists of two parts: the microphone with a permanently attached 30' cable and the cylindrical electronics power module.

The mic cable connects to the power module which adapts the microphone for phantom powering and includes a low-cut switch. Cable connection is via miniature 3-pin connectors. The power module output is balanced, low impedance. It is protected against static and radio-frequency interference.

The CM-31 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 has a built-in removable hanger which allows easy position adjustment. The CM-31 microphone and cable are black; the CM-31W microphone and cable are white.

Operating Instructions

The power module supplied has been matched to the microphone. For best performance do not intermix microphones and modules.

Plug the microphone into the electronics power module. Run a 2-conductor shielded mic cable (not supplied) from your mixer to the power module, and plug it in.

Experiment with microphone placement before permanently installing the power module. A suggested placement for choir sound reinforcement is shown in Figs. 4a and 4b. 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.

If rumble from trucks or air-conditioning is excessive, switch in the low-cut filter on the power module. The low-cut position (—) is toward the microphone.

After finding the desired microphone position, install the power module in one of three ways:

- Install the power module in the ceiling (Fig. 6). Pull up the mic cable until the mic is at the desired height, then knot the cable.
- Clamp the power module to a beam overhead (Fig. 7).
- Tape the power module to the floor

Architects' and Engineers' Specifications

The microphone shall be the Crown CM-31. It shall be a professional-quality supercardioid

MINIATURE CONDENSER HANGING 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 = .0002 dyne/cm²), A-weighted.

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

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

Mic-Cable Connector: TB3F (mini XLR-type).

Power module Connector (input): TB3M (mini XLR-type). See Fig. 3.

Power module Connector (output): 3-pin pro audio XLR-type.

Power Module Switch: Flat/low-cut.

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

Materials: Brass housing, steel power module housing.

Finish: Black (CM-31) or white (CM-31W).

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

Weight (microphone, cable and power module): 9.5 ounces (269 grams).

Cable: Black (CM-31) or white (CM-31W), 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. 5 on reverse side.

Included Accessories: WS5 black foam windscreen for CM-31, WS5W white foam windscreen for CM-31W.

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/cm² = 10 microbars = 94 dB SPL.

Fig. 1 Frequency Response

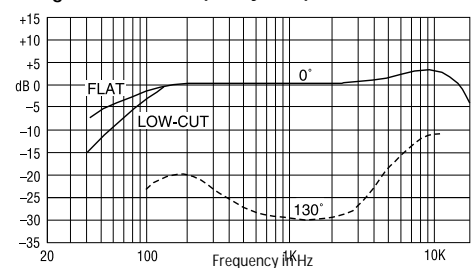


Fig. 2 Polar Response

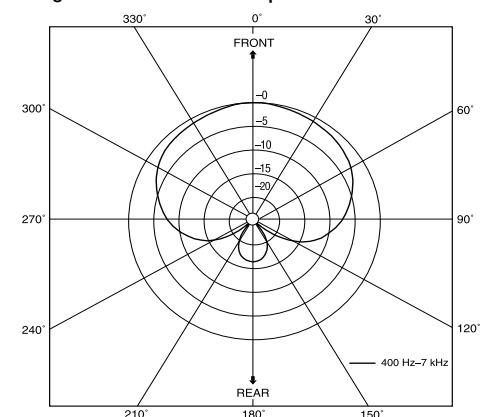


Fig. 3

