

GLM-100

GLM-200



MINIATURE OMNIDIRECTIONAL AND HYPERCARDIOID MICROPHONES



The Crown® GLM or “Great Little Mic” is a miniature electret condenser microphone designed for professional recording and sound reinforcement. It offers the quality of large studio microphones, yet is nearly invisible in use.

The GLM can be attached to an acoustic guitar, sax, flute or the performer's face to allow freedom of movement. It can be attached to drum rims to pick up a drum set without the unsightly clutter of boom stands. These attachments can be made using the included mounting hardware or tape. Used as a lavalier microphone, or hidden on a film set, the GLM disappears in use yet provides excellent sound quality.

The **GLM-100** is an omnidirectional mic with a low-impedance balanced XLR-type output, powered by 12 to 48V phantom power.

The **GLM-200** is a hypercardioid mic with a low-impedance balanced XLR-type output, powered by 12 to 48V phantom power.

The omnidirectional **GLM-100** is the best choice if you need:

- Less wind noise
- Less pickup of mechanical vibration
- Deep low-frequency response down to 20 Hz
- 150 dB maximum SPL
- Smoother frequency response

The hypercardioid **GLM-200** is the best choice if you need:

- Rejection of background noise, room acoustics, feedback, and sounds behind the microphone.

The GLM-100 may have adequate rejection of those unwanted sounds if it is used close to the sound source.

Made of a rugged, resilient space-age material, the GLM's molded housing is designed to resist damage from demanding professional use.

Performance benefits of the GLM include: a wide, smooth frequency response; excellent transient response; and minimal off-axis coloration.

The GLM's housing is designed to improve the high-frequency response of the microphone capsule. In contrast, the frequency response of large microphone capsules often is degraded by the microphone housing (due to sound diffraction).

Included with the GLM-100 and GLM-200 are a GLM-UM Universal Mount, a GLM-TB Tie Bar, GLM-BC Belt Clip, and a GLM-WS2 Windscreen.

Specifications

Type: Miniature condenser.

Element: Electret condenser.

Frequency Response (typical):

GLM-100: 20 Hz to 20,000 Hz. See Fig. 1.

GLM-200: 60 Hz to 20,000 Hz. See Fig. 2.

Polar Pattern:

GLM-100: Omnidirectional. See Fig. 3.

GLM-200: Hypercardioid. See Fig. 4 on other side.

Impedance:

GLM-100: 240 ohms balanced. Recommended minimum load impedance 1000 ohms.

GLM-200: 100 ohms, balanced. Recommended minimum load impedance 1000 ohms.

Open Circuit Sensitivity:

GLM-100: 3.2 mV/Pa* (–50 dB re

1 volt/Pa*)

GLM-200: 6 mV/Pa* (–44.5 dB re

1 volt/Pa*)

Power Sensitivity:

GLM-100: –50 dB re 1 mW/Pa*.

GLM-200: –40.5 dBm/Pa*.

Equivalent Noise Level:

GLM-100: 28 dB SPL

A-weighted, typical
(0 dB = .0002 dyne/cm²).

GLM-200: 31 dB SPL A-weighted, typical
(0 dB = .0002 dyne/cm²).

S/N Ratio:

GLM-100: 66 dB at 94 dB SPL.

GLM-200: 63 dB at 94 dB SPL.

Maximum Sound Pressure Level:

GLM-100: 150 dB SPL produces 3% THD.

GLM-200: 131 dB SPL produces 3% THD.

Polarity:

Positive pressure on the diaphragm produces positive voltage on pin 2 with respect to pin 3 of output connector.

Operating Voltage:

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

Operating Temperature Range: –18° to +57° C
(+0° to +135° F).

Current Drain:

GLM-100: 1.1 mA.

GLM-200: 1.4 mA.

Materials: Black PVC housing.

Cable:

8-foot, black, permanently attached cable with rugged strain/flex relief and 3-pin pro audio connector.

Weight: 1 ounce (27.5 grams) without connector, 2.8 ounces (78.5 grams) with connector.

Dimensions: See Fig. 5 on other side.

Included Accessories:

GLM-UM Universal Mount, GLM-TB Tie Bar, GLM-BC Belt Clip, and a GLM-WS2 Windscreen.

Optional Accessories: Crown PH-1A Battery Phantom Supply (battery or AC adapter powered, single channel, 475 hours battery life with GLM-100, 375 hours battery life with GLM-200).

*1 pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL.

Fig. 1. GLM-100 Frequency Response

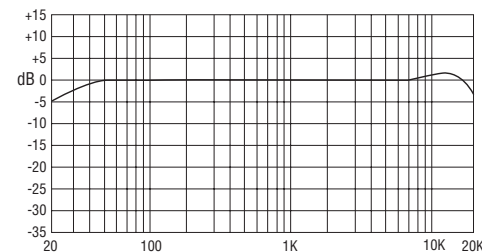


Fig. 2. GLM-200 Frequency Response

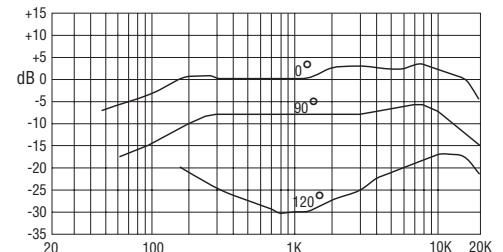
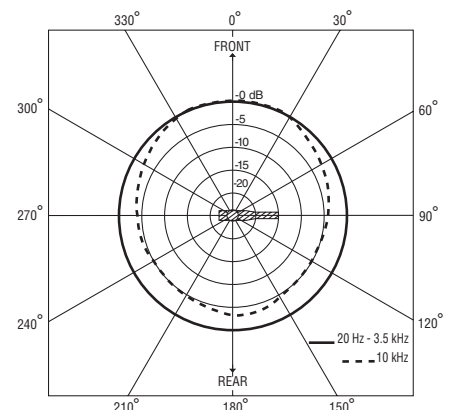


Fig. 3. GLM-100 Polar Response



GLM-100 GLM-200

Fig. 4. GLM-200 Polar Response

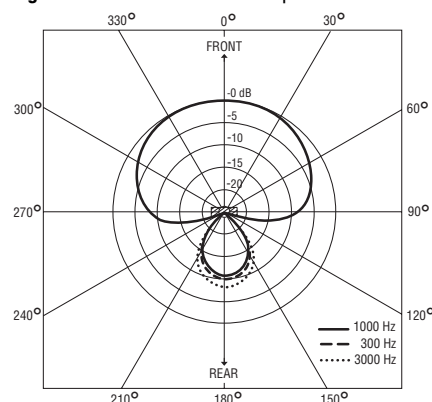


Fig. 5. Dimensions

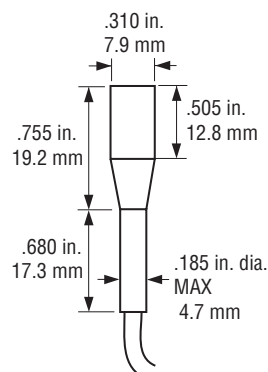
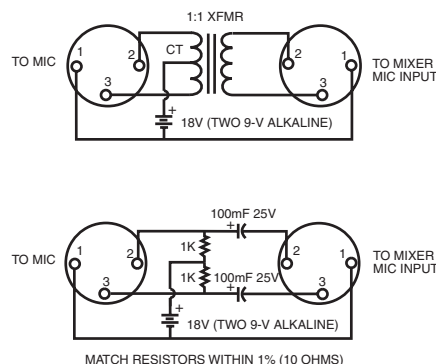


Fig. 6. Battery Phantom Supplies



Operating Instructions

The GLM-100 and GLM-200 require 12 to 48V phantom power to operate. Crown makes a model PH-1A single-channel phantom supply powered by battery or AC adapter. The adapter should provide 24V DC from a 1/8-inch (3.5mm) phone plug with positive tip. For special applications you can make your own battery supply as suggested in Figure 6.

Using a microphone cable, plug the GLM-100 or GLM-200 into a phantom power supply. Connect the power-supply output to a mixer mic input, or if your mixer has phantom power built in, plug the GLM directly into a mixer mic input.

For outdoor or vocal use, place the included GLM-WS2 Windscreen on the microphone to reduce wind noise and breath popping.

The front of the microphone is indicated by the word "FRONT" on the microphone housing.

Although the cable is rugged, excessive abuse such as tugging and twisting will shorten its life. It should last indefinitely if treated with care. The cable has been kept short to allow easy wrapping and to reduce the amount of thin cable on stage.

As with all electret condenser microphones, the GLM should be kept out of hot environments (greater than 130 degrees F or 54.5 degrees C). Following this suggestion will ensure years of reliable performance from the mic capsule.

Suggestions for Use

Detailed GLM application notes are in the *Crown Microphone Application Guide* available free from your dealer, directly from Crown, or online at www.crownaudio.com.

Architects' and Engineers' Specifications

GLM-100

The microphone shall be the Crown GLM-100. The microphone shall be an omnidirectional electret condenser type requiring 12 to 48 volts phantom powering. A smooth frequency response from 20 Hz to 20,000 Hz shall be obtained, with a uniform off-axis response. The microphone shall have an open-circuit sensitivity of 3.2 mV/Pa. A permanently attached, 8 foot (2.5m), two-conductor, shielded cable with 3-pin pro audio connector shall be supplied with the microphone. The microphone shall accept a 150 dB SPL input while providing no greater than 3% THD (open circuit termination). Equivalent noise shall be 28 dBA typical (0 dB = .0002 dyne/cm²). SPL for 3% THD shall be 150 dB. The Crown GLM-100 microphone is specified.

GLM-200

The microphone shall be the Crown GLM-200. The microphone shall be a hypercardioid electret condenser type requiring 12 to 48 volts phantom power. A smooth frequency response from 60 Hz to 20,000 Hz shall be obtained, with a uniform off-axis response. The microphone shall have an open-circuit sensitivity of 6 mV/Pa. A permanently attached, 8 foot (2.5m), two-conductor, shielded cable with XLR-type connector shall be supplied with the microphone. The microphone shall accept a 131 dB SPL input while providing no greater than 3% THD (open circuit termination). Equivalent noise shall be 31 dBA typical (0 dB = .0002 dyne/cm²). The Crown GLM-200 microphone is specified.

Warranty

Crown professional microphones are guaranteed against malfunction for a period of three years from date of original purchase. Please refer to the enclosed full warranty statement for more detail.

Service

If the unit fails to work, recheck all your connections as described in the Installation Section. Check the cables. Also check the power supply to verify that it is supplying correct voltage. **If service is required, return the microphone in its original packaging to: Crown Factory Service, 1718 West Mishawaka Road, Elkhart, Indiana 46517-9439. A Service Return Authorization (SRA) is required for product being sent to the factory for service. An SRA can be completed online at www.crownaudio.com/support/factserv.htm. For further assistance or technical support call 800-342-6939.**



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