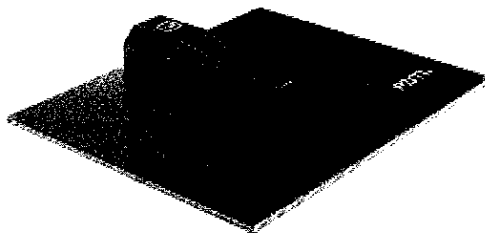


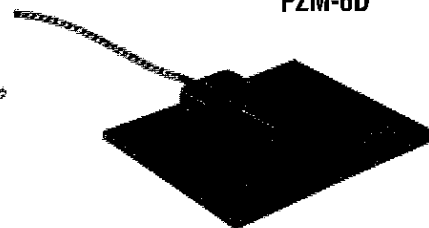
# PZM-30D PZM-6D

## PRESSURE ZONE MICROPHONES

PZM-30D



PZM-6D



The Crown® PZM®-30D is a Pressure Zone Microphone® and the PZM-6D is a Pressure Zone Microphone. Both are designed for professional recording, sound reinforcement and broadcasting. It has many applications, from miking full orchestras or individual musical instruments to security or teleconferencing.

Each mic has a switchable dual frequency response: rising (R) or flat (F). The "rising" position adds brilliance. This makes it useful wherever a crisp attack is desired, such as on percussion, drums, or piano. The user can get a bright sound without boosting high frequencies on the recording console; the result is lower noise. The "flat" position provides a smooth, flat, high-frequency response for natural sound reproduction.

The PZM-30D is sturdy and reliable because it can be used with a rugged detachable cable. The PZM-6D has a smaller plate. Its low profile, unobtrusive appearance is appreciated in conference rooms, as well as on television, film and video productions. When suspended over an orchestra on a clear panel, the PZM-6D practically disappears. Its miniature, permanently attached cable also reduces visual clutter.

The output of either mic is a male 3-pin XLR-type, balanced and low impedance, which permits long cable runs without hum pickup or high-frequency loss.

Like other Pressure Zone Microphones, the PZM-30D and PZM-6D utilize the Pressure Recording Process in which a miniature condenser microphone capsule is positioned very close to a sound-reflecting plate or boundary. The capsule is mounted in the "Pressure Zone" just above the boundary, a region where sound coming directly from the sound source combines in phase with sound reflected off the boundary. The benefits are excellent clarity and "reach," a hemispherical polar pattern, uncolored off-axis response, and a wide smooth frequency response free of phase interference.

### Operating Instructions

The PZM-30D and PZM-6D feature self-contained electronics which allows them to plug directly into a standard 12-48 VDC phantom power supply.

Crown makes an AC-powered model PH-4B supply for powering up to four PZMs. Also available is a single-channel AC/battery supply, Crown model PH-1A. For special applications, you can make your own battery supply as suggested in Fig. 4.

### Features

- Pressure Zone Microphone design prevents coloration from surface sound reflections
- Choice of flat response or rising high-frequency response
- PZM-30D uses a rugged detachable cable. PZM-6D is smaller, lighter, and has a permanently attached cable
- Hemispherical pickup pattern

### Specifications

**Type:** Pressure Zone Microphone.

**Transducer:** Electret condenser.

**Frequency response:** 20 Hz to 20 kHz. See Fig. 1.

**Polar pattern:** Hemispherical when used on a floor, wall or ceiling.

**Open circuit sensitivity:** 7 mV/Pa\* (-43 dB re 1 volt/Pa).

**Power sensitivity:** -43 dB re 1 mW/Pa. EIA sensitivity -135 dBm.

**Impedance:** 240 ohms, balanced. Recommended minimum load impedance 1000 ohms.

**Self-noise:** 20 dB equivalent sound pressure level, A-weighted.

**S/N ratio:** 74 dB at 94 dB SPL.

**Maximum Sound Pressure Level:** 150 dB SPL at the microphone produces 3% THD.

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

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

**Current drain:** 1.1 mA.

**Connector:** Male 3-pin XLR-type.

#### Cable:

PZM-30D: None supplied; use 2-conductor shielded microphone cable.

PZM-6D: Permanently attached 15-foot (4.58-m) black cable with XLRM connector.

**Switch:** Frequency-response select switch for rising or flat response.

**Color:** Black.

**Weight:** 6.5 ounces (184 grams).

#### Dimensions:

PZM-30D: 6 in. x 5 in. x .75 in. (15.2 cm x 12.7 cm x 1.9 cm). See Fig. 2.

PZM-6D: 3 in. x 2.5 in. x .375 in. (7.62 cm x 6.35 cm x .95 cm). See Fig. 3.

**Included accessories:** PZM windscreen, carrying pouch.

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

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

Fig. 1

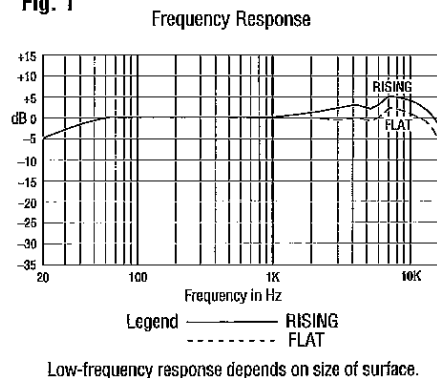


Fig. 2

