

Theater on stage miking  
Houses of worship  
Conference and lectern

- Supercardioid polar pattern rejects the pit orchestra and offers an impressive gain before feedback
- Phase coherent cardioid® design prevents coloration from surface sound reflections
- Finely crafted, rugged housing withstand the rigors of the stage
- Low profile to be inconspicuously placed on the stage-floor
- Industry standard stage-floor microphone



## PCC-160

The Crown PCC®-160 (Phase Coherent Cardioid®) is a surface-mounted supercardioid microphone intended for professional applications on stage floors, lecterns, conference tables, and news desks—wherever improved gain-before-feedback and articulation are important.

Similar to the Pressure Zone Microphone® (PZM®), the PCC® is designed to be used on a relatively large boundary surface. Unlike the PZM®, the Phase Coherent Cardioid® uses a sub miniature supercardioid mic capsule. Its directional polar pattern improves gain-before-feedback, reduces unwanted room noise and rejects sounds from the rear. Surface-mounting creates a “half-supercardioid” polar pattern and increases directivity 3 dB. Since the microphone capsule is placed on a boundary, direct and reflected sounds arrive at the diaphragm in-phase. This coherent addition of direct and reflected waves increases sensitivity 6 dB and prevents phase cancellations. The mic capsule is small enough to ensure phase coherency up to the highest frequencies in the audible spectrum, resulting in a wide, smooth frequency response free of phase interference. Clarity and reach are also enhanced.

Self-contained electronics eliminate the need for an in-line preamp box. The PCC® -160 can be phantom powered directly from the console or other remote power source providing 12 to 48 V. If battery power is required, a battery supply unit can be inserted anywhere in the mic line right up to the console or mixer. A “bass tilt” switch allows the user to tailor the low-end response for particular applications. Thanks to its low profile and black finish, the microphone becomes almost invisible in use. A side-mounted connector complements the form factor of the PCC® -160, allowing the unit to be placed effectively at the stage edge, at the top of a lectern or in other tight spots. If desired, the cable can be hard-wired for bottom entry.

The heavy-gauge, all steel body protects the unit from accidental abuse. Permanent mounting is enabled by screw holes in the base. Engineering attention-to-detail has assured years of trouble-free use from this reliable microphone.

Capable of withstanding up to 120 dB SPL with-out distorting, the PCC® -160 will never overload in practical use. Its electret condenser capsule provides a wide, smooth frequency response from 50 Hz to 18 kHz. RFI suppression is included. Self-noise is low, and sensitivity is very high to override mixer noise in distant-miking applications. Output impedance is 150 ohms, balanced.

AKG SOUNDS BETTER



## Operating Instructions

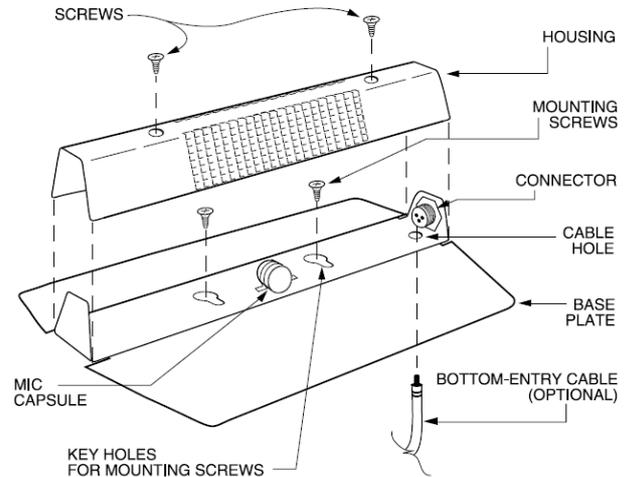
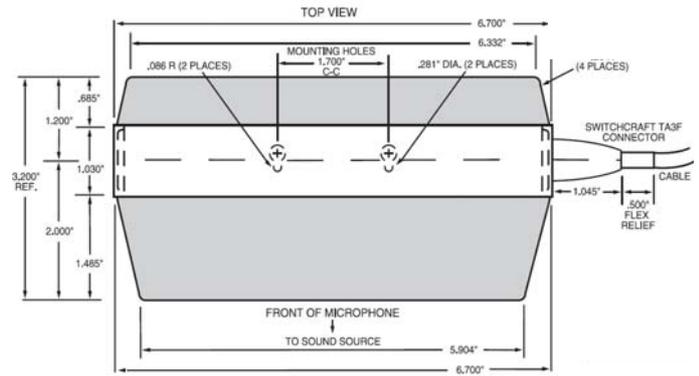
**Unbalanced operation:** If you are using a phantom power supply that does NOT include an isolation transformer, and you desire an unbalanced output, use pin 2 as hot and pin 1 as ground. This procedure prevents distortion in the PCC® circuit. Do not unbalance the output of the supply by connecting pin 3 to pin 1. If you are using a phantom supply containing an iso-lation transformer (such as the Crown PH-1A AC/Battery Supply), then you can unbalance the output by connecting pin 3 to pin 1 in the cable feeding the mixer. This results in 6 dB more sensitivity. The PCC® includes two keyhole slots in its base to accept mounting screws. Note: The porous foam liner in the housing must go toward the front of the microphone; the dense foam liner goes toward the rear. Otherwise the frequency response and polar pattern will be degraded.

Placement suggestions for the PCC® -160 are in the Crown® Boundary Microphone Applications Guide and Speech Sound Reinforcement Application Guide, available online at [http://www.crownaudio.com/mic\\_web/mic-library.htm](http://www.crownaudio.com/mic_web/mic-library.htm).

**BASS TILT SWITCH:** On the bottom of the micro-phon e is a bass-tilt switch which allows the user to tailor the low-end response for particular applications. In general, use the FLAT position. Use the CUT position to reduce room rumble and air-handler noise. Use the BOOST position to compensate for low-frequency losses when the PCC® is placed on small boundaries such as lectern shelf-tops.

## Architects' & Engineers' Specifications

The microphone shall be the PCC® -160 or equivalent.  
 The microphone shall be a half-supercardioid electret condenser type, utilizing a subminiature transducer of rugged construction. A smooth frequency response from 50 Hz to 18,000 Hz shall be obtained, with a uniform off-axis response, over 20 dB down at the rear nulls. The microphone will exhibit excellent off-axis response and gain-before-feedback.  
 The microphone shall employ the principle of phase coherency achieved by mounting a small-diameter element very near a boundary, thus eliminating comb filtering in the audible spectrum. A 15-foot (4.6-m), two-conductor shielded cable with TA3F and A3M connectors shall be supplied with the microphone. The microphone shall have a sensitivity of 22 mV/Pa. The microphone shall accept a 120 dB SPL input while providing no greater than 3 percent THD (open-circuit termination). Equivalent noise shall be 22 dBA typical.  
 The Crown Model PCC® -160 is specified.



## Specifications:

**Polar pattern:** supercardioid  
**Frequency range:** 50 to 18,000 Hz  
**Impedance:** 150 ohms  
**Sensitivity:** 22mV/Pa (-30dBV)  
**Equivalent noise level:** 22 dB-A  
**Maximum SPL:** 120 dB  
**Cable:** 4,6 m (15ft.)  
**Finish:** black  
**Net weight:** 170 g (6 oz.)

**Item number:** PCC-170 6000H50110

Fig. 1 Frequency Response

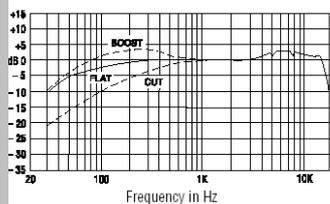
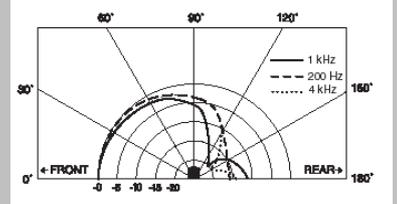


Fig. 2 Vertical Plane Polar Response



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