

PolarChoice PC-12/XLR
PolarChoice PC-18/XLR

**Miniature Multi-Pattern
Podium Microphone**



Key Features:

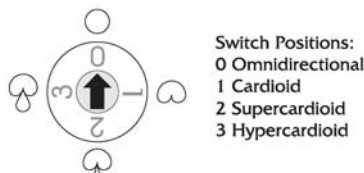
- **Dual Capsule Design with four polar patterns: Omnidirectional, Cardioid, Supercardioid, and Hypercardioid.**
- **Switchable high pass filter**
- **Consistent on-axis response.**
- **Available in 12 or 18 inch versions.**
- **Non-reflecting black finish.**
- **Three-pin male XLR-type output connector.**
- **Phantom powered back-electret condenser**
- **Packaged with a two-piece shock mount**



General Description:

The PolarChoice™ PC-12/XLR and PolarChoice™ PC-18/XLR are multi-pattern miniature gooseneck podium microphones designed for sound reinforcement systems where sound quality and gain-before-feedback is of major importance. The multi-pattern versatility of the PolarChoice microphone makes it true “problem solver”. With 3 directional and one non-directional polar pattern available, the PolarChoice microphone is ideal for virtually any installation. Polar patterns can be easily changed, using a small flat bladed screwdriver with the front mounted rotary control. The control switch has the following settings:

Switch Setting Polar Pattern



Altering the polar pattern does not change the on-axis sonic character of the microphone; therefore changes in equalizer settings are unnecessary. The PolarChoice™ PC-12/XLR and PolarChoice™ PC-18/XLR are acoustically designed for high-quality sound reinforcement and broadcast applications. The frequency response is tailored for wide-range sound reproduction with very natural sound pick-up for either distant or close-up use.

The small, dual diameter gooseneck has two supple joints and a rigid center tube. The rigid tube prevents unsightly twisting of the gooseneck but permits the user to exactly position the microphone. The electronics housing's 3/4-inch diameter base is terminated with a male XLR-type 3-pin connector that allows the microphone to be plugged directly into an existing panel-mount XLR receptacle. The housing is machined brass for ruggedness and superior EMI/RFI attenuation. The PolarChoice™ PC-12/XLR and PolarChoice™ PC-18/XLR are designed to be phantom-powered with a wide voltage range of 12-52V dc (DIN Standard 45 596).

PolarChoice PC-12/XLR PolarChoice PC-18/XLR Microphone

Applications:

The PolarChoice™ PC-12/XLR and PolarChoice™ PC-18/XLR can be used on lecterns, podiums, desk and table-tops, or other applications which require a quick plug-in gooseneck microphone. To maximize gain-before-feedback the PolarChoice™'s three directional polar patterns allow the user to pick the directional polar pattern for optimum effect. For those applications where gain-before-feedback is not a problem, an omnidirectional pattern is included. Applications requiring speaking close to the microphone at podiums, lecterns, or pulpits normally require a windscreen to control breath noise and P-popping or, in some cases, wind noise from circulating air.

Technical Specifications:

Generation Element:

Dual condenser, back electret

Frequency Response:

50 Hz to 20,000 Hz (see chart)

Polar Patterns: (see chart)

Omnidirectional
Cardioid
Supercardioid
Hypercardioid

Sensitivity:

Open Circuit Voltage, 1 kHz:
5.6mV/Pascal

Clipping Level (1% THD):

>135 dB SPL

Equivalent Noise:

<26 dB SPL "A" weighted
(0 dB=20 micropascals)

Dynamic Range:

>109 dB

Output Impedance, 1 kHz:

200 ohms

Power Requirements:

Phantom, 12 – 52 VDC

Current Consumption:

< 8 mA with P12 supply

Polarity:

Pin 2 positive, referenced to pin 3,
with positive pressure on the diaphragm

Dimensions:

Gooseneck Length:

PolarChoice™ PC-12/XLR: 316.4 mm (12.5 in.)

PolarChoice™ PC-18/XLR: 460.4 mm (18.1 in.)

Maximum Head Diameter: 14.6 mm (0.58 in.)

Gooseneck Diameter: 6.4/7.9 mm (0.25/0.312 in.)

Electronics Module Diameter: 20 mm (0.79 in.)

Connector Diameter: 19 mm (0.75 in.)

Accessories Furnished:

Windscreen

Two-piece shock mount

Optional Accessories:

FMK flange-mount kit

WS-PC1 large windscreen

CPSM shock-mount kit

Color:

Nonreflecting black

Environmental Conditions:

Relative Humidity 0-50%:

-29° to 74°C (-20° to 165°F)

Relative Humidity 0 to 95%:

-29° to 57°C (-20° to 135°F)

Net Weight:

PolarChoice™ PC-12/XLR:

170 grams (6.0 oz)

PolarChoice™ PC-18/XLR:

178 grams (6.3 oz)

EV Multi-Port Windscreen:

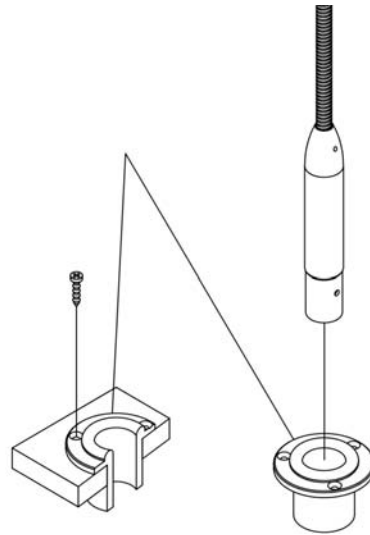
All PolarChoice microphones come with the exclusive EV Multi-Port Windscreen. This unique one-piece ported design offers greatly improved resistance to “P”-popping noise by creating a two-stage filter that has an air space between the stages. This makes the multi-port windscreen as effective as much larger traditional designs.



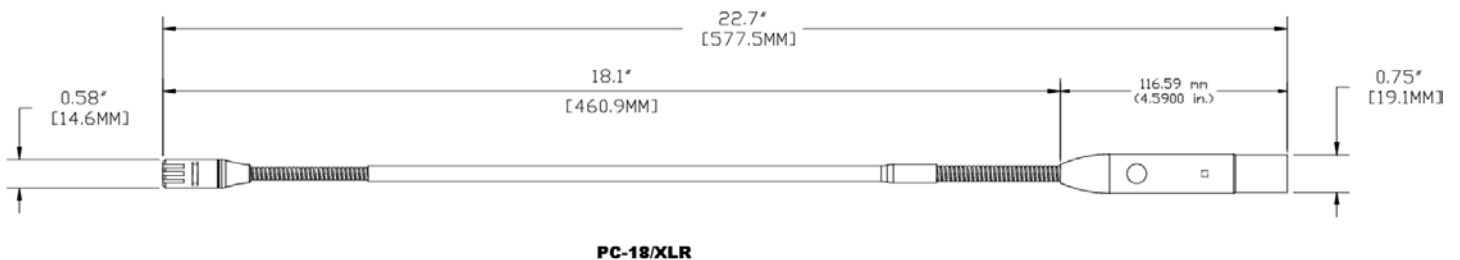
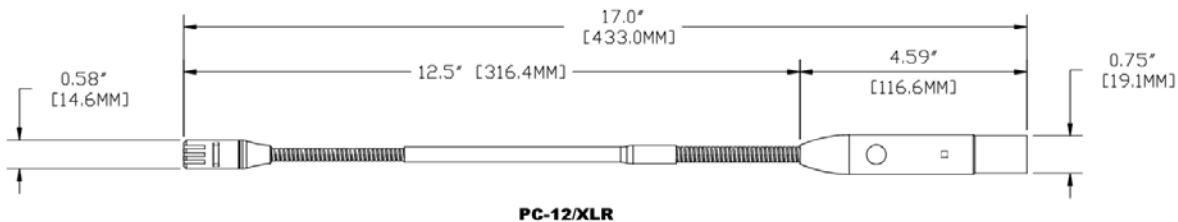
Shock Mount Installation:

Drill a 1-3/8 inch hole to mount the hard plastic flange into the desk, table, or lectern top. Drill three holes to secure the flange. The type of screws used to fasten the flange will depend on the desktop material. To insert the flexible shock mount:

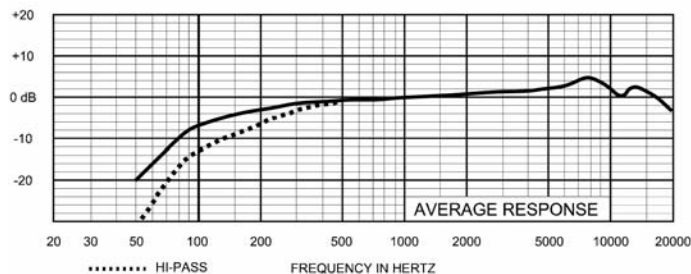
1. Gently push the flexible shock mount onto the electronics housing. Position the flexible shock mount to cover the polar selection switch.
2. Insert the microphone and shock mount into the hard plastic flange using a twisting action to seat the shock mount.



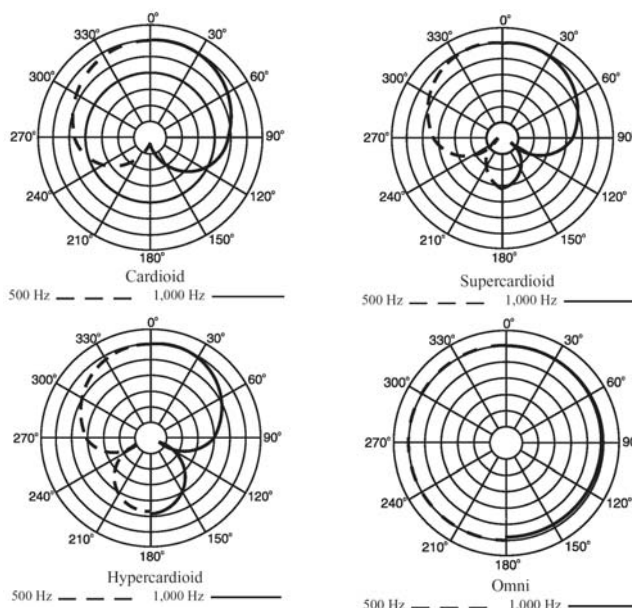
Dimension Drawings:



Frequency Response:



Polars:



Architectural & Engineering Specs:

PolarChoice™ PC-12/XLR, PC-18/XLR

The microphone shall be a back-electret condenser type with a frequency response of 50 Hz to 20 kHz. The microphone shall have a nominal, balanced output impedance of 200 ohms. The microphone shall have four selectable polar patterns: omnidirectional, cardioid, supercardioid, and hypercardioid. The microphone shall have an output level of 5.6 mV/Pascal, and outputs shall not be appreciably affected by the following temperature and humidity extremes: -29° to 74° C (-20° to 165°F) when the relative humidity is 0-50%; -29° to 57°C (-20° to 135°F) when the relative humidity is 0-95%. Dimensions shall be 433 mm (17 in.) long (PC-12/XLR), and 577.5 mm (22.7 in.) long, (Pc-18/XLR) with a maximum head diameter of 14.6 mm (0.58 in). The PC-12/XLR microphone shall include a 318 mm (12.5 in.) gooseneck. The PC-18/XLR microphone shall include a 460 mm (18.1 in.) gooseneck. The PC-12/XLR and PC-18/XLR goosenecks will be terminated with a professional XLR-type 3-pin style connector. The microphone will have a switchable high pass filter to roll off low frequencies. The microphone shall be of metal construction. The microphone will include an external windscreen. The microphone shall have a nonreflecting black finish. The Electro-Voice PolarChoice™ PC-12/XLR or PC-18/XLR is specified.



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www.electrovoice.com

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Specifications subject to change without notice.