

*PolarChoice PC Plus-12*  
*PolarChoice PC Plus-18*  
**Miniature Multi-Pattern  
Podium Microphone**



## Key Features:

- Dual Capsule Design with four polar patterns: Omnidirectional, Cardioid, Supercardioid, and Hypercardioid.
- Configurable push-button switch with status LED.
- Controls are on the bottom, hidden from view.
- XLR mounted or flush mounted.
- Switchable high pass filter.
- Consistent on-axis response.
- Available in 12 or 18 inch versions.
- Non-reflecting black finish.



## General Description:

The PolarChoice™ PC-Plus is the first miniature gooseneck microphone to combine the features and functionality of a desktop mic, with the small unobtrusive size of an XLR mounted gooseneck microphone. The unique profile of the PC-Plus housing places the push button switch and status LED in a more natural position and also creates a lower profile housing. You can even go one step further: The lower half of the PC-Plus (with XLR connector) can be removed and the PC-Plus can be flush mounted. (We supply all the necessary mounting hardware.) The push-button can be configured for either toggle (push on / off), or as push-to-mute (cough switch). You can also configure the microphones' state when power is first applied in toggle mode. So, for example, if you have an installation with multiple PC Plus microphones, you can configure them so that only one mic is live, when the system is first turned on.

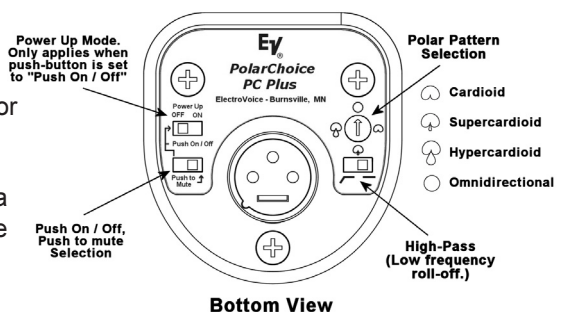
The PC-Plus is also an EV PolarChoice™ multi-pattern microphone. The multi-pattern versatility of the PolarChoice™ microphone makes it true "problem solver". With 3 directional and one non-directional polar pattern available, the PolarChoice™ microphone is ideal for virtually any installation.

The PC-Plus also includes a switchable high pass filter that greatly reduces any vibration induced noise pick-up. All configuration controls are only accessible from the "bottom" of the microphone, reducing the chances of inadvertent changes.

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 Plus is 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 PolarChoice™ PC Plus is designed to be phantom-powered with a wide voltage range of 12-52V dc (DIN Standard 45 596).

## PC Plus Controls:



# PolarChoice PC Plus-12/ PolarChoice PC Plus-18 Microphone

## Applications:

The PolarChoice™ PC Plus can be used on lecterns, podiums, desk and table-tops, or other applications which require a quick plug-in gooseneck microphone. For permanent installations, the PC Plus can be also be easily flush mounted. 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 (included) 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

### Switches and Controls:

Top mounted momentary push-button

Push on/off, or push-to-mute selector

Power up on/off selector

High-pass enable

4-position polar pattern selector

### 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:

PC Plus-12: 305 mm (12 in.)

PC Plus-18: 457 mm (18 in.)

#### Maximum Head Diameter:

14.6 mm (0.58 in.)

#### Gooseneck Diameter:

Lower section, 7.9 mm (0.31 in.)

Upper section, 6.4 mm (0.25 in.)

### Accessories Furnished:

Windscreen

Two-piece shock mount

Flush mount parts kit

### Optional Accessories:

FMK flange-mount kit

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:

PC Plus-12: 201 grams (7.1 oz)

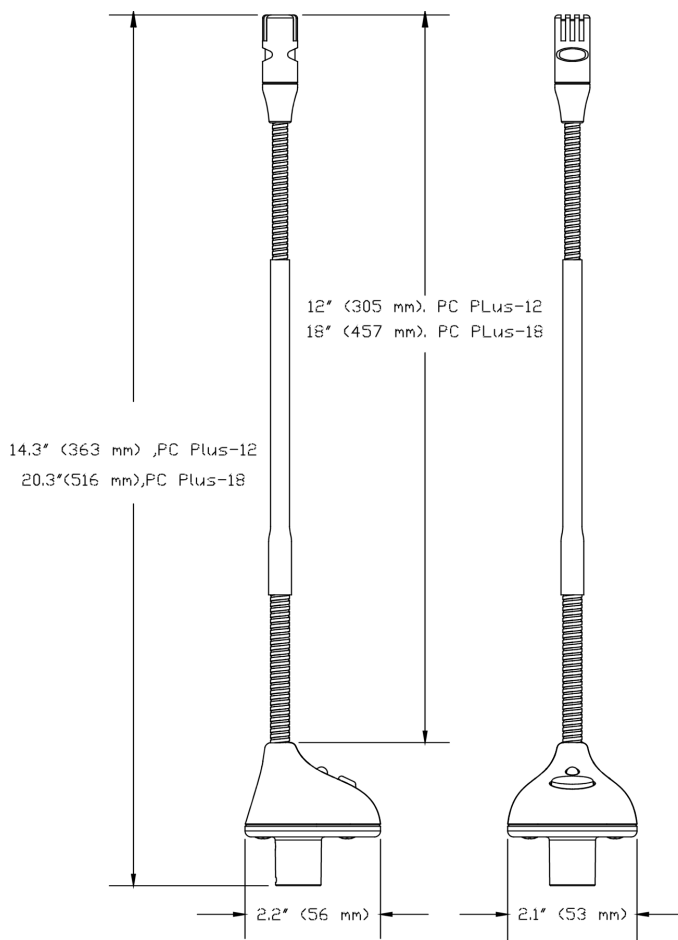
PC Plus-18: 210 grams (7.4 oz)

## EV Multi-Port Windscreen:

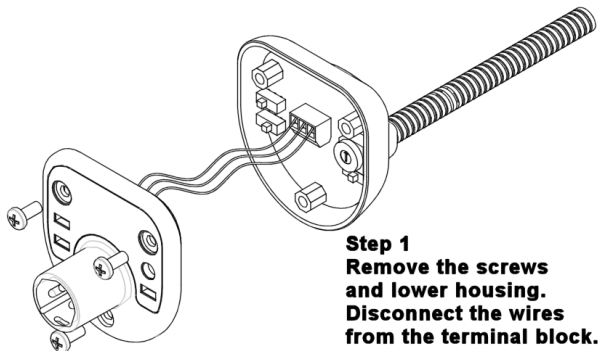
All PolarChoice microphones come with the exclusive EV Multi-Port Windscreen. This unique one-piece ported design offers greatly improved resistance to "P"-popping noise by creating a two-stage filter that has an air space between the stages. This makes the multi-port windscreen as effective as much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



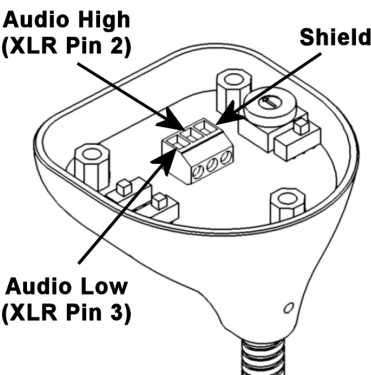
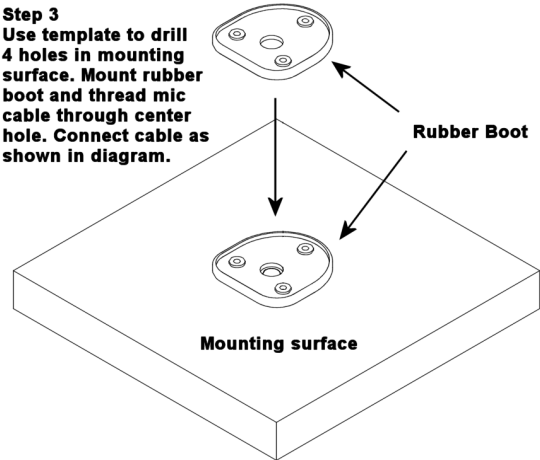
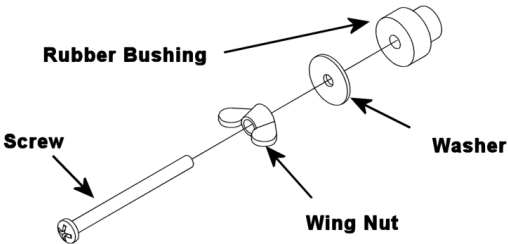
## Dimension Drawings:



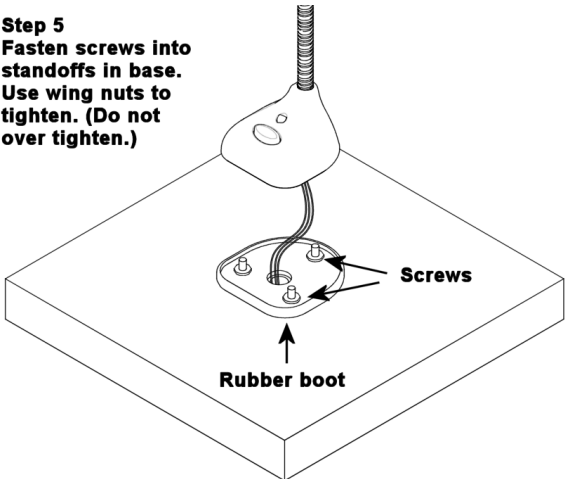
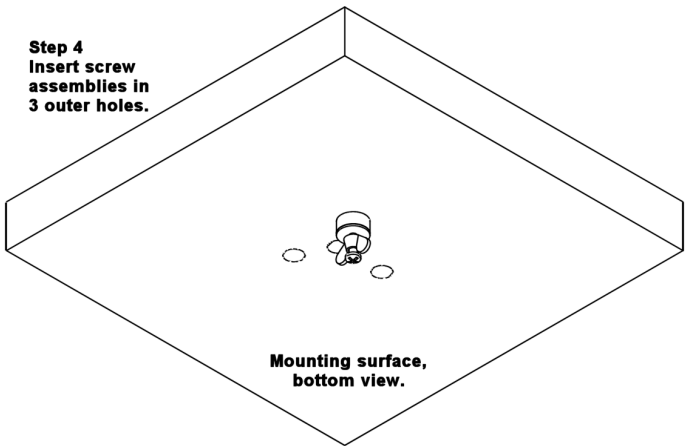
Surface Mounting the PC Plus Microphone:



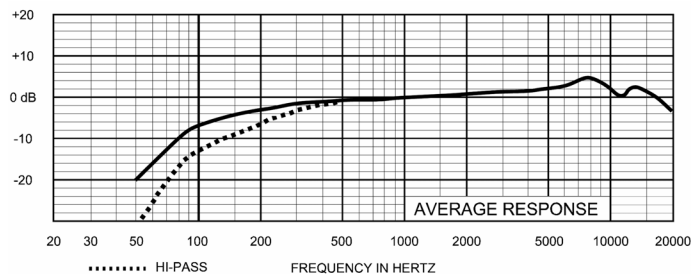
Step 2  
Assemble screw, wing nut, washer, and rubber bushing as shown. (Included with PC Plus.)



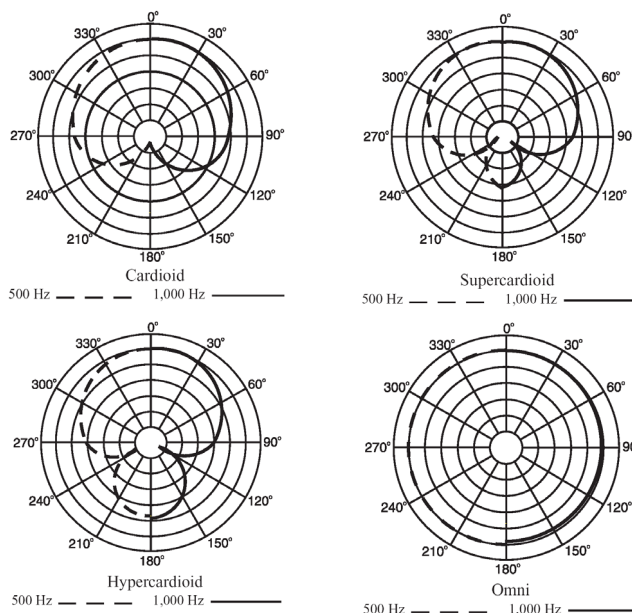
Wiring Diagram



## Frequency Response:



## Polars:



## Architectural & Engineering Specs:

### PolarChoice™ PC Plus-12, PC Plus-18

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 363 mm (14.3 in.) long (PC Plus 12), and 516 mm (20.3 in.) long, (Pc Plus-18) with a maximum head diameter of 14.6 mm (0.58 in). The PC Plus-12 microphone shall include a 305 mm (12 in.) gooseneck. The PC Plus-18 microphone shall include a 457 mm (18 in.) gooseneck. The gooseneck will be attached to a miniature base that has a top mounted push-button, and a status LED that lights when audio is active. The push-button will be configurable for push on/off, or push-to-mute operation. Furthermore, when the push-button is set for push on/off operation, the status of the microphone when power is initially applied, will be configurable. The miniature base will have an integral 3-pin XLR connector. The lower section housing of the miniature base will be removable to facilitate flush mounting of the microphone on a flat surface and appropriate hardware will be supplied for this purpose. The microphone will have a switchable high pass filter to roll off low frequencies. All controls except for the push button will be only accessible from the bottom of the microphone base. The microphone shall be of metal construction. The microphone will include and external windscreen. The microphone shall have a nonreflecting black finish. The Electro-Voice PolarChoice™ PC Plus-12 or PC Plus-18 is specified.



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[www.electrovoice.com](http://www.electrovoice.com)

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Specifications subject to change without notice.