

*PolarChoice Satellite*  
*PC Sat-5/PC Sat-12/*  
*PC Sat-18*



**Multi-Pattern Wireless  
Free-Standing Microphone**

*Patent Pending*

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**Key Features:**

- Free-standing weighted base for reliable stability.
- Accepts Telex & Electro-Voice bodypack transmitters (RE-1, RE-2, FMR-1000, FMR 500 & Safe-1000)
- Easy to use mute switch. Can be programmed to operate as either latching on/off or momentary push-to-mute.
- High visibility blue LED clearly displays mic status to the user.
- Exceptional sound quality with EV's proven PolarChoice design.
- Selectable polar pattern to easily adapt to any situation. Choose between omni, cardioid, super-cardioid or hypercardioid.
- Consistent microphone voicing across all four patterns.
- Available in three gooseneck lengths: 18", 12" or 5".
- Wireless system sold separately



**General Description:**

The PolarChoice™ Satellite is a free-standing gooseneck style microphone, firmly anchored in place by its' elegantly designed base. This low-profile foundation hides PolarChoice™ Satellite's most powerful feature - space for a wireless transmitter. Turn the base over to reveal the specially designed compartment for housing a Telex or Electro-Voice bodypack transmitter. Connect the microphone to the bodypack, set-up the wireless channel, and place PC Satellite anywhere an easy-to-use microphone is required. No longer do you have to cut holes in tables, run long cables, or compromise the architectural integrity of an installation. With the Polar Choice™ Satellite, anything is possible.

The PC-Satellite features an EV PolarChoice™ multi-pattern microphone. The multi-pattern versatility of the PolarChoice™ microphone makes it a true "problem solver". With one non-directional and 3 directional polar patterns available, the PolarChoice™ microphone is ideal for virtually any installation. The PC-Satellite also includes a switchable high pass filter that greatly reduces any vibration induced noise pick-up.

# PolarChoice PC Sat-5/ PC Sat-12/ PC Sat-18 Microphones

## Microphone Setup:

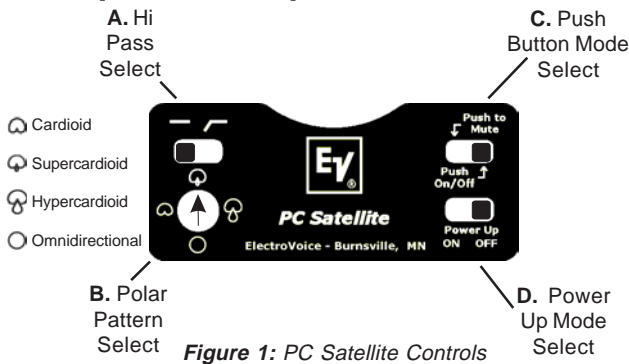


Figure 1: PC Satellite Controls

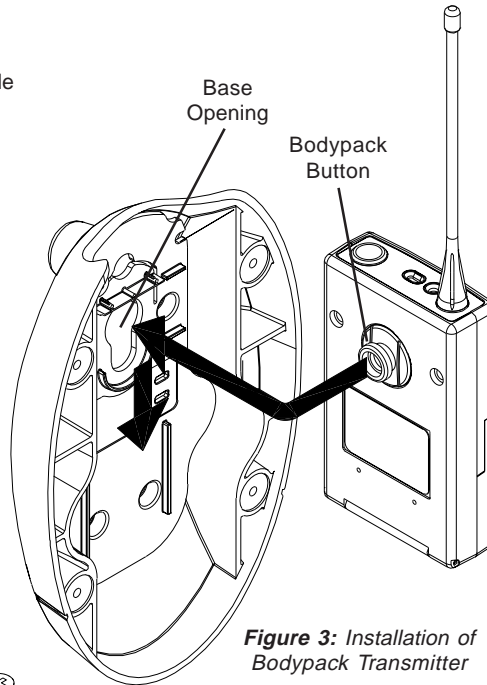


Figure 3: Installation of Bodypack Transmitter

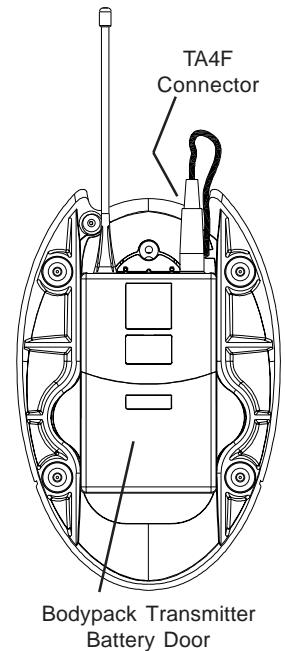


Figure 4: Bottom View with Bodypack Transmitter

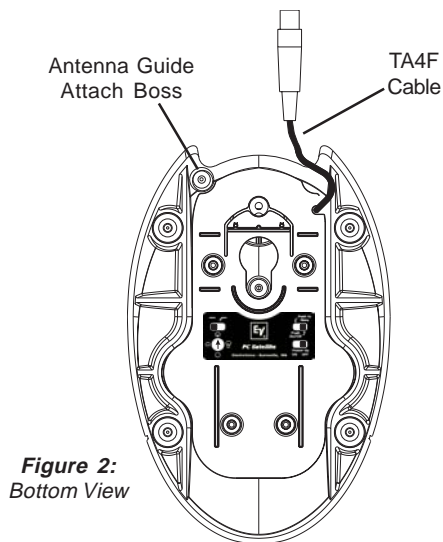


Figure 2: Bottom View

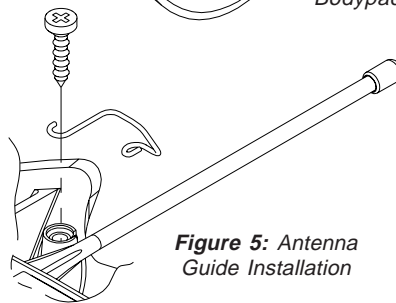


Figure 5: Antenna Guide Installation

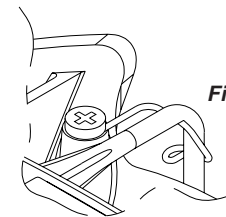


Figure 6: Orientation of Antenna with Antenna Guide

- 1) **A.** Select High-Pass switch position (see figure 1).  
 Flat ( — ): Normal response.  
 High Pass ( ∩ ): minimum 5 dB reduction in sensitivity at 100 Hz.
- B.** Select preferred polar pattern (see figure 1).
- C.** Pushbutton Mode Select (see figure 1) -  
 “Push to Mute”: In this mode, the audio output of the microphone is disabled (muted) when button is depressed. Microphone resumes normal function when button is released.  
 “Push On/Off”: In this mode, the audio output of the microphone is disabled when the pushbutton is depressed and released. The microphone resumes normal function when the button is depressed and released again.
- D.** Power Up Mode Select (see figure 1) - This mode only functions when control (C) is set to “Push On/Off”.  
 “Power Up On”: In this mode, audio output of the microphone is enabled when power from the bodypack transmitter is applied.  
 “Power Up Off”: In this mode, audio output of the microphone is disabled when power from the bodypack transmitter is applied.
- 2) Note: bodypack transmitter must have the “bodypack” button installed on the back of its’ housing. The bodypack does not ship with this part attached.
- 3) Insert bodypack into Satellite (see figure 3). “Bodypack” button inserts into opening on bottom plate. Push bodypack into plate, and slide down as shown.
- 4) Carefully insert TA4F connector into bodypack (see figure 4).
- 5) Turn on bodypack transmitter & check for mic level.
- 6) Test mic in actual use situation, and set audio gain on bodypack transmitter for optimal gain through wireless system. Note: battery door may be opened to access gain adjustment in bodypack, without removing bodypack from base (see figure 4).
- 7) If desired, install antenna guide using screw provided (see figure 5). First drive in screw completely, then back it out slightly, hook on antenna guide and screw it down. Orient antenna within guide to achieve vertical antenna polarization (see figure 6).

## Applications:

The PolarChoice™ PC Sat 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 PolarChoice™ PC Satellite can be used on lecterns, podiums, desks, table-tops, or other applications. 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:

15.8mV/Pascal

### Clipping Level (1% THD):

>130 dB SPL

### Equivalent Noise:

<32 dB SPL "A" weighted  
(0 dB=20 micropascals)  
Dynamic Range: >98 dB

### Output Impedance, 1 kHz:

1000 ohms

### Power Requirements:

5 VDC, supplied by beltpack

### Current Consumption:

<1.5 mA

### Polarity:

Pin 2 positive, referenced to pin 1,  
with positive pressure on the diaphragm

### Dimensions:

#### Base (all mics):

Length: 175 mm (6.9 in.)  
Width: 117 mm (4.6 in.)  
Height: 56 mm (2.2 in.)

#### Gooseneck Length:

PC Satellite-5: 175 mm (6.9 in.)  
PC Satellite-12: 318 mm (12.5 in.)  
PC Satellite-18: 470 mm (18.5 in.)

#### Maximum Head Diameter:

14.6 mm (0.58 in.)

#### Gooseneck Diameter:

PC Satellite-5, 12, & 18: 6.4 mm (0.25 in.)  
PC Satellite-12, & 18 (lower section): 7.9 mm (0.31 in.)

### Accessories Furnished:

Windscreen  
Antenna Guide & Mounting Screw

### Optional Accessories:

WS-PC1 large windscreen

### 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:

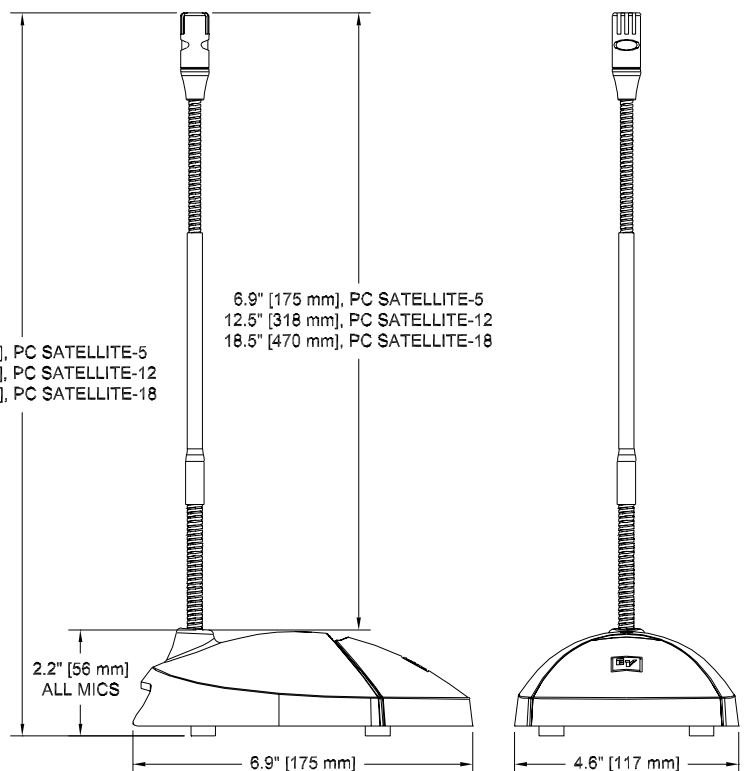
PC Satellite-5: 602 grams (21.2 oz)  
PC Satellite-12: 614 grams (21.7 oz)  
PC Satellite-18: 631 grams (22.3 oz)

## EV Multi-Port Windscreen:

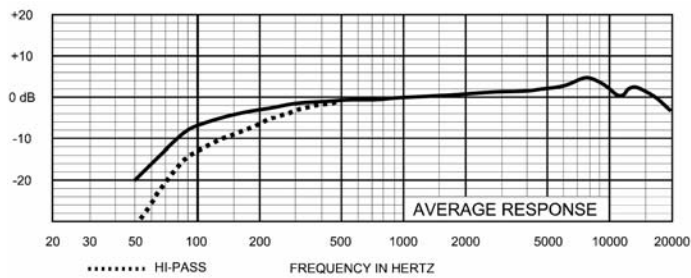
All PolarChoice microphones come with the exclusive EV Multi-Port Windscreen. This unique one-piece ported design offers greatly improved resistance to "P"-popping noise by creating a two-stage filter that has an air space between the stages. This makes the multi-port windscreen as effective as much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



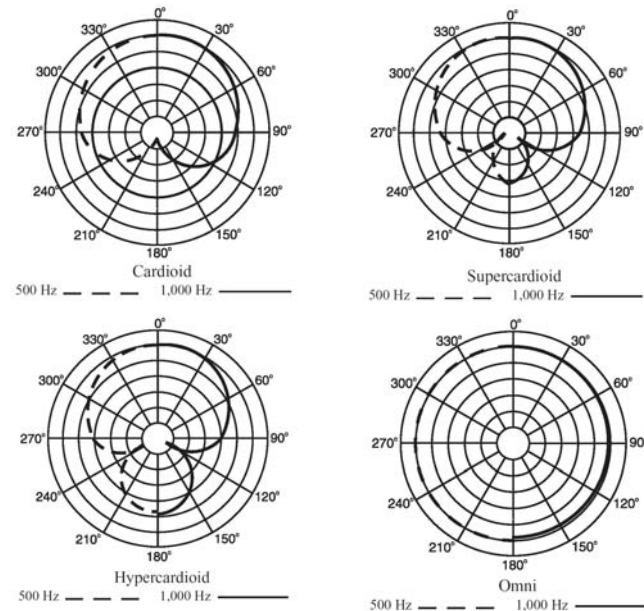
## Dimension Drawings:



## Frequency Response:



## Polar Response:



## Architectural & Engineering Specs:

### PolarChoice™ Satellite: PC Sat-5, PC Sat-12, PC Sat-18

The microphone shall be a free-standing, wireless, table-top microphone. The base will have an integral 4-pin TA4F connector, which interfaces directly to one of the following wireless microphone bodypack transmitters: Electro-Voice RE-1 or RE-2, Telex FMR-1000, FMR-500 or Safe-1000. The microphone shall have four selectable polar patterns: omnidirectional, cardioid, supercardioid, and hypercardioid. The mic element is 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 1000 ohms. The microphone will have a switchable high pass filter to roll off low frequencies. The microphone shall have an output level of 15.8 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 231 mm (9.1 in.) long (PC Sat-5), 373 mm (14.7 in.) long (PC Sat-12), and 526 mm (20.7 in.) long (PC Sat-18) with a maximum head diameter of 14.6 mm (0.58 in.). The PC Sat-5 microphone shall include a 175 mm (6.9 in.) gooseneck. The PC Sat-12 microphone shall include a 318 mm (12.5 in.) gooseneck. The PC Sat-18 microphone shall include a 470 mm (18.5 in.) gooseneck. The gooseneck will be attached to a 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, can be programmed to be either on or off. All controls except for the push button are accessible from the bottom of the microphone base, when the bodypack is not installed. The microphone base shall be of metal construction. The microphone will include an external windscreen and antenna guide. The microphone shall have a nonreflecting black finish. The Electro-Voice PolarChoice™ PC Sat-5, PC Sat-12, or PC Sat-18 is specified.

Ordering Information		
Model No.	Part No.	Description
PC Sat-5	301483-000	5" Gooseneck Length
PC Sat-12	301484-000	12" Gooseneck Length
PC Sat-18	301485-000	18" Gooseneck Length



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

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Part Number 38110-311 Rev. E

U.S.A. and Canada only. For customer orders, contact Customer Service at:

**800/392-3497 Fax: 800/955-6831**

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:

**+ 49 9421-706 0 Fax: + 49 9421-706 265**

Other International locations. For customer orders, contact Customer Service at:

**+ 1 952 884-4051 Fax: + 1 952 736-4212**

For warranty repair or service information, contact the Service Repair department at:

**800/553-5992 or 402/467-5321**

For technical assistance, contact Technical Support at: **800/392-3497 or 952/736-4656**

Specifications subject to change without notice.