

**PolarChoice** Satellite  
 PC Sat-5/PC Sat-12/  
 PC Sat-18  
**Multi-Pattern Wireless  
 Free-Standing Microphone**



## Key Features:

- RF Shield provides superior RFI/GSM shielding.
- Free-standing weighted base for reliable stability.
- Accepts Telex & Electro-Voice bodypack transmitters (RE-1, RE-2, RE-2Pro, REV, FMR-1000, FMR-500 & Safe-1000).
- Dual Capsule Design with four polar patterns: Omnidirectional, Cardioid, Supercardioid, and Hypercardioid.
- Easy to use mute switch in either latching on/off or momentary PTT or PTM modes.
- High visibility blue LED clearly displays mic status to the user.
- Exceptional sound quality with EV's proven PolarChoice design.
- 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, and is highly-shielded from RFI/GSM thanks to EV's exclusive RF Shield technology. 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.

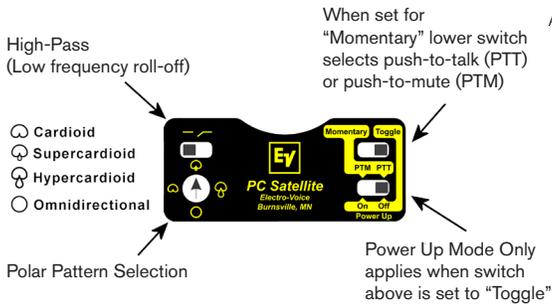
The PC-Satellite features an EV PolarChoice multi-pattern microphone. The multi-pattern versatility of the PolarChoice microphone makes it a true "problem solver". With one (1) non-directional and three (3) directional polar patterns available, the PolarChoice microphone is ideal for virtually any installation. The PC-Satellite also includes a switchable high pass filter that greatly reduces any vibration induced noise pick-up.

## Technical Specifications:

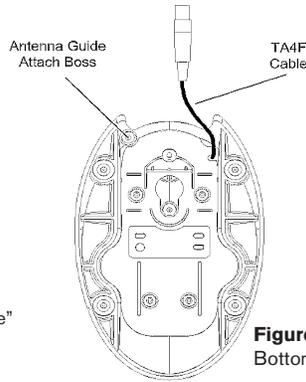
Generation Element:	Dual condenser, back electret
Frequency Response:	50Hz to 20,000Hz (see chart)
Polar Patterns: (see chart)	Omnidirectional Cardioid Supercardioid Hypercardioid
Switches and Controls:	Top mounted momentary push-button Push on/off, or PTT/PTM selector Power up on/off selector High-pass enable 4-position polar pattern selector
Sensitivity:	Open Circuit Voltage, 1kHz: 15.8mV/Pascal
Clipping Level (1% THD):	>130dB SPL
Equivalent Noise:	<32dB SPL "A" weighted (0 dB=20 micropascals)
Dynamic Range:	>98dB
Output Impedance, 1 kHz:	1000 Ohms
Power Requirements:	5 VDC, supplied by beltpack
Current Consumption:	<1.5mA
Polarity:	Pin 2 positive, referenced to pin 3, with positive pressure on the diaphragm
Dimensions:	Base (all mics): Length: 175mm (6.9in.) Width: 117mm (4.6in.) Height: 56mm (2.2in.) Gooseneck Length: PC Satellite-5: 175mm (6.9in.) PC Satellite-12: 318mm (12.5in.) PC Satellite-18: 470mm (18.5in.) Maximum Head Diameter: 14.6mm (0.58in.) Gooseneck Diameter: PC Satellite-5, 12, & 18: 6.4mm (0.25in.) PC Satellite-12, & 18 (lower section): 7.9mm (0.31in.)
Accessories Furnished:	Windscreen Antenna Guide & Mounting Screw
Optional Accessories:	WS-PC1 large windscreen
Color:	Nonreflecting black
Net Weight:	PC Satellite-5: 602 grams (21.2oz) PC Satellite-12: 614 grams (21.7oz) PC Satellite-18: 631 grams (22.3oz)
Shipping Weight:	PC Desktop-5: 1080 grams (38.1oz) PC Desktop-12: 1102 grams (38.9oz) PC Desktop-18: 1111 grams (39.2oz)



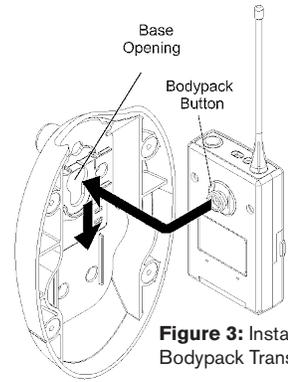
# Microphone Setup:



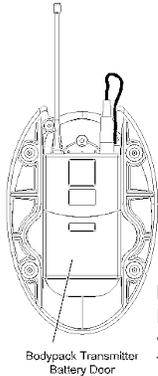
**Figure 1:** PC Satellite Controls



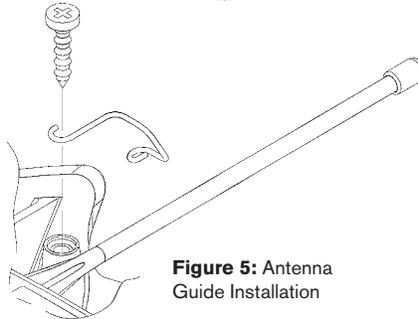
**Figure 2:** Bottom View



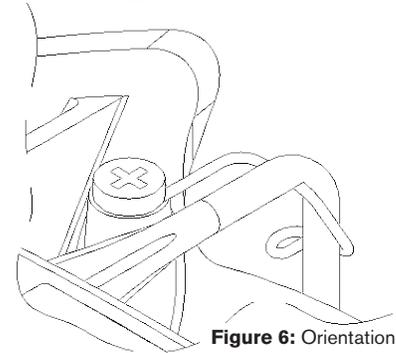
**Figure 3:** Installation of Bodypack Transmitter



**Figure 4:** Bottom View with Bodypack Transmitter



**Figure 5:** Antenna Guide Installation



**Figure 6:** Orientation of Antenna with Antenna Guide

**1) High-Pass Filter Selector Switch:**

Select High-Pass switch position. Start with this switch set to the left (flat response). If the mic is in a location where low frequency rumble or wind noise is encountered, moving this switch to the right will help by reducing low frequency sensitivity.

Flat ( — ): Normal response.

High Pass ( / ): minimum 5dB reduction in sensitivity at 100Hz.

**Polar Pattern Selector Switch:**

Select preferred polar pattern. The cardioid polar pattern works well for most installations. If feedback from a sound system occurs, switching to the supercardioid or hypercardioid pattern will usually allow increased mic gain before feedback. The omnidirectional pattern is best suited for situations where there is no sound reinforcement system present, such as for recording.

**Momentary/Toggle, PTM/PTT, On/Off Switches:**

Control action of push-button switch on the top of the PC Desktop microphone, as well as the on or off status upon system power-up.

**Momentary Modes:**

When Momentary/Toggle switch is set to the left, the push-button (mute) switch action is momentary.

In addition, if PTM/PTT switch is in the left hand position, the mic will be in push-to-mute mode.

Alternately, if PTM/PTT switch is in the right hand position, the mic will be in push-to-talk mode.

**Toggle Modes:**

When Momentary/Toggle switch is in the right hand position, the push-button (mute) switch will be in toggle (push-on/push-off) mode. With Momentary/Toggle switch in the right hand position, the setting of on/off switch determines if the mic audio should be muted when power is first applied.

If on/off switch is in the left hand position, the mic audio will be on when power is first applied.

If on/off switch is in the right hand position, mic audio will be muted when power is first 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 closeup 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.

## EV Multi-Port Windscreen:

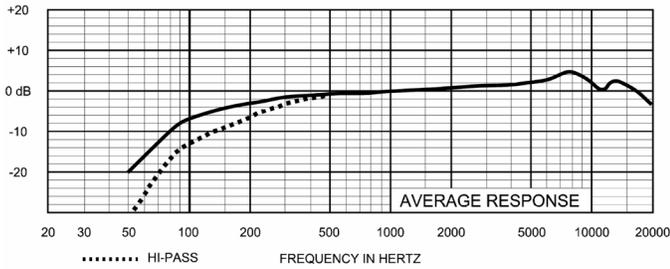
All PolarChoice microphones come with the exclusive EV Multi-Port Windscreen. This unique one-piece ported design offers greatly improved resistance to "P"-popping noise by creating a two-stage filter that has an air space between the stages. This makes the multi-port windscreen as effective as much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



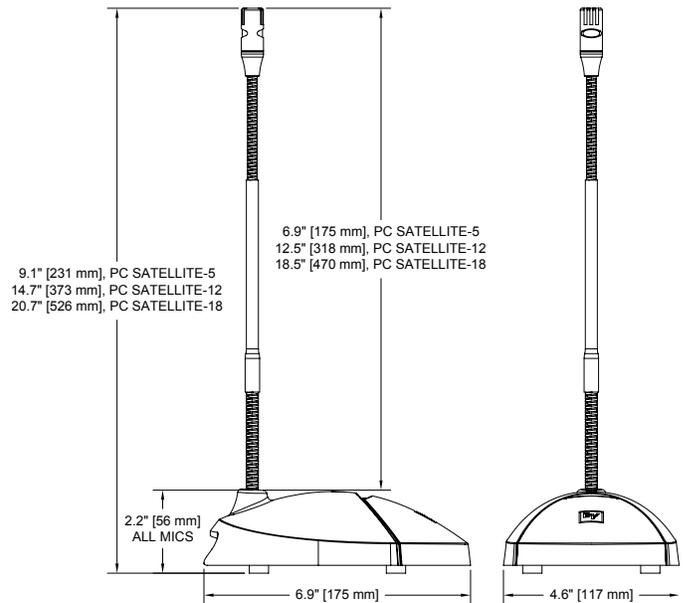
## Architects' and Engineers' Specifications:

**PolarChoice Satellite: PC Sat-5, PC Sat-12, PC Sat-18**  
The microphone shall be a free-standing, wireless, table-top microphone, and shall produce a high degree of output signal quality despite the possible near-field presence of RF (Radio Frequency) devices such as cell phones. 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 50Hz to 20kHz. 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°C to 74°C (-20°F to 165°F) when the relative humidity is 0-50%; -29°C to 57°C (-20°F to 135°F) when the relative humidity is 0-95%. Dimensions shall be 231mm (9.1in.) long (PC Sat-5), 373mm (14.7in.) long (PC Sat-12), and 526mm (20.7in.) long (PC Sat-18) with a maximum head diameter of 14.6mm (0.58in.). The PC Sat-5 microphone shall include a 175mm (6.9in.) gooseneck. The PC Sat-12 microphone shall include a 318mm (12.5in.) gooseneck. The PC Sat-18 microphone shall include a 470mm (18.5in.) gooseneck. The gooseneck will be attached to a base that has a top mounted push-button, and a status LED which lights when audio is active. The push-button will be configurable for push on/off, or push-to-mute and push-to-talk 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.

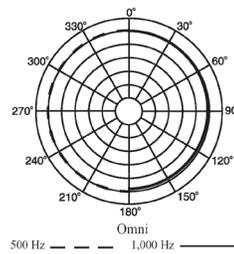
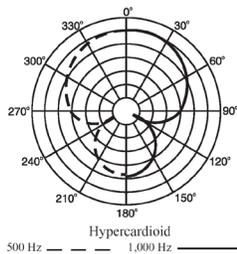
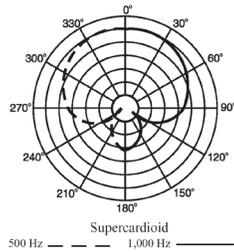
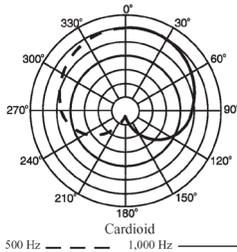
## Frequency Response:



## Dimension Drawing:



## Polar Response:



## Polar Choice Part Number:

PC Sat-5 ▪ 5" Gooseneck Length  
PC Sat-12 ▪ 12" Gooseneck Length  
PC Sat-18 ▪ 18" Gooseneck Length

## Warranty:

Please refer to the Limited Warranty information found at:  
[www.electrovoice.com](http://www.electrovoice.com)

# Electro-Voice

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Specifications subject to change without notice.