

Antenna Installation Guide

Wide-Band
Panel Antenna
Window, Ceiling, Wall
& Outdoor Mounts

WINDOW

#304452

#304472

CEILING

#304451

#304471

WALL

#311135

UPGRADE- #311155-0630

#311155

POLE

314453

#314473



Appearance of device and accessories may vary.

The wide-band panel antenna is vertically polarized. For optimum performance, install the antenna with the cable running from the bottom or the top.

Wide-Band Panel Antenna Window, Ceiling, Wall & Pole Mounts

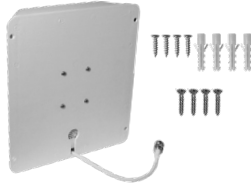
Window Mount:

#304452 - 50 Ohm
#304472 - 75 Ohm



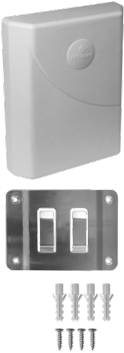
Ceiling Mount:

#304451 - 50 Ohm
#304471 - 75 Ohm



Wall Mount:

#311135
#311155



**DT4G Inside Panel
Antenna Upgrade**
#311155-0630

Panel Antenna
w/F-Female Connectors

RG6 30' Coax Cable
w/F-Male Connectors
*Required F-Female to SMA
Male adapter #2F1165*

Pole Mount:

#314453
#314473



Optional In-Wall Mount Accessory:



In-Wall Mounting
Bracket
(901123)

(extra parts may be included in hardware packet)

Appearance of device and accessories may vary.

Window Mount Installation

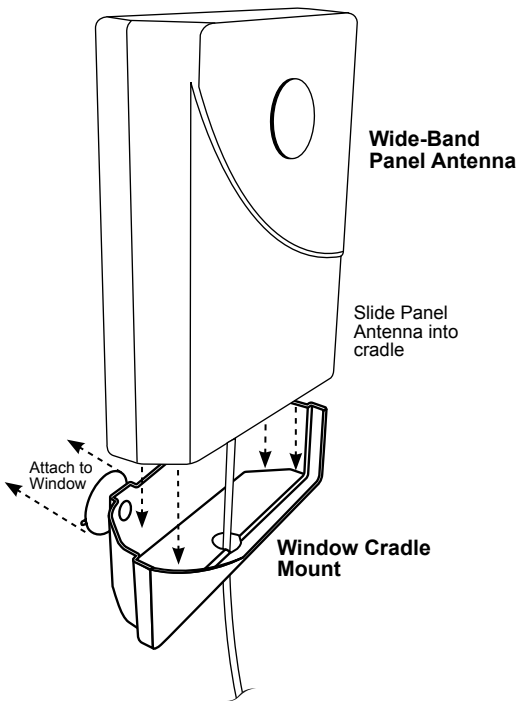
To be used as your outside antenna which communicates with the cell tower

Find the window that faces the direction of the nearest cell tower. The signal strength function on your cell phone can help you determine this. Contact Customer Support at 866-294-1660, for instructions on accessing the signal strength function on your particular phone.

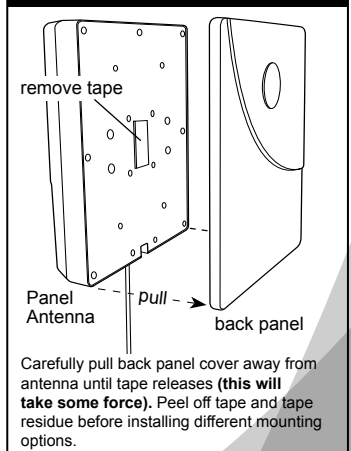
Choose an **inside** window location where the antenna will be hung. Clean the window and the suction cups with glass cleaner.

It is important that the small tabs on each suction cup be facing outward so they may be used to remove the antenna from the window if desired. Use firm and even pressure to attach the antenna to the window without breaking the glass. Avoid excessive or sudden pressure against the glass.

Refer to Signal Booster instructions for separation requirements.



Remove Back Panel Before Utilizing Other Mounting Options

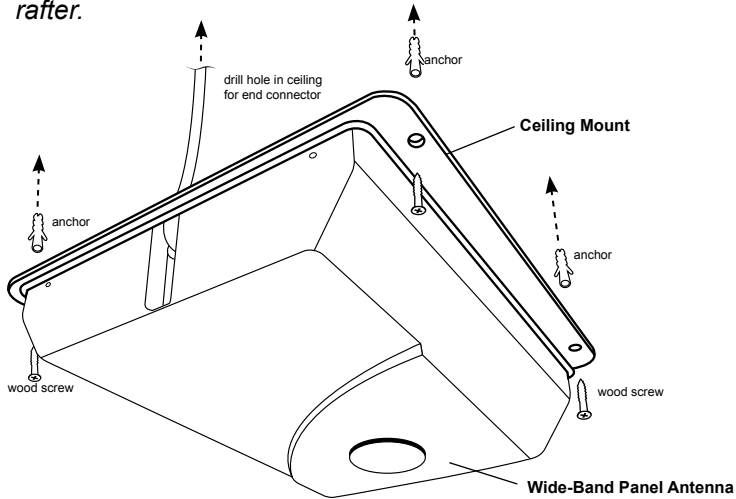


Ceiling Mount Installation

Select a location on the ceiling that you can access from above to run the antenna cable. Verify that your chosen location allows for the necessary separation between the Inside and Outside Antenna (see Signal Booster installation instructions for antenna separation requirements).

Use the antenna as your template in your predetermined location.

Note: Ensure that the cable connector location is NOT below a ceiling rafter.

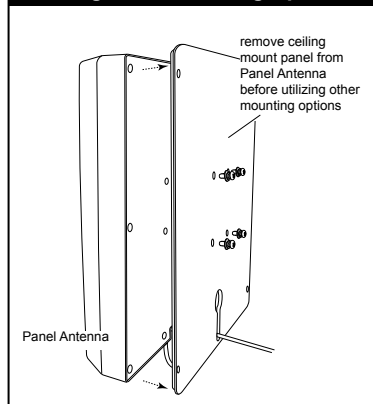


Drill a hole large enough to accommodate the dimension of the connector on the location you have marked for the cable. Hold the antenna to the ceiling and mark the locations for the screws and then drill a 3/16 inch hole and tap anchors into the pre-drilled screw holes.

Attach the Signal Booster “Inside Antenna” cable to the connector on the Ceiling Mount Antenna. Place the antenna flush against the ceiling, and then screw the antenna into place (screws and anchors provided). Be careful not to over-tighten.

If you have any questions about the installation procedure, please contact our Customer Support Team toll free at 866-294-1660 or email tech@wilsonelectronics.com.

Remove Ceiling Mount Before Utilizing Other Mounting Options

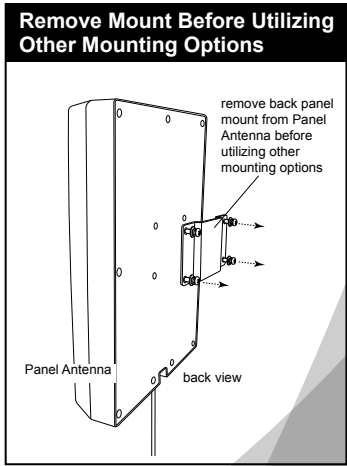
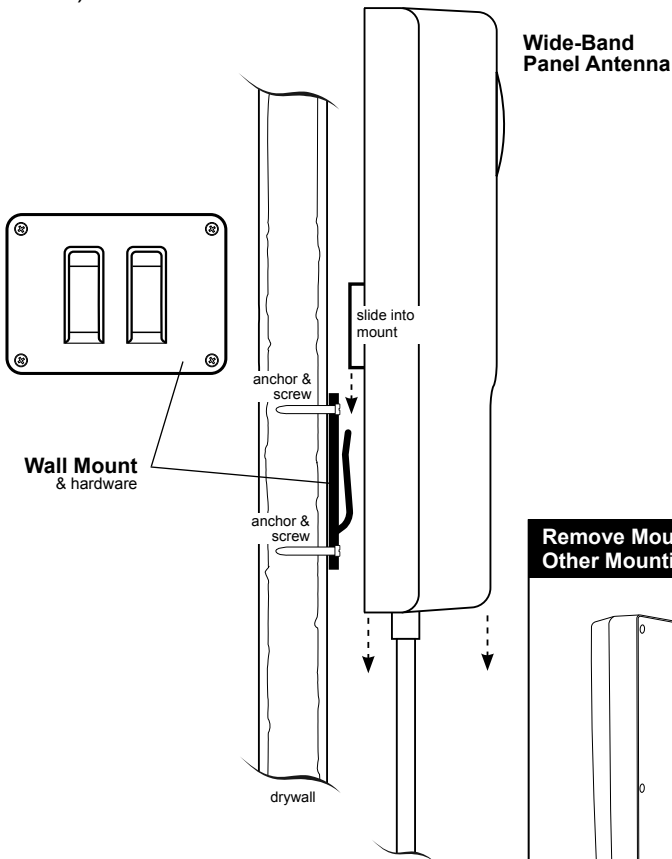


Wall Mount Installation

Find the desired location for the Panel Antenna. Verify that the Panel Antenna and the Outside Antenna have the necessary separation (see Signal Booster instructions for requirements).

For optimum results, the antenna should be mounted a minimum of 6 feet from the floor.

Utilize Wall Mount Bracket (see diagram below) as your template. Drill out the four holes for the screws in the wall, using a 3/16 size drill bit, following your template. Tap in wall anchors provided and place the mounting bracket over the wall anchors, insert the screws and tighten. Slide the Panel Antenna onto the wall mount bracket (see diagram below).

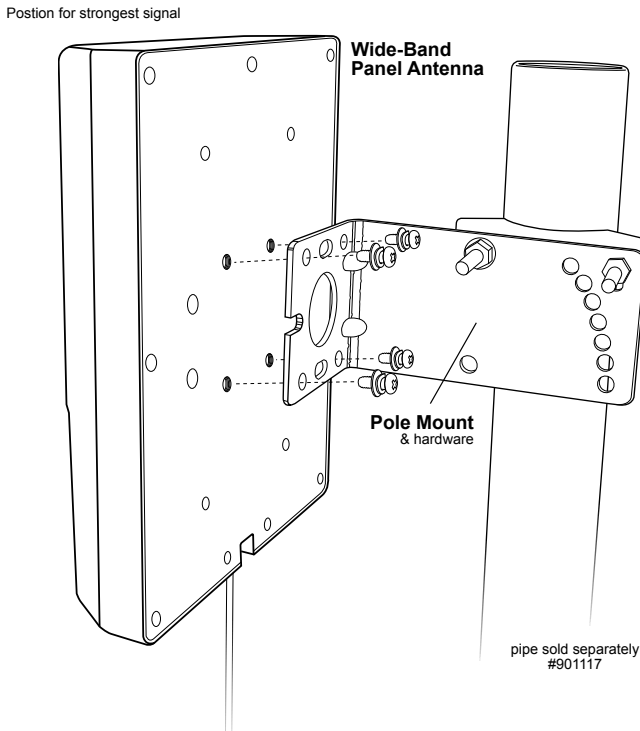


Pole Mount Installation

The antenna should be mounted as shown in the illustration below. The included mounting bracket is adjustable and will accommodate pipe diameters from 1.25 inches to 2 inches (pipe sold separately #901117). Mount the antenna so that there is at least 3 feet of clearance in front and sides. Position the antenna so that it has the most unobstructed line of sight to the cellular service provider's strongest signal. If you are using a wireless Signal Booster, make sure the antenna is not pointing across your own roof.

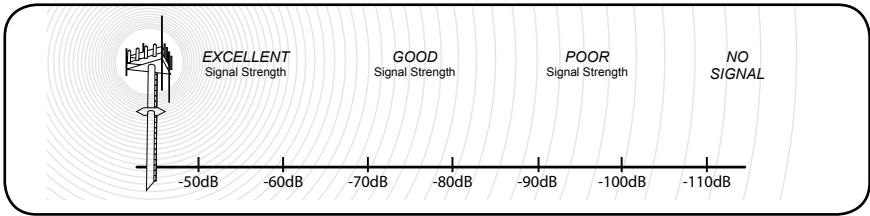
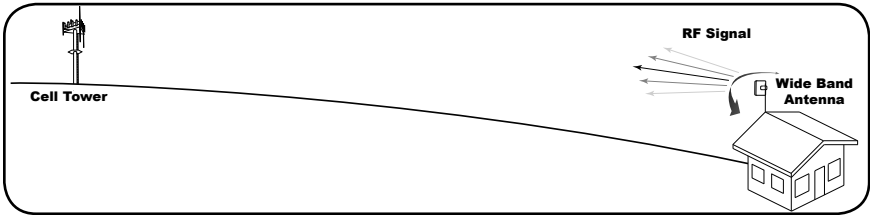
Refer to Signal Booster instructions for separation requirements.

Warning: Lightning protection is recommended for all installations, sold separately (Wilson Electronics #859902-50 Ohm & #859992-75 Ohm). Take extreme care to ensure that neither you nor the antenna comes near any electric power lines.



Adjusting the Antenna for Maximum Performance

To adjust the antenna for best performance, connect it to your cell phone with an External Adapter and a length of cable (External Antenna Adapters and cables are sold separately). Put the cell phone in test mode and turn the antenna in 10-degree increments while checking the cell phone's signal level. At each point you may need to wait a few seconds as your cell phone updates.



Signal readings usually appear as a negative number (for example, -86). The larger the number, the more powerful the signal (-75 is stronger than -84). See graph above.

Once you have obtained the strongest signal, fully tighten the mounting hardware. After the Signal Booster and the rest of the system is installed and performing correctly, weatherproof all connections.

Important: If you are using a Wireless Signal Booster, be sure the antenna is not pointing across the building in which you are trying to get coverage. The antenna should point away from the building to help prevent oscillation (feedback).

Ultra low loss cable is recommended for lengths 20 feet or greater to prevent significant signal loss. Wilson Electronics offers WILSON 400 cable in several lengths from 20-100 feet. Wilson Electronics also offers a wide range of phone adapters to connect your cell phone to a Signal Booster or directly to the antenna. To find the adapter for your phone, or contact Customer Support toll free 866-294-1660.

2-Year Warranty

Wilson Electronics Signal Boosters are warranted for two (2) years against defects in workmanship and/or materials. Warranty cases may be resolved by returning the product directly to the reseller with a dated proof of purchase.

Antennas may also be returned directly to the manufacturer at the consumer's expense, with a dated proof of purchase and a Returned Material Authorization (RMA) number supplied by Wilson Electronics. Wilson Electronics shall, at its option, either repair or replace the product. Wilson Electronics will pay for delivery of the repaired or replaced product back to the original consumer.

This warranty does not apply to any antennas determined by Wilson Electronics to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Replacement products may include refurbished Wilson Electronics products that have been recertified to conform with product specifications.

RMA numbers may be obtained by contacting Technical Support at 866-294-1660.

Disclaimer: The information provided by Wilson Electronics, LLC is believed to be complete and accurate. However, no responsibility is assumed by Wilson Electronics, LLC for any business or personal losses arising from its use, or for any infringements of patents or other rights of third parties that may result from its use.

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Antenna Specifications

| Part Number | 304452 | 304472 | 304451 | 304471 | 311135 | 314473 | 311155 | 314453 | 311155-0630 |
|----------------------------|---|----------|----------|----------|--|----------|----------|----------|--|
| Frequency Range | 700-800 MHz / 824-894 MHz / 880-960 MHz / 1710-1880 MHz / 1850-1900 MHz / 2110-2700 MHz | | | | 698-716 MHz / 776-787 MHz / 824-849 MHz / 1710-1755 MHz / 1850-1995 MHz | | | | 698-716 MHz / 776-787 MHz / 824-849 MHz / 1710-1755 MHz / 1850-1995 MHz |
| Impedance | 50 Ohms | 75 Ohms | 50 Ohms | 75 Ohms | 50 ohms | 75 ohms | 75 Ohms | 50 Ohms | 75 Ohms |
| Connector | N-Female | F-Female | N-Female | F-Female | N-Female | F-Female | F-Female | N-Female | F-Female |
| Antenna Gain | 5.2 dBi 700-800 MHz / 4.4 dBi 824-894 MHz / 4.2 dBi 880-960 MHz / 10.1 dBi 1710-1880 MHz / 10.6 dBi 1850-1990 MHz / 8 dBi 2110-2700 MHz | | | | 3.8 dBi 698-716 MHz / 3.6 dBi 776-787 MHz / 4.4 dBi 824-849 MHz / 8.2 dBi 1710-1755 MHz / 10.0 dBi 1850-1995 MHz | | | | 1.49 dBi 698-716 MHz / 1.26 dBi 776-787 MHz / 1.81 dBi 824-849 MHz / 4.25 dBi 1710-1755 MHz / 5.72 dBi 1850-1995 MHz |
| Polarization | Vertical | | | | | | | | |
| Beamwidth Horizontal Plane | 70 / 60 Deg | | | | | | | | |
| Beamwidth Vertical Plane | 50 / 45 Deg | | | | | | | | |
| Max Power | 50 Watts | | | | | | | | |
| Dimension | 8.27 x 7.09 x 1.73 (inch) / 21 x 18 x 4.39 (cm) | | | | | | | | |
| Weight | 1.32 lbs / 0.6 kg | | | | | | | | |

Wilson Electronics, LLC
 3301 East Deseret Drive, St. George, UT 84790
 For additional Technical Support visit www.WilsonElectronics.com
 or email at: tech@wilsonelectronics.com
 Phone: 866-294-1660 Local: 435-673-5021 Fax: 435-656-2432
www.twitter.com/WilsonCellular www.facebook.com/WilsonCellular