Antenna Installation Guide

Outdoor Panel Antenna

PART# 301157

Features:

- High-gain
- Directional
- Pipe mounting hardware included
- Installs Easily
- Weather resistant
- Wide bandwidth

Wilson® Electronics, Inc.

How It Works

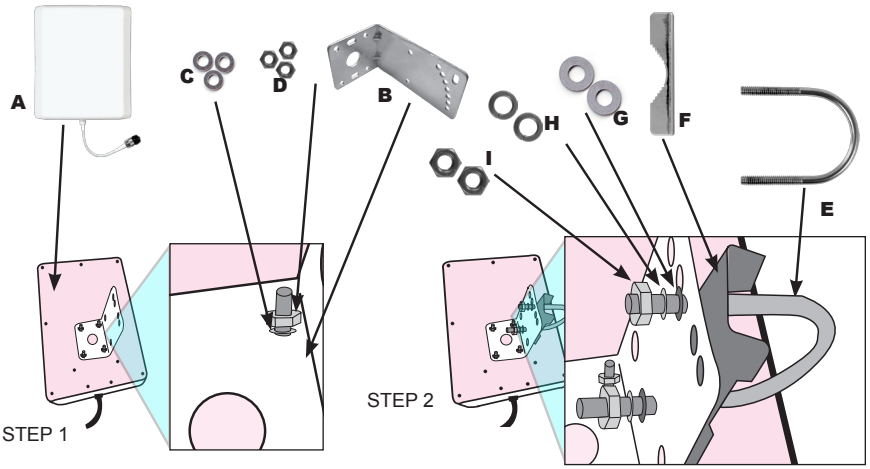
Wilson Electronics Outdoor Panel Antenna will collect the cell tower signal and send it through the cable to a Signal Booster, cell phone or data card. When the cellular device transmits, the signal is transferred to a Signal Booster or directly to the antenna and broadcasted back to the cell tower.

Package Contents

(A) Outdoor Panel Antenna, (B) Pole Mounting Bracket), (C) 3 - Small Washers,

(D) 3 - Bracket nuts, (E) 1 - U-Bolt, (F) 1- Pipe Bracket, (G) 2 - Washers (H) 2 - 1/4" Split-Lock Washers

(I) 2 - 2 - 1/4"-20 nuts

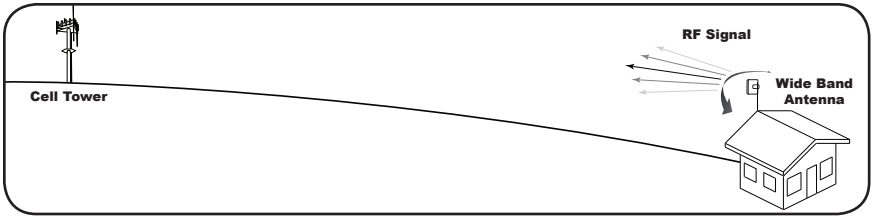


Antenna Installation

The antenna should be mounted as shown in the illustration above. The included mounting bracket is adjustable and will accommodate pipe diameters from 1.25" to 2" (pipe sold separately Part# 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.

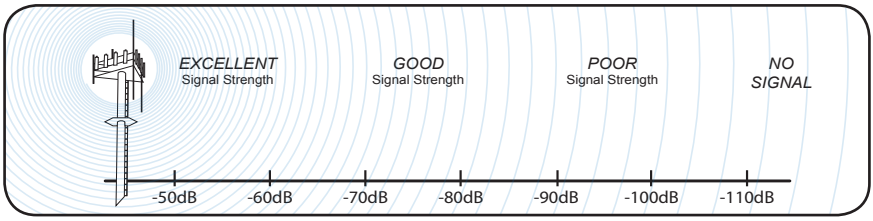
Warning: **Lightning protection is recommended for all installations (Wilson Electronics Part #859902). Take extreme care to ensure that neither you nor the antenna comes near any electric power lines.**

Contact Wilson Electronics Technical Support Team with any questions at 866-294-1660 or email: tech@wilsonelectronics.com. Hours: 7 am to 6 pm MST.



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. To find your phone's test mode, visit *www.WilsonElectronics.com*. 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 below.



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' 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, visit *www.WilsonElectronics.com* or call toll free 866-294-1660.

Antenna Adapter

An 18-inch external adapter may be required to connect the cell phone directly to the antenna. The external adapter is cell phone specific and may be purchased through a local retailer. Refer to Wilson Electronics Adapter Guide to identify the right adapter for your cell phone or cellular data card. The Adapter Guide is available through a local retailer. It is also available on our web site, *www.WilsonElectronics.com*, or you may call Technical Support at 866-294-1660.

30-Day Money-Back Guarantee

All Wilson Electronics products are protected by Wilson Electronics 30-day money-back guarantee. If for any reason the performance of any product is not acceptable, simply return the product directly to the reseller with a dated proof of purchase.

90-Day Warranty

Wilson Electronics antennas are warranted for ninety (90) days 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 signal boosters determined by Wilson Electronics to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

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

Antenna Specifications

Part Number	301157
Frequency Range	700-800 MHz / 824-894 MHz / 880-960 MHz / 1710-1880 MHz 1850-1990 MHz / 2110-2170 MHz
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 / 8.2 dBi 2110-2170 MHz
VSWR max	< 1.5
Horizontal Beamwidth	70°
Vertical Beamwidth	50°
Nominal Impedance	50 ohms
Polarization	Vertical
Maximum Power	100 watts
Connector	N-Female
Dimension	210 x 180 x 44 mm
Weight	600 g
Radome Material	UV Protection ABS

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