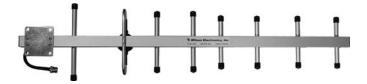
# Antenna Installation Guide



14 dB 800 MHz Yagi Cellular Antenna

PART# 301111

### Features:

- High-gain
- Directional
- Single-band (800 MHz)
- · Pipe mounting hardware included
- Easy to install



#### **30-Day Money-Back Guarantee**

All Wilson Electronics products are protected by Wilson's 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 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 amplifiers 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.

#### How It Works

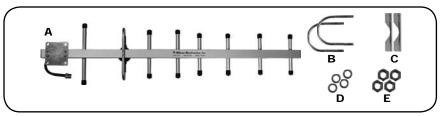
Wilson's 14 dB 800 MHz Yagi Antenna will collect the cell tower signal and send it through the cable to an amplifier or directly to the cell phone or cellular data card. When the cell phone or cellular data card transmits, the signal is transferred to an amplifier or directly to the antenna and broadcast back to the cell tower.

#### Antenna Adapter

An 18-inch external adapter is required to connect the cell phone or cellular data card to the Yagi antenna. The external adapter is cell phone/data card specific and may be purchased through a local retailer. Refer to Wilson's 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.

Disclaimer: The information provided by Wilson Electronics, Inc. is believed to be complete and accurate. However, no responsibility is assumed by Wilson Electronics, Inc. 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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# **Package Contents**

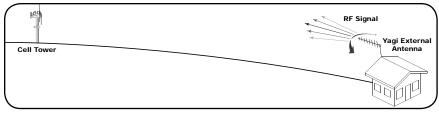
Wilson Yagi (#301111) contents include (A) Yagi antenna with N-Female End Connector, (B) 2 - U-Bolts, (C) 2 - Pipe Brackets, (D) 4 - 1/4" Split-Lock Washers, (E) 4 - 1/4"-20 nuts.



## Antenna Installation

The Yagi antenna should be mounted horizontally with the elements vertical. The included mounting bracket is adjustable and will accommodate pipe diameters from  $\frac{1}{2}$ " to 2" (pipe not included). Mount the Yagi so that there is 3 feet of clearance in all directions around it. Position the Yagi so that it has the most unobstructed line of sight to the cellular service provider's strongest signal. If you are using a wireless amplifier, make sure the Yagi is not pointing across your own roof.

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

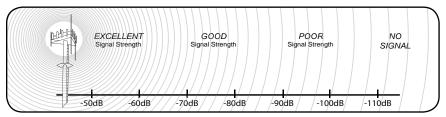


## Adjusting the Antenna for Maximum Performance

To adjust the Yagi antenna for best performance, connect it to your cell phone with an external adapter and a length of coaxial cable. External antenna adapters and coaxial cables are sold separately (see the back cover). Put the cell phone in test mode and turn the Yagi 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).

*Important:* If you are using a wireless amplifier, be sure the Yagi 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).

Once you have obtained the strongest signal (see below), fully tighten the mounting hardware. After the amplifier and the rest of the system is installed and performing correctly, weatherproof all connections.



Ultra low loss coax is recommended for lengths 20' or greater to prevent significant signal loss. Wilson offers 9913 ultra low loss cable in several lengths from 20-100 feet. Wilson also offers a wide range of phone adapters to connect your cell phone to an amplifier or directly to the antenna. To find the adapter for your phone, visit www.wilsonelectronics.com or call toll free 866-294-1660.

## **Antenna Specifications**

Part Number	301111
Number of Elements	8
Frequency Range	806-939 MHz
Impedance	50 ohms
Gain	14 dBi
Maximum Power	50 watts
Polarization	Vertical or Horizontal
Connector	N-Female
Length (w/ mount)	32.5 in / 82.6 cm
Weight (w/ mount)	1.31 lbs / 597 kg
Material	Aluminum
Wind Surface Area	< 430 cm <sup>2</sup>



3301 East Deseret Drive, St. George UT 84790 For additional Technical Support visit <u>www.wilsonelectronics.com</u> Phone: 866-294-1660 Fax: 435-656-2432