

## Wilson 1900 MHz Yagi PCS Antenna Installation Instructions

The Wilson 1900 MHz Yagi PCS antenna (#301124) is a high-gain, directional, single-band (1850-1990 MHz) PCS antenna for fixed installations.

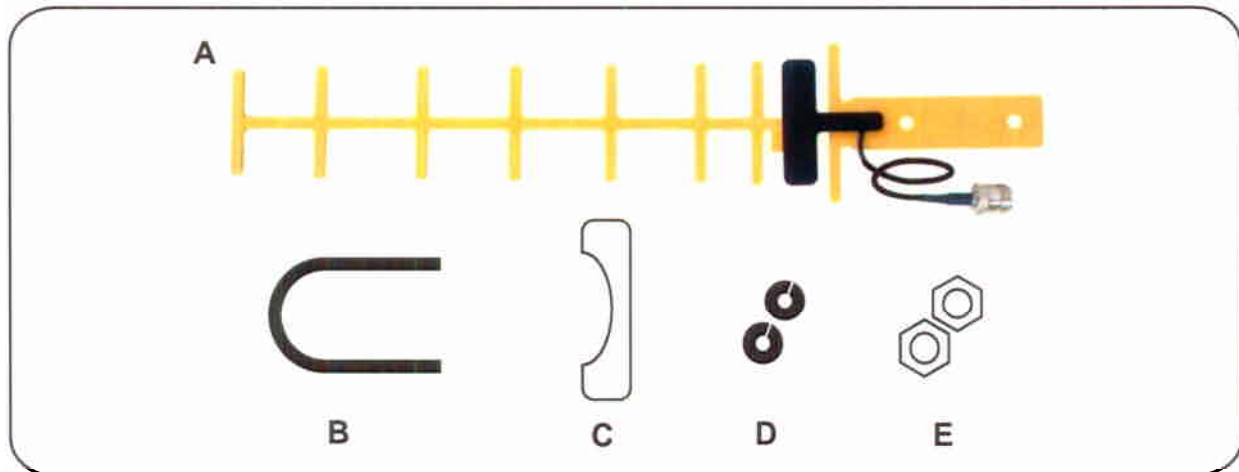


Figure 1. Package Contents

### Package Contents (see Figure 1)

Wilson Yagi (#301124) contents include (A) Yagi Antenna with N-Female End Connector, (B) 1 - U-Bolt, (C) 1 - Pipe Bracket, (D) 2 - 1/4" Split-Lock Washers, (E) 2 - 1/4"-20 Nuts. Cable and adapter sold separately.

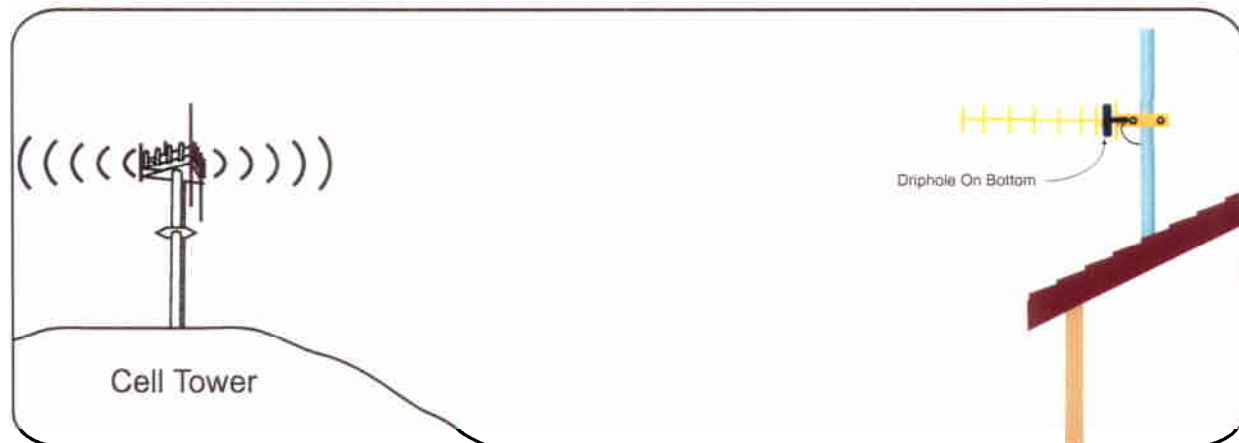
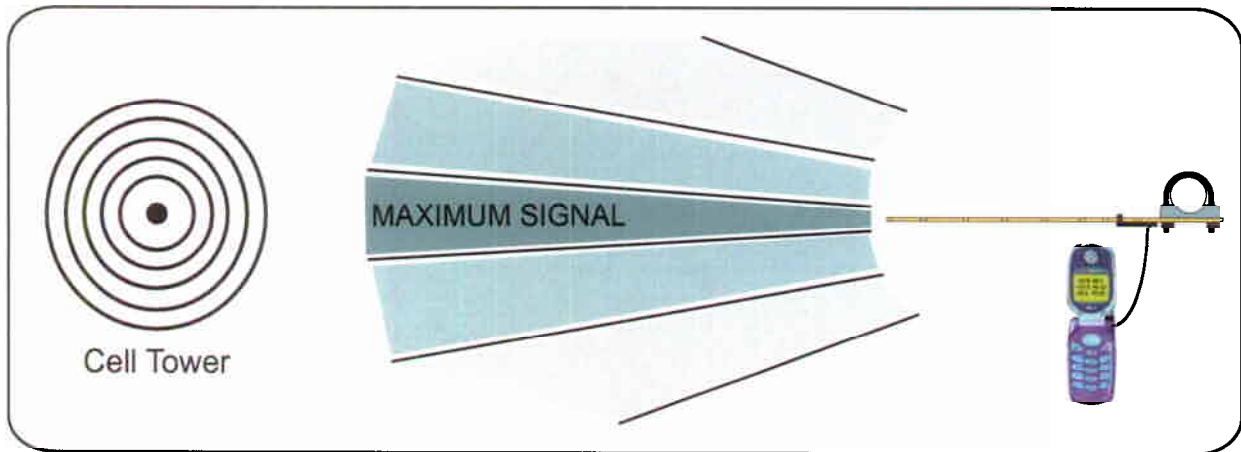


Figure 2. Side View

### Wilson Yagi Installation (see Figure 2)

The Yagi antenna should be mounted horizontally with the radials vertical. The included mounting bracket is adjustable and will accommodate pipe diameters from 1/2" to 2". (Pipe not included) The Yagi antenna should be mounted to minimize obstructions between the antenna and the service provider's strongest signal.

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

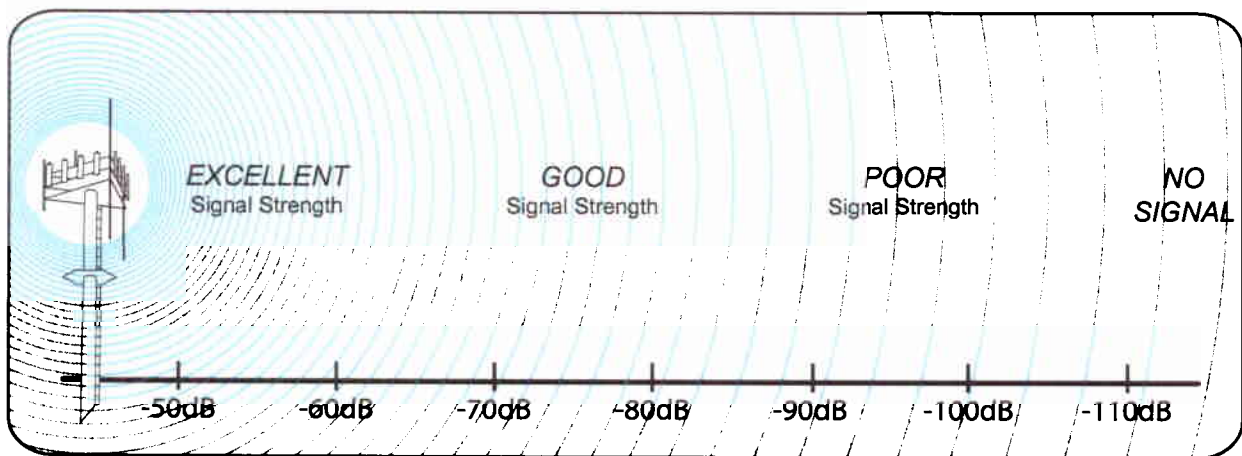


**Figure 3. Overhead View** *Note: Your strongest signal may not be in the direction of the nearest tower.*

To obtain maximum performance, you must “tune” the antenna (see Figure 3). This is done by directly connecting the Yagi to your cellphone, while in test mode, with an adapter (sold separately, see below). Turn the Yagi in 10-degree increments while checking the cellphone’s signal level. At each point you may need to wait a few seconds as your phone updates. To find your phone’s test mode, visit us at [www.wilsonelectronics.com](http://www.wilsonelectronics.com). Signal readings are given as a negative number (Example -86). The larger the number the more powerful the signal (-75 is stronger than -84).

**Important:** After finding the strongest signal, be sure the Yagi is not pointing across the building you are trying to get coverage in. The antenna should point away from the building to help prevent oscillation (feed back).

Once you have obtained the strongest signal (see Figure 4), fully tighten the mounting hardware. After the entire system is installed and performing correctly, weather proof all connections.



**Figure 4. Signal Graph**

Ultra low loss coax is recommended for lengths 20' or greater to prevent significant signal loss. (See Table 1)

**Table 1. Cable Assembly Options**

Part #	Coax Type	Length	Connectors
951108	9913 Ultra Low Loss	20 Feet	2 - N Male Connectors + 1 - Male & 1 - Female FME Adapter
951105	9913 Ultra Low Loss	30 Feet	2 - N Male Connectors + 1 - Male & 1 - Female FME Adapter
951106	9913 Ultra Low Loss	50 Feet	2 - N Male Connectors + 1 - Male & 1 - Female FME Adapter
951107	9913 Ultra Low Loss	100 Feet	2 - N Male Connectors + 1 - Male & 1 - Female FME Adapter
951117	9913 Ultra Low Loss	75 Feet	2 - N Male Connectors + 1 - Male & 1 - Female FME Adapter

### **How to Find Phone Adapters**

The phone adapter connects your phone to the antenna. To find the adapter for your cellphone, visit [www.wilsonelectronics.com](http://www.wilsonelectronics.com) or call toll free 866-294-1660.