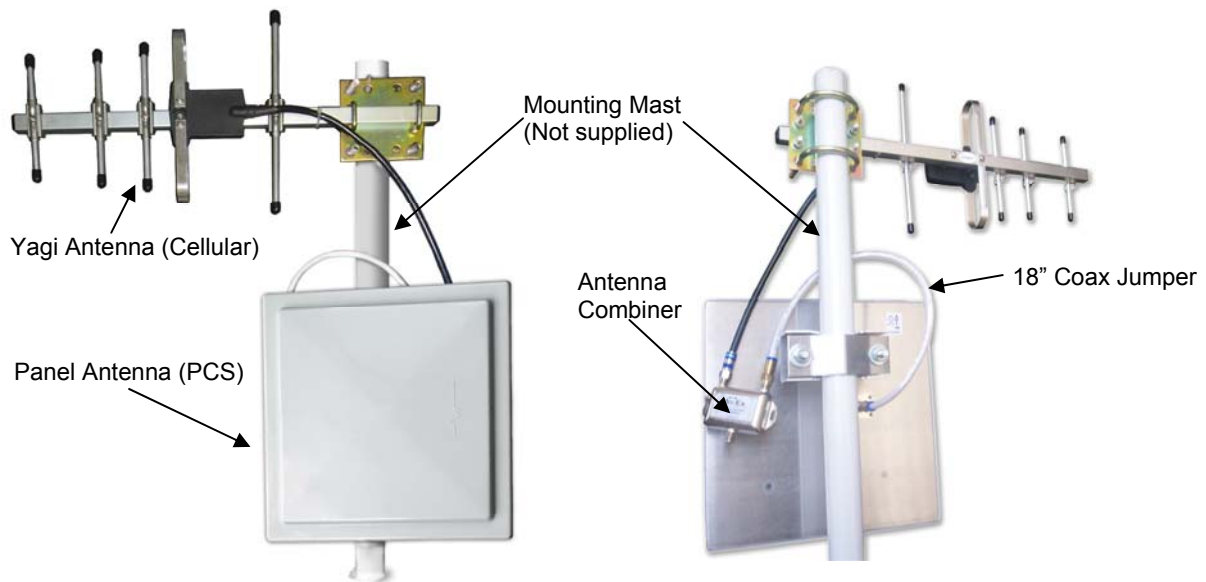




YX029-PCS-CEL Dual-Band Signal Antenna Installation Guide

The YX029-PCS-CEL dual-band outdoor signal antenna system allows your Wi-Ex cell phone signal booster to provide a larger area of improved indoor signal strength and improve indoor performance where weak outdoor cell signals exist. The antenna operates with signals in both the 800 MHz Cellular and the 1900 MHz PCS bands.

The YX029-PCS-CEL dual-band antenna system consists of two antennas, a Yagi (beam type) antenna for Cellular, a Panel antenna for the PCS band. An antenna combiner is included to combine the signals from the two antennas onto one coax for connection to the Wi-Ex Base Unit. An 18" coaxial jumper is included to connect the Panel antenna to the Combiner.



YX029-PCS-CEL Front View

YX029-PCS-CEL Rear View

Maximum performance will be achieved when the antennas are aimed at the strongest signal from your wireless provider. If you know the direction of your provider's tower, simply point the antenna in that direction. Note: the closest tower may NOT be used by your provider. We have included some helpful hints if you are unsure where your tower is located.

Installation Steps:

1. The highest point will usually produce the best results. If you do not have roof access, you should choose the side of the building with the strongest signal. With your wireless phone turned on, walk around your house while noting the number of "bars" on your signal strength indicator.
2. When you have determined the location of the strongest signal, install the antennas to a mast or pole with the brackets provided as shown in the picture above. Loosely tighten the antennas to the mast to allow the antennas to be reoriented for strongest signal.
3. Connect the coax from the Yagi antenna to the connection on the Combiner marked CEL.
4. Connect the supplied 18" coaxial jumper from the Panel antenna to the other Combiner port marked PCS.
5. Connect the RG-6 coax to the Combiner output port, route coax to the Base Unit indoors and connect the other end of the coax to the Base Unit.

Antenna Aiming:

To get the maximum benefit, you will want to take special care to make sure you point the antennas in the direction of the best signal for your wireless service provider. To aim each antenna for maximum signal, you may need more than one cell phone, one operating in the Cellular band (typically Cingular, Verizon or Alltel) and one operating in the PCS band (typically Sprint, T-Mobile, Metro PCS, Cricket).

1. Using the phone operating in the Cellular band, place the cell phone on a non-metal surface about 6-8 feet from the Base Unit.
2. Turn the signal booster on and wait 30 seconds. Note the number of signal bars displayed on your cell phone. For best results, you want to place your phone where the phone's signal meter displays in the middle of the signal meter range or less so that it can indicate as you rotate the Signal Antenna to the optimum direction. If it is reading too high, move the phone farther from the base unit antenna.
3. Record the number of signal bars _____(A) on your cell phone. Leave the phone in exactly the same place and pointing in the same direction for the following steps.
Note the direction of the Yagi antenna starting position_____.
4. Rotate the Yagi antenna mast 90 degrees and then record the phone signal bars _____(B).
5. Continue to rotate the antenna mast another 90 degrees in the same direction and record the phone signal bars _____(C).
6. Again, rotate the antenna mast another 90 degrees in the same direction and again record the phone signal bars _____(D).
7. If you desire to optimize further, then look for the two highest signal bar readings above and move the antenna between these two points to find the highest signal bars reading.
8. Look for the highest reading above. Set the antenna to that position and tighten the antenna to the mast.
9. With a PCS cell phone, repeat steps 1 through 8 rotating the Panel antenna for maximum signal strength as indicated on the PCS cell phone.
10. Once you have determined the highest reading position for each phone, tighten the antennas securely to the mast.

You have now completed the Directional Signal Antenna installation and you now have "Wireless Where You Want It."

Troubleshooting:

- If you have difficulty peaking each antenna, you may not be using the cell phone for the correct band (Cellular or PCS). Try the other cell phone and repeat the steps for that antenna to see if there is a change in signal strength indicated on the cell phone.
- "Network Overdrive" [Power LED = off; Signal LED = Solid Red; Install LED = Solid Red] -you will have to choose another direction to aim your Directional Signal Antenna. This usually means that you are getting too much signal from another service provider.
- "Oscillation" [Power LED = off; Signal LED = Flashing Red; Install LED = Flashing Red] -you will have to choose another direction to aim your Directional Signal Antenna OR move your Base Unit Antenna. This usually means that your Directional Signal Antenna is pointing towards the Base Unit Antenna.
- Please consult your Wireless Extenders Cell Phone Signal Booster installation guide for more complete troubleshooting information.

For the **latest installation tips and drawings**, visit our website at www.wi-ex.com and click on the Installation button and the FAQ's button (Frequently Asked Questions).