

SIGNALBOOST™
DT™
DESKTOP
CELLULAR SIGNAL BOOSTER



SIGNALBOOST™ DT
Adjustable Gain
In-Building Wireless
800/1900 MHz
Smart Technology II™
Signal Booster



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Signal Booster Specifications **Back Cover**

Appearance of device and accessories may vary.

Installation Instructions for the Following Wilson Electronics Signal Booster:

SIGNALBOOST™ DT Adjustable Gain In-Building Wireless 800/1900 MHz Smart Technology II™ Signal Booster
 Model # 271265
 FCC ID: PWO271265 IC: 4726A-271265

The term “IC” before the radio certification number only signifies that Industry Canada technical specifications were met.

Welcome to the Wilson Electronics Family of Products!

Thank you for purchasing the Wilson Electronics SIGNALBOOST DT system. You are just minutes away from enjoying improved performance from your cellular phone and/or laptop data card. When installed properly, the SIGNALBOOST DT will significantly reduce dropped calls and improve both voice and data signal quality. By taking a few minutes to read and follow the simple instructions in this guide, you will get the most out of your new SIGNALBOOST DT system. If you have questions during or after installation, please do not hesitate to contact a member of our Technical Support team by phone 866-294-1660 or 435-673-5021 or email tech@wilsonelectronics.com. We are here to help!

Before Getting Started

This guide will help you properly install a Wilson Electronics SIGNALBOOST DT. **It is recommended that you read through all of the installation steps and familiarize yourself with the product.** Read the instructions and visualize where you want to place the components before mounting any equipment. Please contact Wilson Electronics Technical Support with any questions at 866-294-1660 or 435-673-5021.

Package Contents:

Accessories packaged may not exactly match the below photos due to different kit options



Tools Required for Installation:

Depending on your particular installation, you will need the following tools:

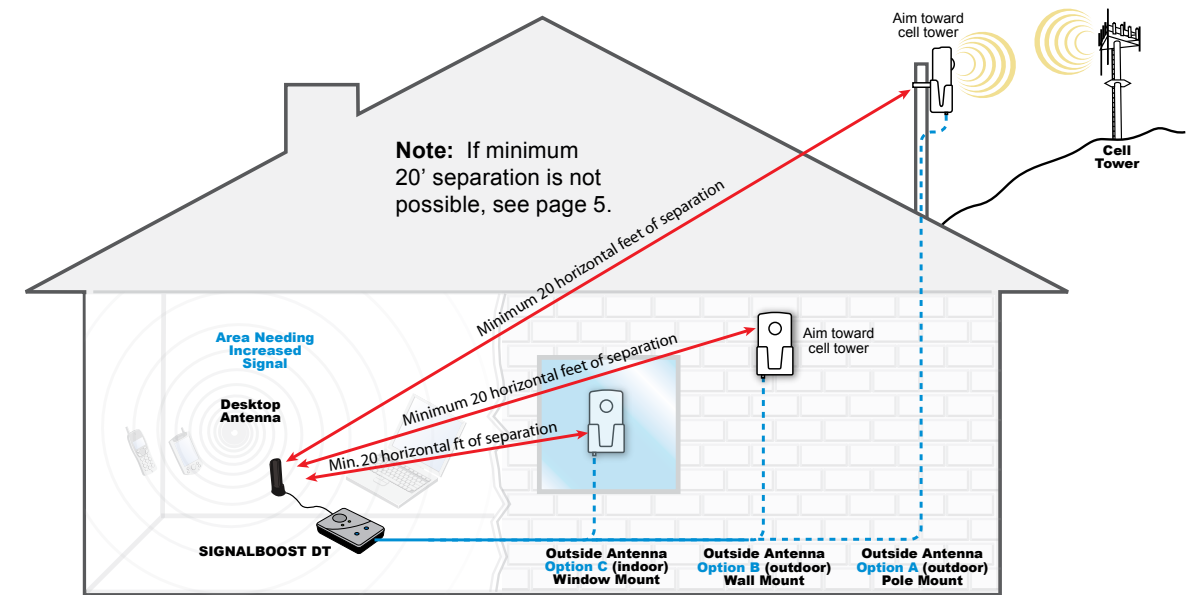
1. Pole mount - 1/4 inch open-end wrench or adjustable wrench
2. Wall mount or Rafter mount - Drill and 3/16 inch bit, Phillips-head screwdriver

Note: Need help installing your SIGNALBOOST™ DT? Check out our latest complete *Installation Video* at www.wilsonelectronics.com/dt-install.aspx.

How it Works

Your Wilson Electronics SIGNALBOOST DT works by picking up a cellular signal from the Outside Antenna facing the cell tower. The Signal Booster then increases the signal and transmits it to the Desktop Antenna. The Desktop Antenna then transmits the boosted signal to your cell phone or laptop data card. There are several ways to mount the Outside Antenna, (see Figure 2 on page 3) but for the best results, mount the Outside Antenna on a pole outside your building facing a cell tower.

Figure 1



Warning: Make sure the position of the Desktop Antenna observes the minimum required separation distance from the outside Cradle Antenna. The Desktop Antenna must be positioned at least 20 vertical feet from the outside Cradle Antenna.

Reasons for Weak Cellular Signals

Anyone who uses a cell phone or cellular data card knows the frustration of not being able to connect to or maintain a strong cellular signal. When this occurs, it is generally due to one of two reasons:

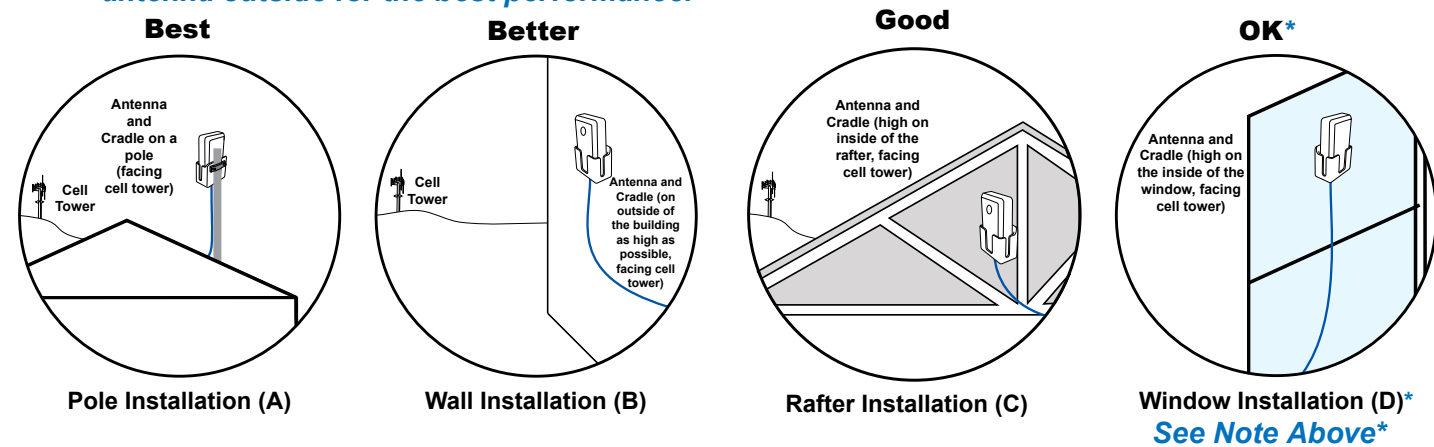
1. Location of the Nearest Cell Tower – Cell towers are situated to provide broad coverage; however, there are many areas in which signal strength may be reduced by topographic features or by local government restrictions on the height or placement of the towers themselves. Rural areas generally have fewer cell towers than urban regions.
2. Natural and Man-made Obstructions – Signal strength can also be negatively affected by trees, hills, buildings and other obstructions. You may be relatively close to a cell tower but still unable to make a call. This often occurs in homes, offices and other buildings in which stucco, concrete or metal block the signal.

The outside Cradle Antenna receives the outside signal and sends it through the cable to the SIGNALBOOST DT, where it is amplified and transmitted through the Desktop Antenna into the room. When the Desktop Antenna picks up a signal from your cell phone or data card, the Signal Booster then amplifies that signal and transmits it through the cable to the outside Cradle Antenna and back to the cell tower.

(Note: The SIGNALBOOST DT will only operate if there is adequate outside signal to amplify.)

Figure 2

***Note: For Window Installation: Most modern dual-pane windows will not pass cellular signals because of a metal oxide film applied during manufacturing. We recommend mounting the antenna outside for the best performance.**



Installation Options - Outside Cradle Antenna

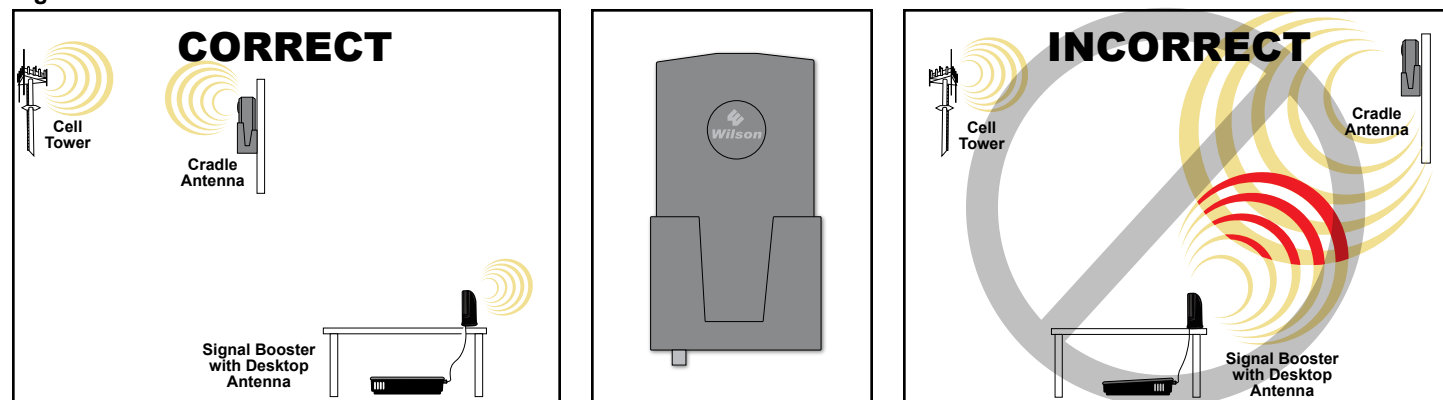
The outside Cradle Antenna is directional – it receives and transmits best in one direction. The round Wilson Electronics insignia indicates the side of the antenna that should face toward the cell tower when the unit is placed in the cradle. **Note: The weaker the signal is at the outside Cradle Antenna, the shorter the distance the Desktop Antenna will transmit; therefore, signal strength at the outside Cradle Antenna is extremely important.** In some kits the SIGNALBOOST DT comes with all necessary parts for installation of the outside Cradle Antenna in four alternative locations (see Figure 2 on page 3):

- A. BEST:** Outside on a pole. See page 5 for installation instructions.
- B. BETTER:** Outside on a wall. See page 6 for installation instructions.
- C. GOOD:** In the attic on a rafter. See page 7 for installation instructions.
- D. OK:** Inside on a window. See page 7 for installation instructions.

Antenna Placement

The location of the SIGNALBOOST DT with the Desktop Antenna in relation to the outside Cradle Antenna is very important. Once you find a good signal location for the outside Cradle Antenna, the Signal Booster and Desktop Antenna need to be located *behind it* to reduce the possibility of oscillation (feedback) (indicated by a red indicator light on the Signal Booster). In other words, the front of the outside Cradle Antenna (indicated by the Wilson Electronics insignia) needs to face in the direction of the cell tower and not in the direction of the Signal Booster and the Desktop Antenna (see Figure 3).

Figure 3

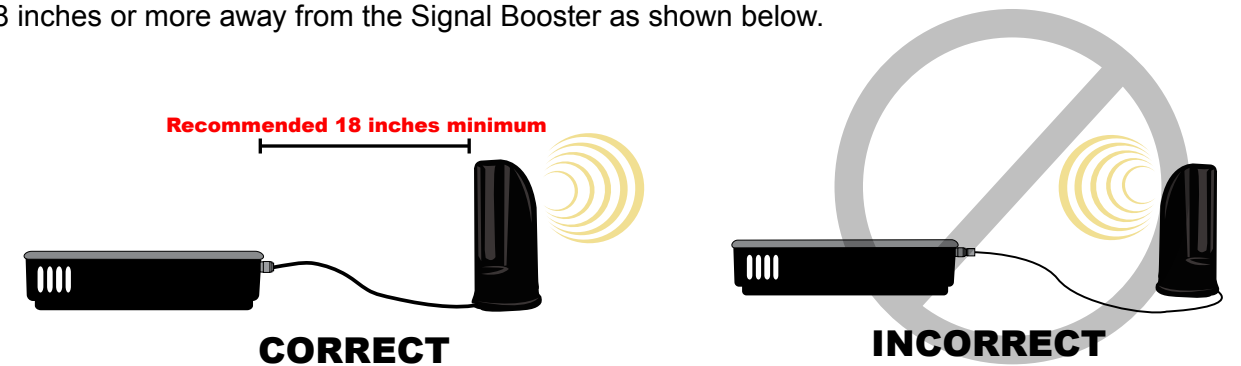


Position the Desktop Antenna with the logo on the antenna facing away from both the Signal Booster and outside Cradle Antenna.

The Wilson Electronics insignia on the outside Cradle Antenna should face **toward** the cell tower and **away from** the Desktop Antenna.

Never point the outside Cradle Antenna across the building toward the Desktop Antenna. Do not let the outside Cradle Antenna and the Desktop Antenna (logo side) transmit toward each other.

In addition, it is important that the Desktop Antenna be positioned so that the logo is not pointed towards the Signal Booster or the outside Cradle Antenna, as shown in Figure 3. The Desktop Antenna is recommended to be 18 inches or more away from the Signal Booster as shown below.

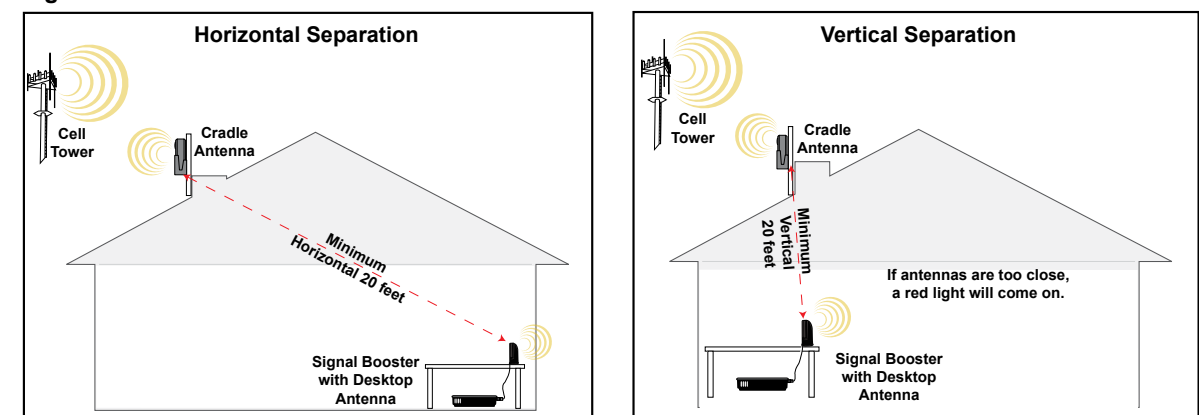


Antenna Separation

The location of the Desktop Antenna in relation to the Outside Antenna is very important. Poor antenna placement increases the possibility of oscillation (feedback), which causes system shutdown (indicated by a red light on the DT). Observe the following rules for correct antenna placement and optimum DT performance.

- Rule #1** Once you find a good signal location for the Outside Antenna, the front of the Outside Antenna (the Wilson Electronics insignia) must face toward the cell tower, and face **AWAY FROM** the Desktop Antenna. The Desktop Antenna must be positioned at least 20 **vertical** feet from the outside antenna (see Figure 4).
- Rule #2** The Desktop Antenna should be placed 18 inches or more away from the Signal Booster, with the logo pointed away from the Signal Booster (see figure 4).

Figure 4



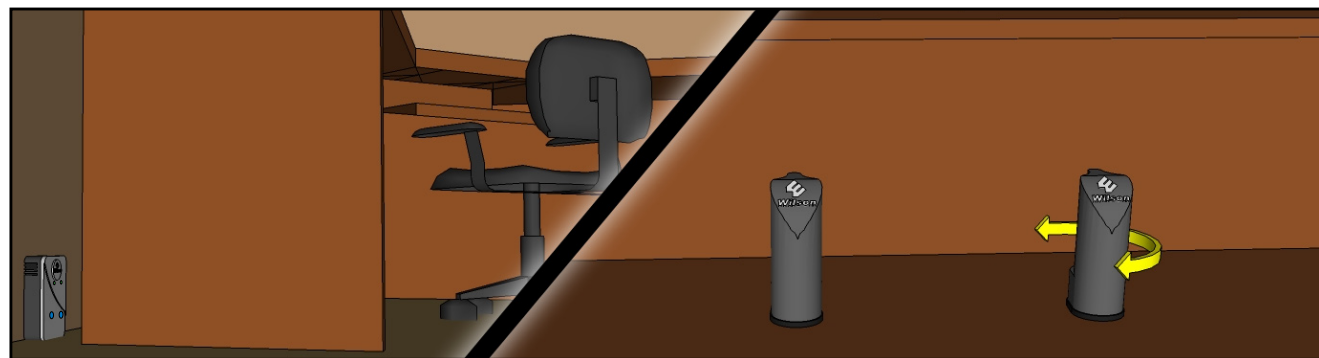
Even at 20 feet, the Signal Booster may shut down, as indicated by the red light. By moving the Desktop Antenna further away from the Signal Booster, you may be able to change the red light to a green light, indicating that the system is operating properly (see Figure 5).

Figure 5



If you are unable to maintain the 20-foot minimum separation between antennas, it may be possible to achieve normal operation (a green light) at less than 20 feet by moving the Desktop Antenna to a different position, as noted above, and rotating the Desktop Antenna in relation to the outside Cradle Antenna (see Figure 6). Do not position the Desktop Antenna towards the Signal Booster unit or the outside Cradle Antenna.

Figure 6



If you are not able to change the red light to green in this manner, more separation is needed between the outside Cradle Antenna and the Desktop Antenna.

Troubleshooting Tip: If your installation maintains at least 20 **vertical** feet of separation distance but the red light remains illuminated, then relocate the Desktop Antenna more directly beneath the position of the Outside Antenna, inside the imaginary Null Zone of Signal (see Figure 7-1 & 7-2). Make sure the relocated Desktop Antenna observes rules 1 & 2 on page 4.

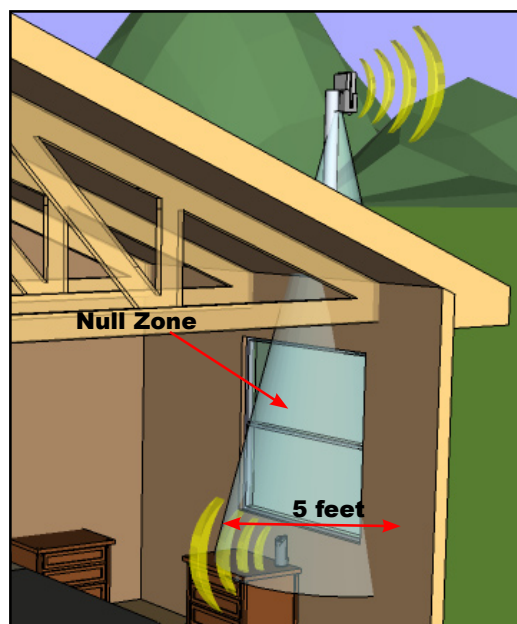


Figure 7-1: BEST: Outside Pole Mount Option

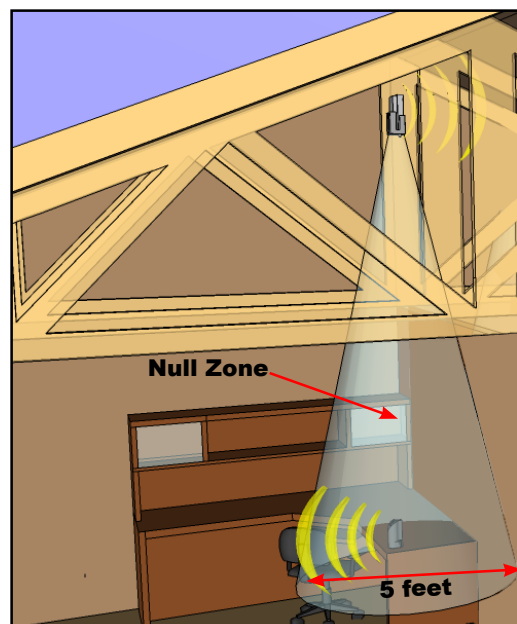
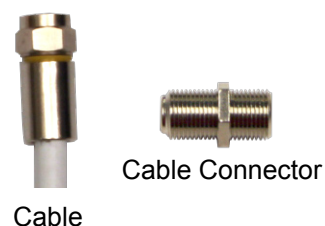
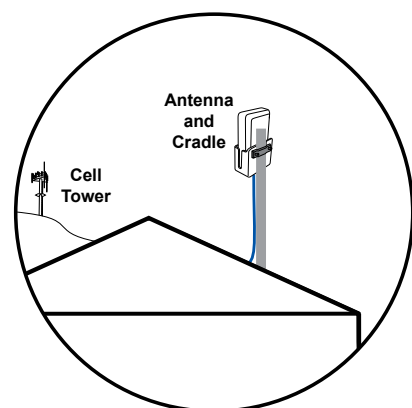


Figure 7-2: BETTER: Rafter Mounting Option

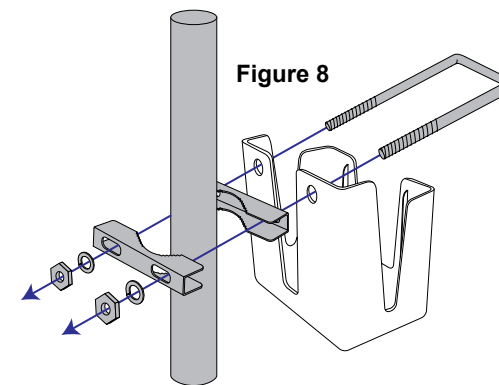
Installing the Outside Cradle Antenna

BEST: Outside Pole Mount (Packet A)

1. Select a location on the roof where the outside Cradle Antenna can be mounted on a pole directly above the Desktop Antenna with at least 15 feet vertical separation. See Figure 7-1.
2. The supplied pole-mount bracket is designed to accommodate a pole diameter of 1 to 2 inches. Install the pole in the desired location using your own hardware.
3. Insert the supplied U-bolt through the holes in the cradle and slide one half of the bracket assembly onto the U-bolt (see Figure 8).
4. Fitting the assembly onto the pole, slide the second half of the bracket onto the U-bolt and secure it with lock washers and nuts. Be sure the cradle is at the desired height on the pole and is rotated toward the nearest cell tower before tightening the nuts (do not over-tighten the nuts.)

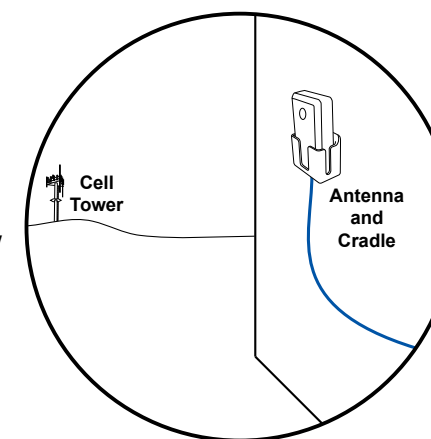


5. Insert the antenna into the cradle **with the Wilson Electronics insignia facing in the direction of the cell tower**. The cable connection should protrude through the bottom of the cradle.
6. Connect the supplied cable to the antenna. Route the cable as desired to where the Signal Booster will be located. Depending on the distance between the Signal Booster and antenna, you may need one or both lengths of the supplied cable. If you use both, connect them together with the supplied cable connector.

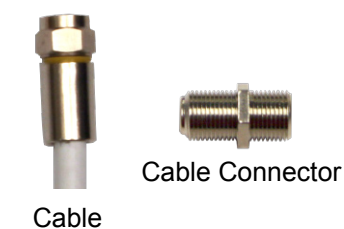
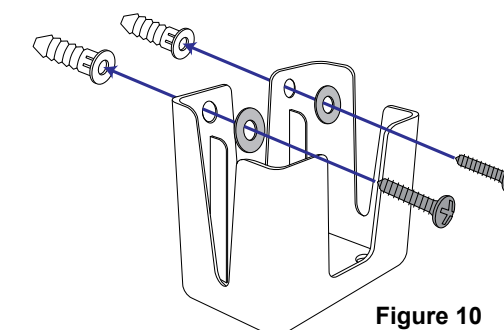
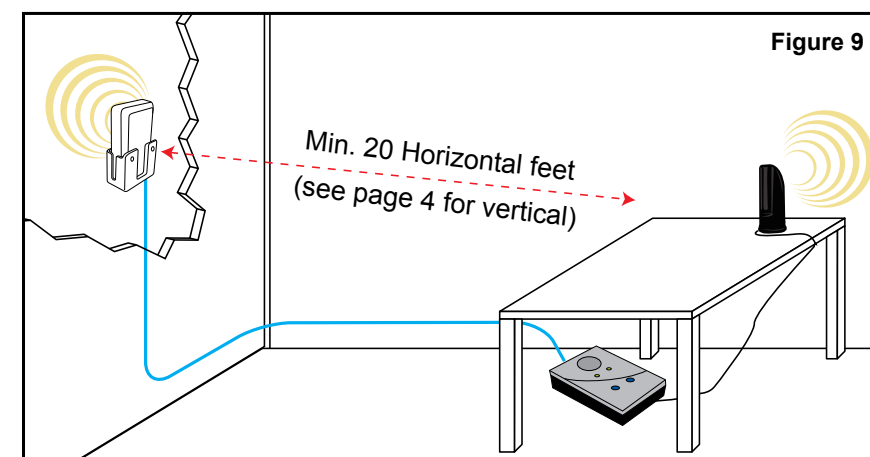


BETTER: Outside Wall Mount (Packet B)

1. Select a location on an outside wall as high as possible and at least 20 feet away from where the Signal Booster will be located (see Figure 9).
2. Using the cradle as a template, position it on the wall in the desired location and mark the screw holes with a pencil.
3. Drill two holes where marked, using a 3/16-inch bit and insert the screw anchors.
4. Line up the holes in the cradle with the screw anchors and mount the cradle to the wall using two screws and two washers (see Figure 10). Tighten the screws with a Phillips-head screwdriver.
5. Insert the antenna into the cradle **with the Wilson Electronics insignia facing in the direction of the cell tower**. The cable connection should protrude through the bottom of the cradle.
6. Connect the supplied cable to the antenna. Route the cable as desired to where the Signal Booster will be located. Depending on the distance between the Signal Booster and antenna, you may need one or both lengths of the supplied cable. If you use both, connect them together with the supplied cable connector.

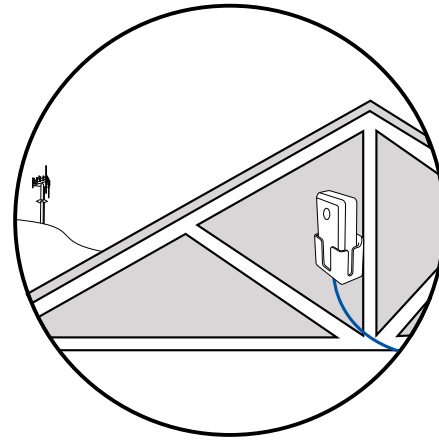


Warning: RF Safety: FCC regulations require that any antenna (inside or outside) used with this Signal Booster may not have gain that exceeds 15 dBi. All Wilson Electronics antennas meet this requirement. Inside antennas must have at least 8 inches of separation from all persons. Outside antennas must be farther than 30 inches from all persons.



GOOD: Rafter Mounting Option

1. Select a location in the buildings rafters where the outside Cradle Antenna can be mounted directly above the Desktop Antenna with at least 20 feet vertical separation (see Figure 7-2 on page 5).
2. Using the cradle as a template, position it on the rafter in the desired location and mark the screw holes with a pencil.
3. Drill two holes where marked, using a 3/16-inch bit and insert the screw anchors.
4. Line up the holes in the cradle with the screw anchors and mount the cradle to the wall using two screws and two washers (see Figure 10 on page 6). Tighten the screws with a Phillips-head screwdriver.
5. Insert the antenna into the cradle **with the Wilson Electronics insignia facing in the direction of the cell tower**. The cable connection should protrude through the bottom of the cradle.
6. Connect the supplied cable to the antenna. Route the cable as desired to where the Signal Booster will be located. Depending on the distance between the Signal Booster and antenna, you may need one or both lengths of the supplied cable. If you use both, connect them together with the supplied cable connector.



OK: Inside Window Mount (Packet C)*

1. Select a location on the inside of the window as high as possible and at least 20 feet from where the Signal Booster will be located.
2. Clean the area on the glass with the supplied alcohol prep pad.
3. Mount the outside Cradle Antenna, use the suction cups provided in Packet C. Using a twisting motion, press the suction cups into the two holes on the antenna cradle (see Figure 11), then press the cradle onto the glass at the desired location.
4. Insert the antenna into the cradle **with the Wilson Electronics insignia facing in the direction of the cell tower**. The cable connection should protrude through the bottom of the cradle.
5. Connect the supplied cable to the antenna and route the cable as desired to where the Signal Booster will be located. Depending on the distance between the Signal Booster and antenna, you may need one or both lengths of the supplied

**See Note Below*

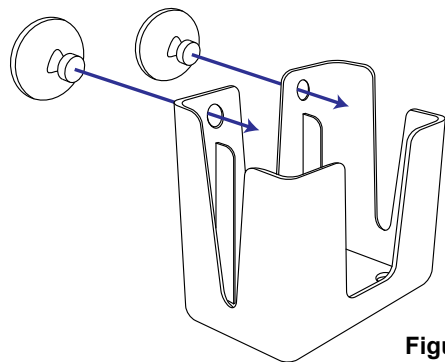
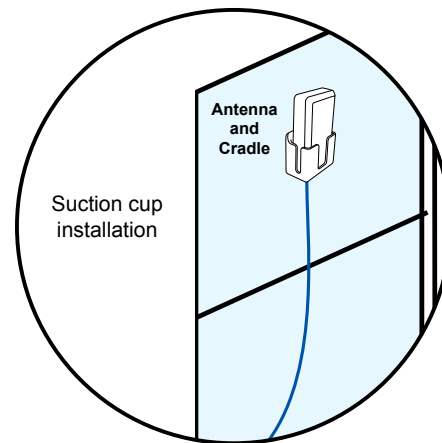
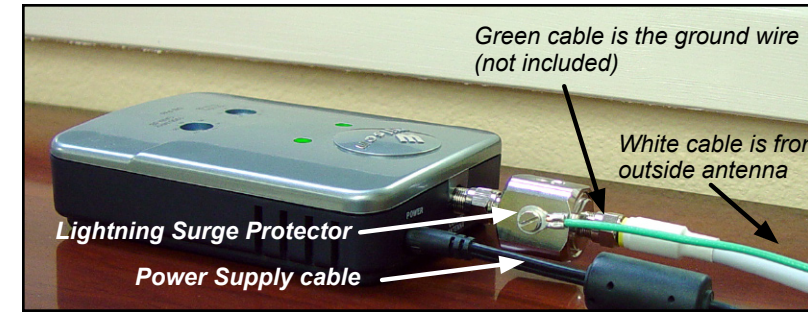


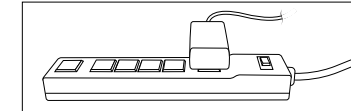
Figure 11

*** Note: For Window Installation: Modern Dual-Pane windows will not pass cellular signals because of a metal oxide film applied during manufacturing. We recommend mounting the antenna outside for the best performance.**



Recommended: Installing the Lightning Surge Protector (sold separately)

Install the Lightning Surge Protector (LSP) close to the Signal Booster. Attach the cable from the Outside Antenna to the surge protector. **Ensure the LSP is properly grounded.** (For RG6 cable use #859988-75 Ohm (shown), for 50 Ohm use #859902). May be purchased at www.WilsonElectronics.com or by calling 800-204-4104.



Wilson® Electronics recommends that all AC power supplies for home electronics be plugged into a **Surge Protector Power Strip**.

Installing the Signal Booster Unit

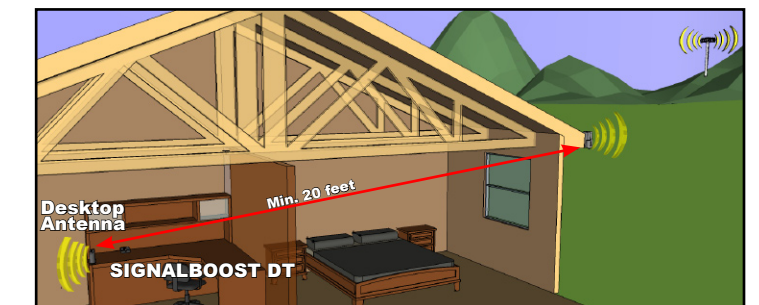
1. Select a location to install the Signal Booster that is away from excessive heat, direct sunlight, moisture and that has proper ventilation. Do not place the Signal Booster in an air-tight enclosure. Recommended installation locations for in-building Signal Boosters are: On a shelf or In a closet, and near a power outlet.

Note: It is important to have adequate air ventilation. Maintain at least 6 inches of clearance from surrounding objects.
2. Place the Signal Booster on a desk, table or similar surface where you have routed the cable.
3. Run the Outside Antenna cable to the Signal Booster and attach it to the connector labeled "Outside Antenna" on the Signal Booster. Run the Inside Antenna cable to the Signal Booster and attach it to the connector labeled "Inside Antenna" on the Signal Booster. **Note:** Be careful when plugging the connector in to avoid bending the center pins on the connectors.

Powering Up the Signal Booster

1. Ensure that the distance between the Desktop Antenna and the outside Cradle Antenna is a minimum of 20 horizontal feet (see Figure 12). If you are using a different antenna configuration, see the separation guidelines for your specific antenna or call Wilson Electronics Technical Support Team at 866-294-1660 or 435-673-5021.
2. Never point the front of a directional Outside Antenna toward the Inside Antenna.
3. Ensure that both the Outside Antenna cable and the Inside Antenna cable are connected to the Signal Booster **and the connections are tight** before powering up the Signal Booster.
4. Plug the 6-volt power supply into the Signal Booster input marked "POWER" (carefully, to avoid damaging the center pin) and then into a wall outlet.
5. Make sure the position of the Desktop Antenna observes the minimum required separation distance from the outside Cradle Antenna. The Desktop Antenna must be positioned at least **20 horizontal/vertical feet** from the outside Cradle Antenna.
6. If the Signal Booster does not have a green light please see page 10 for troubleshooting tips.

Figure 12

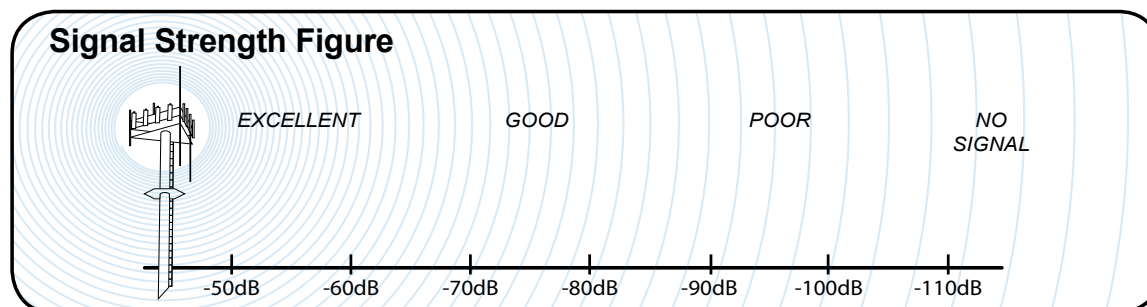
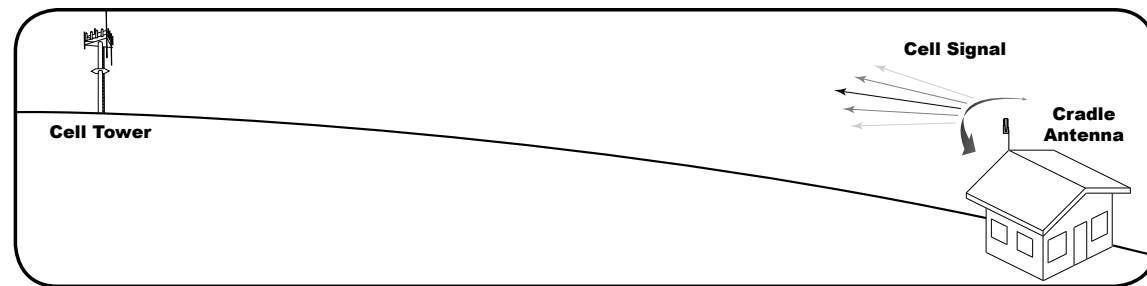


- If you know that only one frequency band (800 or 1900) is available in your coverage area (or going to be used), reduce the gain control on the frequency band that is NOT in use to the minimum. This will reduce the power consumption of the Signal Booster.
- Using multiple Signal Boosters in one installation may cause interference to the cell tower.
- If you find you still have a weak signal after powering up the Signal Booster, see signal strength figures below for additional help. **Note:** *The weaker the signal is at the Cradle Antenna, the shorter the distance the Desktop Antenna will transmit; therefore, signal strength at the Cradle Antenna is extremely important.*

Find the Strongest Signal


Before you install your SIGNALBOOST DT, it is very important that you determine the location of the **best available cellular signal**. This will affect where you place the outside Cradle Antenna and will help you get the best performance from your system. You will find the strongest signal outside your house or building, preferably at the highest place available. Your cell phone can help you find the strongest outside signal, using any or all of the following methods:


- Place calls from several locations outside your building and note where you get the best reception.
- Check the bar indicator on your cell phone display and note where the signal appears to be the strongest. **Note:** *Cell phone bars are only an approximation of signal strength and vary from phone to phone. They can take up to 30 seconds to reset to a new reading.* Be patient and repeat your signal check several times.
- The best way of getting the strongest signal is to have one person on the roof to rotate the Outside Antenna, which is connected to the Signal Booster, while the second person is watching the signal strength on the phone inside the building. This allows you to read the signal strength from the cell tower. Turn the Outside Antenna 45 degrees at a time. It is preferable to have the phone in the test mode so the numerical signal strength can be read since bars are not the most accurate. Go to the website www.WilsonElectronics.com for help in finding the test mode for your phone. Always make sure the person inside the building gives the phone time to register (between 10-30 seconds for phone to reset to the new signal reading). Signal readings usually appear as a negative number (for example, -86). The closer you get to zero the stronger the signal (see Signal Strength Figure). Once you have determined where the outside signal is strongest, you should plan to install the outside Cradle Antenna in that general area, with the antenna facing towards the cell tower (see the following section for alternative installation options).




Understanding the Signal Booster Lights and Trouble Shooting


During installation mode the Signal Booster is resetting itself very quickly to aid the installer. The Signal Booster is equipped with two indicator lights, one for the 800 MHz band and the other for the 1900 MHz band. For the first 15 minutes that the booster is plugged in, it is programmed for a test and alignment period. During this time, both lights will do one of the following 4 things: (**Note:** *If after the initial 15 minutes you are not done with the installation, the Signal Booster can be reset and enter installation mode again by disconnecting and reconnecting the power supply from the booster.*)

BLINKING GREEN:  If the Signal Booster is blinking green, the Signal Booster is operating properly. If you are happy with the coverage area in your building, then you are done. Blinking will stop after the 15 minute installation period.

BLINKING ORANGE:  The Signal Booster is experiencing receiver overload. The Signal Booster has protection shutoff circuits to prevent the disruption of cell towers. If one or both lights are blinking orange, this indicates that the Signal Booster has shut down due to close proximity to a cell tower. **First, turn down the gain control on the band that is blinking until you get a blinking green light. The Signal Booster is now working with reduced gain.** If the gain is not adequate for good coverage, **you will need to turn the gain to maximum and then turn the Outside Antenna away from the cell tower until the light turns to blinking green.** If the Signal Booster will not respond, turn the gain down 5 dB and move the Outside Antenna. Continue to adjust the gain and the antenna position until the light turns blinking green. Contact Wilson Electronics Technical Support Team for assistance: 866-294-1660.

SOLID RED:  If either of the two lights on the Signal Booster are solid red, this indicates that the Signal Booster has shut down on that frequency to prevent an oscillation (feedback). First, make sure that all the connections are tight. **Then reduce the gain of the Signal Booster in small increments by rotating the gain control, counter-clockwise, wait 5 seconds between each adjustment for the Signal Booster to reset, continue this adjustment until the light turns blinking/solid green.** When you are turning down the gain, you are reducing the inside coverage area. If the amount of coverage area is sufficient for your needs and the light is green the installation is complete. **If the coverage area is not large enough, it is necessary to increase the separation distance of the antennas by moving them horizontally or vertically farther apart, or both. Then increase the gain until the red light comes on, and then slightly keep decreasing the gain until the green or blinking green light appears.** If after separating the antennas your coverage area is still too small, contact Wilson Electronics Technical Support Team for assistance: 866-294-1660.

If your installation takes longer than 15 minutes, it is possible to re-enter the installation mode by disconnecting and reconnecting the power supply from the Signal Booster.

SOLID GREEN:  The indicator lights on the Signal Booster will be a solid green after the first 15 minute installation period and the unit is powered up and working properly.

Note: *Oscillation (feedback) can occur when the Outside Antenna is too close to the antenna inside the house. An oscillation in a Signal Booster is similar to when a microphone is too close to a speaker in a sound system, resulting in a loud whistle. An oscillation in the Signal Booster, if allowed to occur, can affect nearby cell towers ability to handle calls.*

Warnings and Recommendations

- Warning:** **RF Safety:** FCC regulations require that any fixed outside antenna used with this Signal Booster may not have gain (less cable loss) that exceeds 15 dBi and must be located at least 30 inches from all people. Inside antennas must not exceed 7 dBi gain (less cable loss) in the 800 MHz band or 10 dBi gain (less cable loss) in the 1900 MHz band and must be located at least 8 inches from all people.
- Warning:** If the cable is shortened, or if a different type of cable is used, or if a different antenna is used, consult with Wilson Electronics Technical Support to verify that the planned installation is safe. Call 866-294-1660 or 435-673-5021, or email tech@wilsonelectronics.com.
- Warning:** Connecting the Signal Booster directly to the cell phone with use of an adapter will damage the cell phone.
- Warning:** Attach the Desktop Antenna and connect the outside Cradle Antenna before powering up the Signal Booster.
- Warning:** Use only the power supply provided in this package. Use of a non-Wilson Electronics product may damage your equipment.
- Warning:** Always operate cell phone at least three feet from the Desktop Antenna.
- Warning:** The Signal Booster unit is designed for use in an indoor, temperature-controlled environment (less than 100 degrees Fahrenheit). It is not intended for use in attics or similar locations subject to temperatures in excess of that range.
- Warning:** Take care to ensure that neither you nor the pole comes near any power lines during installation.
- Warning:** The directional antenna must always be located so the back or side points to the Inside Antenna. Never point the front of the Outside Antenna toward the Inside Antenna — this is to prevent oscillation.

Recommendation: Lightning surge protection is recommended for all in-building installations.

Frequently Asked Questions

What kind of improvement in cell phone performance can I expect with the SIGNALBOOST DT?

The SIGNALBOOST DT's performance will depend somewhat on the strength of the cellular signal outside your home or building. Regardless, if you install the SIGNALBOOST DT in accordance with the instructions in this guide, you can expect a significant improvement in your ability to use your cell phone or cellular data card indoors.

Where should I install my SIGNALBOOST DT and Desktop Antenna to get the best coverage?

You should install the Signal Booster and Desktop Antenna in the area where you most need an improved signal. The farther you are from the Inside Antenna, the less improvement you will experience. It is also important to install the outside Cradle Antenna in a location where you have the strongest outside signal (see page 3). Also keep in mind the distance between the Signal Booster and the outside Cradle Antenna. You will need at least 20 feet of separation to prevent the start of oscillation (feedback), but you will probably want to stay within the 50-foot length of the cable. (Additional cable and the necessary connectors are available from your Wilson Electronics dealer, but using more cable will result in some signal loss.)

I have a Nextel phone – will the SIGNALBOOST DT boost that signal?

The SIGNALBOOST DT is not designed for iDEN/Nextel frequency, however, Wilson Electronics offers specific Signal Boosters for iDEN/Nextel users. Visit www.WilsonElectronics.com for details.

Can I use my own cable for my installation?

Yes! However, the commonly available low-loss RG6 cable included with your product has been specifically selected for the SIGNALBOOST DT. RG6 is a commonly available cable, you can buy it from Wilson Electronics, or from your local electronics/hardware store. Use of another type or longer length of cable will likely degrade the system's performance.

There are frequently several people using cell phones in my office at the same time – will the SIGNALBOOST DT improve the signal for all of them?

Absolutely! The SIGNALBOOST DT is designed to support multiple users simultaneously (within the range of the Desktop Antenna).

Can I use different antennas than the ones supplied in the box?

Yes! While the SIGNALBOOST DT is designed to give you reliable signal improvement with the included antennas, Wilson Electronics offers a variety of optional antennas and accessories that enable you to customize your SIGNALBOOST DT to your specific needs. Visit www.WilsonElectronics.com for details.

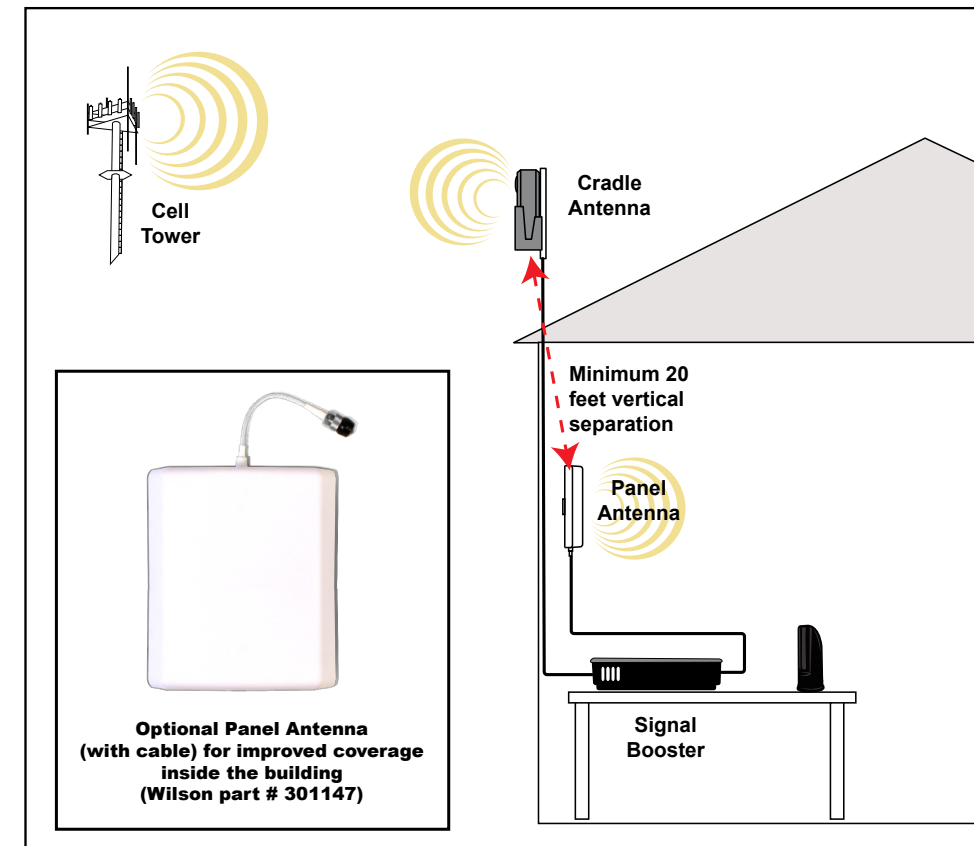
I have questions about my installation – where can I get some help?

Wilson Electronics Technical Support representatives are just a phone call or email away. Call 866-294-1660 or 435-673-5021, or send an email to tech@wilsonelectronics.com.

For Weak Areas with Insufficient Signal

In areas with particularly weak outside signals, additional coverage can be obtained by upgrading the Inside Antenna and replacing it with a high-gain inside Panel Antenna (Wilson part #301147). This antenna (which includes RG58 cable) can double the inside coverage area (See Figure 13). Additional coverage can be obtained by upgrading to the Outside Antenna option to #301157 Outdoor Panel or #304475 Wide Band Directional Antenna. To purchase call 800-204-4104 or www.WilsonElectronics.com.

Figure 13





About Wilson Electronics

Wilson Electronics, Inc. has been a leader in the wireless communications industry for over 40 years. The company designs and manufactures Signal Boosters, antennas and related components that significantly improve cellular telephone signal reception and transmission in a wide variety of applications, both mobile (marine, RV, vehicles) and in-building (home, office, M2M).

With extensive experience in antenna and Signal Booster research and design, the company's engineering team uses a state-of-the-art testing laboratory, including an anechoic chamber and network analyzers, to fine-tune antenna designs and performance. For its Signal Boosters, Wilson Electronics uses a double electrically insulated RF enclosure and cell tower simulators for compliance testing.

Wilson Electronics Signal Boosters feature patent-pending Smart Technology II™ that enables them to automatically adjust their power based on cell tower requirements. By detecting and preventing oscillation feedback, signal overload and interference with other users, these Smart Technology II™ Signal Boosters improve network cell phone areas without compromising carrier systems.

All products are engineered and assembled in the company's 55,000-square-foot headquarters in St. George,

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.

This device complies with Part 15 of FCC rules. The transaction is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by Wilson Electronics could void the authority to operate this equipment.

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One or more of the following U.S. Patent numbers may apply to the Signal Booster in this product – D596,614; D596,615; D563,381; 7,729,669; 7,486,929; 7,729,656; 7,409,186; 7,783,318; 7,684,838; 12,714,994.



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.

1-Year Warranty

Wilson Electronics Signal Boosters are warranted for one (1) year 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.

Signal Boosters 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 if located within the continental U.S.

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.

Signal Booster Specifications

SIGNALBOOST™ DT Specifications			
Model Number	271265		
Outside antenna connectors	F-Female / SMA-Female		
Outside antenna impedance	75 / 50 Ohms		
Inside antenna connectors	SMA		
Inside antenna impedance	50 Ohms		
Dimensions	6.5 x 4.5 x 1.75 inch (16.5 x 11.4 x 4.4 cm)		
Weight	0.47 lbs (0.213 kg)		
Frequency	824-894 MHz / 1850-1990 MHz		
¹Passband Gain (nominal)			
	800 MHz	55 dB	
	1900 MHz	60 dB	
²20 dB Bandwidth (nominal)			
	Downlink		
	800 MHz	45 MHz	
	1900 MHz	88 MHz	
Power output			
	800 MHz	1900 MHz	
Power output for single cell phone (uplink)	30.8 dBm	30.5 dBm	
Power output for single received channel (downlink)	26.0 dBm	25.2 dBm	
³Power output for multiple transmitted channels (uplink)			
		Maximum Power	
The maximum power is reduced by the number of channels:	Number of channels	800 MHz	1900 MHz
	2	24 dBm	21.3 dBm
	3	20.5 dBm	17.8 dBm
	4	18.0 dBm	15.3 dBm
	5	16.1 dBm	13.3 dBm
	6	14.5 dBm	11.8 dBm
⁴Power output for multiple received channels (downlink)			
		Maximum Power	
The maximum power is reduced by the number of channels:	Number of channels	800 MHz	1900 MHz
	2	24.8 dBm	23.7 dBm
	3	21.3 dBm	20.2 dBm
	4	18.8 dBm	17.7 dBm
	5	16.8 dBm	15.7 dBm
	6	15.3 dBm	14.2 dBm
Noise Figure (typical)	3.5 dB nominal / 6 dB nominal		
Isolation (uplink/downlink)	> 90 dB		
Power Requirements	110-240 V AC, 50-60 Hz, 8 W		

Notes:

- Nominal gain is the maximum gain at any frequency in the passband.
- Nominal bandwidth is the difference between two frequencies that are adjacent to the passband where the amplification is 20 dB lower than the passband amplification. One of the frequencies is lower than the passband and the other is higher.
- The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device.
- The maximum power for 2 or more simultaneous signals will be reduced by 6 dB every time the number of signals is doubled.



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
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