

# WILSON PRO 1000C

In-Building Signal Booster  
With Extended Dynamic Range  
& LTE Remote Monitoring



## User Manual

**NEED HELP?**

 [wilsonpro.com](http://wilsonpro.com)

 866.294.1660

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# Package Content

## Kit 460236



WilsonPro  
1000C



Wide Band Directional  
Antenna + 75'  
Wilson 400 Cable



Dome Antenna +  
100' Wilson 400 Cable



2' Wilson  
400

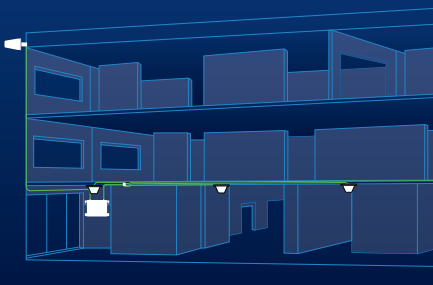


Lightning Surge  
Protector

# WilsonPro 1000C

## Remote Monitoring

Includes remote monitoring using integrated LTE modem.



## Onboard Software For Better Control

Automatically controlled with onboard software, ensuring great connectivity throughout large spaces and multi-story buildings.

## Extended Dynamic Range For Continuous Connectivity

XDR allows the booster to never shutdown due to too strong of a signal. No matter how strong, the booster will never overpower and shutdown.

# XDR TECHNOLOGY

## Color LCD For Easier Access

Unlike other boosters, the WilsonPro 1000 has a color LCD screen with four-way navigation, allowing integrators to have easy and effective control of the product.



# The 1000C Delivers Maximum Downlink Power

The WilsonPro 1000C cell signal booster is Wilson's flagship amplifier system providing significantly enhanced voice and data coverage, including 4G LTE, inside large homes and commercial buildings where cell signals may not otherwise penetrate. The result for your clients are no more dropped calls or lost



connections, faster uploads/downloads and a reliable, up to 32x stronger signal. The WilsonPro 1000C delivers maximum FCC-allowed downlink power to provide the largest possible indoor signal coverage.

The WilsonPro 1000C also includes Wilson Electronics' state-of-the-art XDR (Extra Dynamic Range) technology that prevents signal overload conditions which can, in accordance with FCC regulations, force a booster to shut down.

When the WilsonPro 1000C senses that any incoming cell signal is too strong and threatens to overload the system, XDR automatically reduces signal gain to compensate for this overload condition while maintaining signal coverage throughout the building. In contrast, competing signal boosters shut down when they reach a maximum incoming signal strength threshold, causing the indoor cell signal to drop out. Both antenna ports are located on the top of the booster unit for easy installation. Like all WilsonPro cell signal boosters, the WilsonPro 1000C booster system is universal: it works for all cellular devices, all services including 4G LTE, and all U.S. and Canada cell phone carriers.

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# Key Features



**Simple Wall-Mount Installation:** A signal-in and signal-out port are located on top of the Pro 1000C for easy antenna connections, while an exposed mounting flange at each corner of the booster provides for simple and clean wall-mount installation.



**Onboard Software for Better Control:** Booster is automatically controlled with automatic onboard software, ensuring great connectivity throughout large spaces and multi-story buildings. The booster will adjust its gain level up or down as required by the conditions of the immediate signal environment.



**Extended Dynamic Range (XDR) for continuous connectivity:** Gives the 1000C much greater tolerance for a strong incoming signal from the tower. XDR lets the 1000 system work with an incoming signal stronger than any competing booster and never shuts down due to a strong outside signal.



**Color LCD for Easier Access:** Unlike other boosters, the Wilson 1000C has a color LCD screen with four-way navigation, allowing integrators to optimize antenna position and maximize the performance of the booster.



**Remote LTE Monitoring:** Get immediate notification if the 1000C stops working or if band conditions change (monthly monitoring subscription required).

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# Competitive Advantages



**Highest Downlink Power:** Up to +15dB more downlink power than the competition allows for stronger signal in environments where the incoming signal is weak. The benefit is a stronger signal sent to the inside antennas, providing larger coverage area from a single booster.



**Highest Uplink Power:** This allows for a stronger signal transmitted to the tower, up to +3dB more than the competition, providing greater user capacity and increased range from the cell site.



**Lower Overload and Shutdown Threshold:** No matter how strong the outside signal, the WilsonPro 1000C never shuts down. This is a huge benefit in strong signal environments like cities and locations close to a carrier tower.



**Intelligent Control:** WilsonPro cellular boosters automatically adjust signal gain while still providing even signal coverage throughout the building.



**Sophisticated Software:** Cellular signals are constantly fluctuating. The software is always monitoring signal levels and making immediate adjustments as needed, allowing the booster to operate at maximum gain consistently.

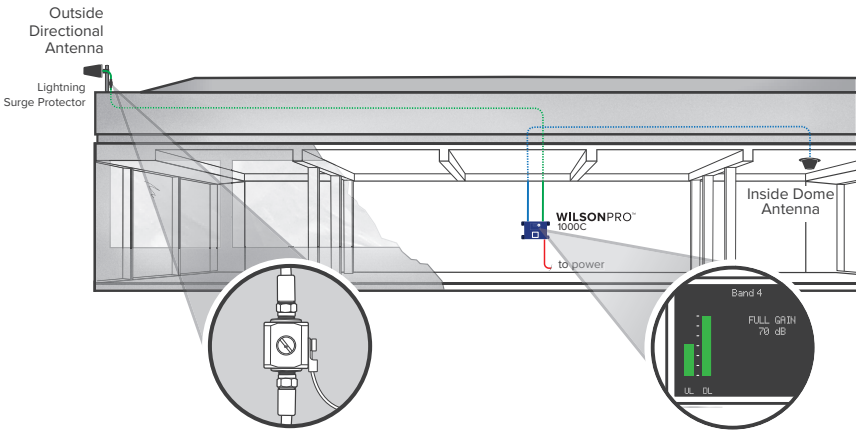


**More Secure:** Connectivity and remote monitoring via LTE, so no “sharing” of existing premises network resources which creates a more secure system.

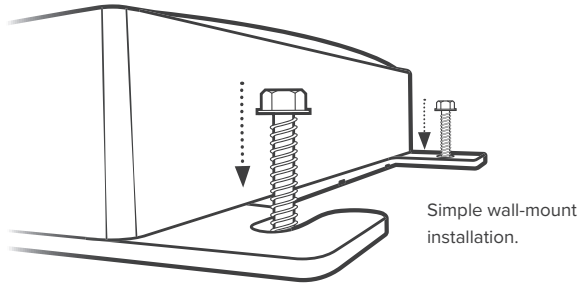
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# Installation Diagram

A Wilson Lightning Surge Protector is recommended for all building installations. Make sure the protector is installed outside the building at point of entry connected to a suitable ground and in line between the Outside Antenna and the Signal Booster.



The direction of the outside antenna should be adjusted until the “DL” bar is maximized.



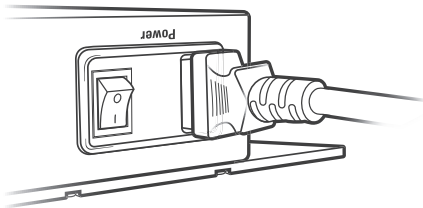
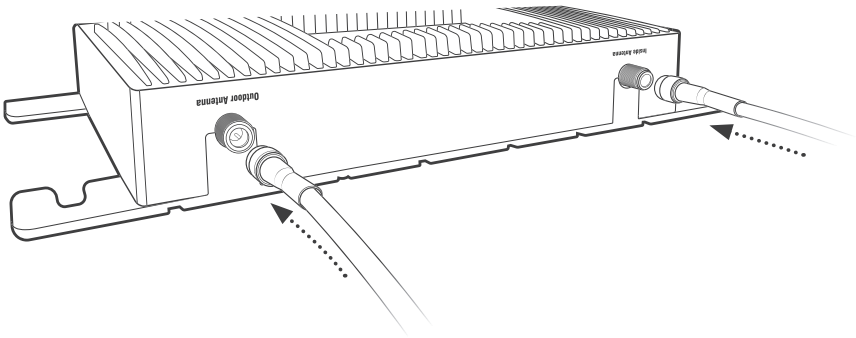


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# Post Install Setup

The WilsonPRO 1000C is designed with advanced internal programming, which allows it to automatically adjust for a variety of conditions, while still boosting weak signals.

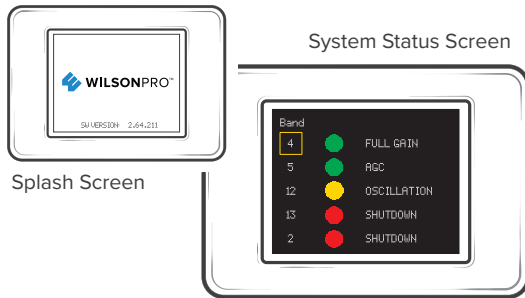
Once the AC power cable and antenna cables are connected, turn the unit on by toggling the power switch located near the AC power receptacle.



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# Status Screen

The 1000C takes about 20 seconds to boot up. Once boot up is complete, the status screen will appear, showing the amplification and status of each port and band.



## Lights Description



A solid green light indicates that a band is operating correctly with maximum allowable gain.



A solid yellow light indicates band gain reduction because of an oscillation condition. Reposition antennas (more separation between indoor and outdoor antennas, and pointed in opposite directions) and reboot (power cycle) the 1000C for maximum performance. When adequate separation is achieved, the yellow lights will return to green upon reboot. Note that when the light is yellow, the band is **operational**; however, performance is reduced.

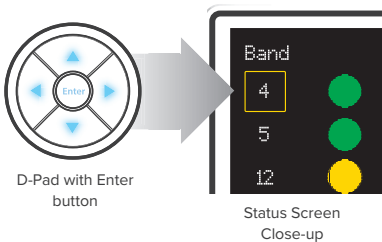


A red light indicates a band which has been completely shut down because of a severe oscillation conditions or repeated oscillation. Reposition antennas (more separation between indoor and outdoor antennas, and point in opposite directions) and then reboot (power cycle) the 1000C to reactivate the band and maximize performance. When adequate separation is achieved, the red light(s) will return to green upon reboot.

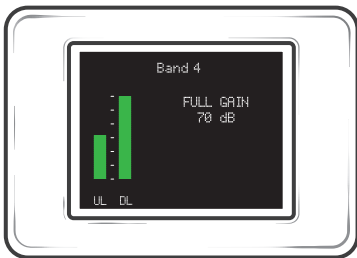
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## Band Status Screens

### Green Light



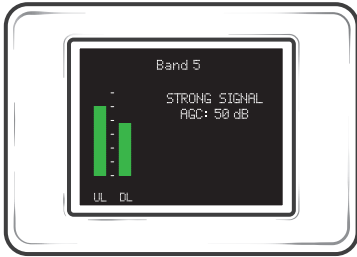
By pressing enter on a highlighted light, as shown, a more detailed status screen will be displayed for the highlighted band.



Band Details Screen

This screen provides specific band and port information. Including the strength of the received uplink and downlink signal, status details, and the amplifier gain.

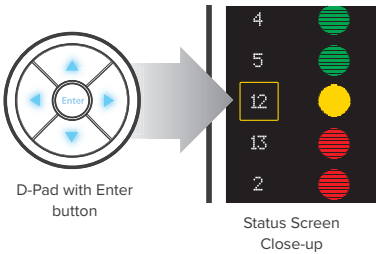
## (BAND STATUS SCREENS - GREEN LIGHT cont.)



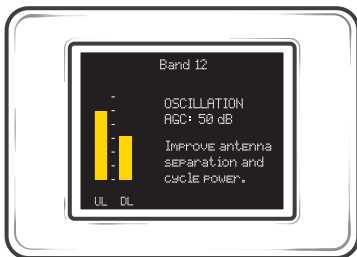
Band Details Screen

In the presence of a strong outdoor cell tower signal, the 1000C will reduce its “boost” (Gain) using internal Automatic Gain Control (AGC). This gain reduction is necessary to stay within FCC requirements. When this occurs, the 1000C has reached the ‘speed limit’ so this is good! The outside antenna should always be adjusted until the “DL” bar is maximized and “AGC” is indicated, if possible with a weak outside signal, this may not be possible.

## Yellow Light



Pressing enter on a highlighted light with a yellow light (Band 12), as shown, will display the following...

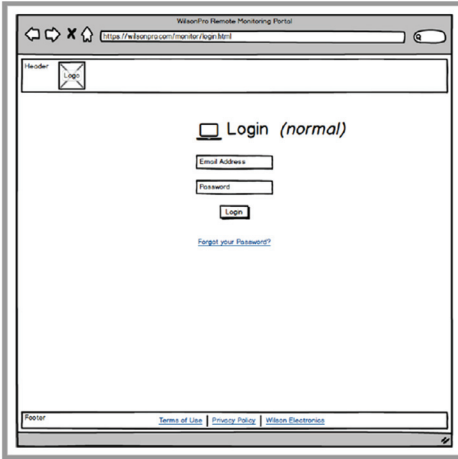


Band Details Screen

This screen indicates band gain has been reduced because of the oscillation condition detected at a nearby band.

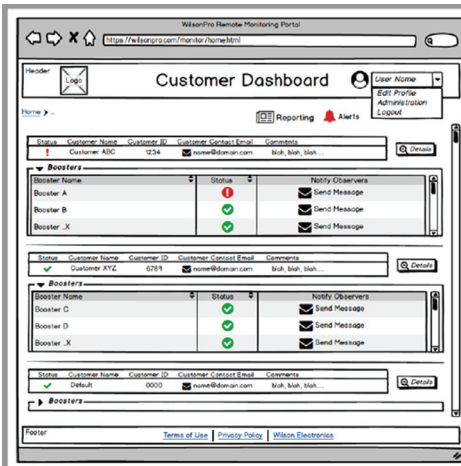
# Remote Monitoring

## Login Portal



Your supported boosters can be managed through the portal located at <https://wilsonpro.com/monitor>. Simply login using your user name and password.

## Customer Dashboard



You can quickly check the status of all of your boosters from the “dashboard” summary screen. Click on a specific booster for more details.

# Booster Detail Screen

**Booster A Details**

Band	Status	Gain	Relative Output Power	DL Output Power	Outside Signal Strength	24hr Oscillation Count
<b>Band 2 - PCS</b>	Full Gain	23.45	10.00m	-88.00m	0	
<b>Band 4 - AWS</b>	Out of Band	50.45	10.00m	-84.00m	2	
<b>Band 5 - CELL</b>	20dB Signal Boost	23.45	10.00m	-88.00m	0	
<b>Band 12 - LTE Lower</b>	Blocked	-	10.00m	-	6	
<b>Band 13 - LTE Upper</b>	Full Gain	23.45	10.00m	-88.00m	0	

**System Variables**

Serial Number	we160042db0	Model Number	46004ZA	Local Access	<input type="checkbox"/>	Power Loss	<input type="checkbox"/>
App Proc FW Ver	v5.6.7.8	Serial Number	we160042db0	HW Malfunction	<input type="checkbox"/>	USB Inserted	<input checked="" type="checkbox"/>
Booster Proc FW Ver	v18.7.6	Uptime (days)	355	Other Flag	<input type="checkbox"/>	Other Flag	<input type="checkbox"/>
Modern FW Ver	v0.0.1	Other	TBD	Other Flag	<input type="checkbox"/>	Other Flag	<input type="checkbox"/>

Status, gain, output power, signal strength & oscillation count will be displayed as well as booster identification.

# Booster History Screen

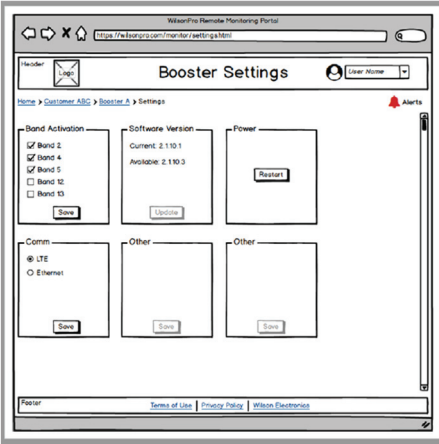
**Booster History**

UL Output Power History

DL Output Power History

Clicking on a performance parameter will provide a historical graph.

# Booster History Screen



Either through the LCD interface or through the remote cloud terminal application, a band can be turned “on” or “off” by the user. This includes uplink and downlink; it will not be possible to turn on an uplink and turn off a downlink for a band or vice versa. The user will have no control over the gain. Gain will be controlled by the firmware of the booster, adhering to FCC 20.21 network protection standards, always providing the maximum amount of allowable gain, under the rules.

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# Safety Guidelines

## Warnings

To uphold compliance with network protection standards, all active cellular devices must maintain at least 6 feet of separation distance from Panel and Dome antennas.

Use only the power supply provided in this package. Use of a non-Wilson Electronics product may damage your equipment.

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.

RF Safety Warning: Any antenna used with this device must be located at least 8 inches from all persons.

AWS Warning: The Outside Antenna must be installed no higher than 10 meters (31'9") above ground.

### This is a **CONSUMER** device.

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**BEFORE USE**, you **MUST REGISTER THIS DEVICE** with your wireless provider and have your provider's consent. Most wireless providers consent to the use of signal boosters. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.

In Canada, **BEFORE USE** you must meet all requirements set out in ISED CPC-2-1-05. You **MUST** operate this device with approved antennas and cables as specified by the manufacturer. Antennas **MUST** be installed at least 20 cm (8 inches) from (i.e., **MUST NOT** be installed within 20 cm of) any person.

You **MUST** cease operating this device immediately if requested by the FCC (or ISED in Canada) or licensed wireless service provider.

**WARNING.** E911 location information may not be provided or may be inaccurate for calls served by using this device.

This device may be operated **ONLY** in a fixed location (i.e., may operate in a fixed location only) for in-building use.

**ISED CPC-2-1-05:** <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html>

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### FOR MORE INFORMATION ON REGISTERING YOUR SIGNAL BOOSTER WITH YOUR WIRELESS PROVIDER, PLEASE SEE BELOW:

**Sprint:** [http://www.sprint.com/legal/fcc\\_boosters.html](http://www.sprint.com/legal/fcc_boosters.html)

**T-Mobile/MetroPCS:** <https://support.t-mobile.com/docs/DOC-9827>

**Verizon Wireless:** <http://www.verizonwireless.com/wcms/consumer/register-signal-booster.html>

**AT&T:** <https://securec45.securewebsession.com/attsignalbooster.com/>

**U.S. Cellular:** <http://www.uscellular.com/uscellular/support/fcc-booster-registration.jsp>



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# Antenna Kit Options

The following accessories are certified by the FCC to be used with the **Wilson PRO 1000C**.

## Inside Antennas

### Kit 311135-400150

1 - Panel  
150' Wilson 400

### Kit 309900-50N

2 - Panel Antennas  
1 - 3-Way 50 Ohm Splitter  
90' Wilson 400

### Kit 304412-400100

1 - Dome Antenna  
100' Wilson 400

## Outside Antennas

### Kit 314411-40075

1 - Wide Band Directional Antenna  
75' Wilson 400

### Kit 311203-40020

1 - Omni Directional Antenna  
20' Wilson 400

### Kit 314453-40075

1 - Panel Antenna  
75' Wilson 400

### Kit 301111-400170

1 - Yagi Antenna  
170' Wilson 400

### Kit 304422-40020

1 - Omni Enterprise Antenna  
20' Wilson 400

# Specifications

<b>Product Number</b>	460042				
<b>Model Number</b>	460042				
<b>FCC ID</b>	PWO460042				
<b>IC ID</b>	4726A-460042				
<b>Connectors</b>	N-Female				
<b>Antenna Impedance</b>	50 Ohms				
<b>Frequency</b>	698-716 MHz, 729-746 MHz, 777-787 MHz, 824-894 MHz, 1850-1990 MHz, 1710-1755/2110-2155 MHz				
<b>Power output for single cell phone (Uplink) dBm</b>	<b>700MHz Band12/17</b>	<b>700MHz Band13</b>	<b>800MHz</b>	<b>1700MHz</b>	<b>1900MHz</b>
	20.9	22.9	22.70	24.30	21.70
<b>Power output for single cell phone (Downlink) dBm</b>	<b>700MHz Band12/17</b>	<b>700MHz Band13</b>	<b>800MHz</b>	<b>2100MHz</b>	<b>1900MHz</b>
	16.7	15.0	16.0	16.4	15.5
<b>Noise Figure</b>	5 dB nominal				
<b>Isolation</b>	> 90 dB				
<b>Power Requirements</b>	12V 3A				

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

Each Signal Booster is individually tested and factory set to ensure FCC compliance. The Signal Booster cannot be adjusted without factory reprogramming or disabling the hardware. The Signal Booster will amplify, but not alter incoming and outgoing signals in order to increase coverage of authorized frequency bands only. If the Signal Booster is not in use for five minutes, it will reduce gain until a signal is detected. If a detected signal is too high in a frequency band, or if the Signal Booster detects an oscillation, the Signal Booster will automatically turn the power off on that band. For a detected oscillation the Signal Booster will automatically resume normal operation after a minimum of 1 minute. After 5 (five) such automatic restarts, any problematic bands are permanently shut off until the Signal Booster has been manually restarted by momentarily removing power from the Signal Booster. Noise power, gain, and linearity are maintained by the Signal Booster's microprocessor.

This device complies with Part 15 of FCC rules. Operation 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 weBoost could void the authority to operate this equipment.

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# Warranty

## ✓ 30 DAY MONEY-BACK GUARANTEE

All WilsonPro products are protected by WilsonPro 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.

## ✓ 3 YEAR WARRANTY

WilsonPro Boosters are warranted for three (3) years 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 WilsonPro. WilsonPro shall, at its option, either repair or replace the product.

This warranty does not apply to any Signal Boosters determined by WilsonPro to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Replacement products may include refurbished WilsonPro products that have been recertified to conform with product specifications.

RMA numbers may be obtained by contacting Customer Support.

**DISCLAIMER:** The information provided by WilsonPro is believed to be complete and accurate. However, no responsibility is assumed by WilsonPro 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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