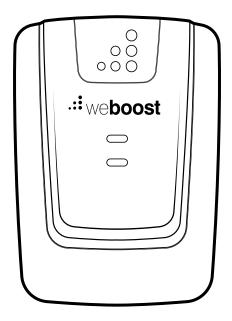


## **Basic Home**

Cell Signal Booster



## **Installation Guide**

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## Package Contents



Basic Home



Inside Antenna



Outside Antenna



2-30' Cables



Window Entry Cable



Power Supply



Roof/Pole Mount Bracket



Wall Mount Bracket



Cable Connector

## Preparation

### You Will Need (tools not included)

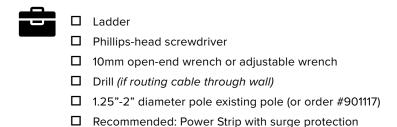
Make sure the following materials are prepared and ready for your installation.



1 to 2 hours



2 people (a person to help with antenna calibration)

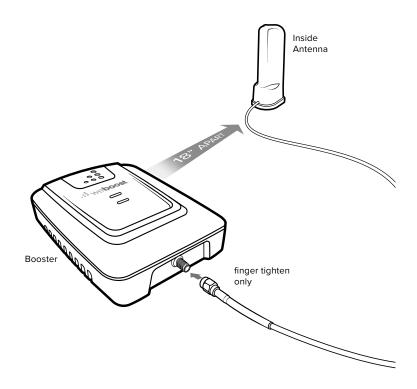


NOTE: These instructions will walk you through a "soft" install process to find the optimal locations for the inside and outside antennas, then through the process of the permanent installation.

## **Step 1-A & B:** Connect Inside Antenna To Booster

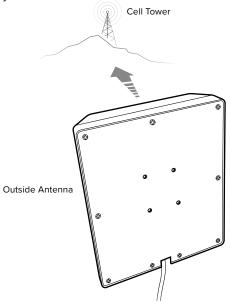
Connect **Inside Antenna** cable to the bottom port on **Basic Home booster** labeled 'INSIDE' and place Inside Antenna in weak signal area at least 18 inches away from booster.

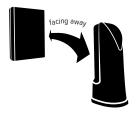
NOTE: Do not connect booster to power until the system is fully installed.



# **Step 2-A:** Point Outside Antenna Toward Nearest Cell Tower

Point the **Outside Antenna** toward the nearest cell phone tower. To find the nearest tower, use an app such as 'Open Signal'. This is the most critical step of the installation process because it will determine the overall performance of the booster system.



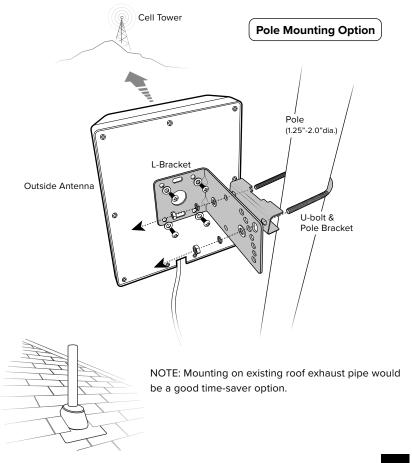


NOTE: The Outside Antenna must be at least **50 feet horizontal or 20 feet vertical** from the Inside Antenna for best performance. Make sure the Inside Antenna and Outside Antennas are setup so they are **facing away** from each other.

## **Step 2-B:** Mount Bracket To Outside Antenna

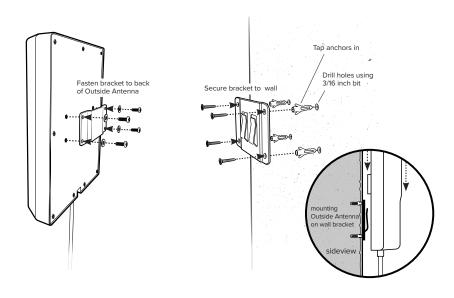
**Pole Mounting and Wall Mounting Options** are included. The pole mounting option is preferred because it would be easier to adjust to the direction of the cell tower.

Attach the **L-Bracket** to the Outside Antenna and use the **U-Bolts/Pole Bracket** to attach the L-Bracket to a pole.



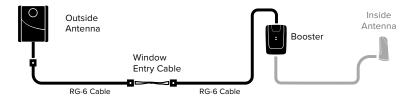
#### (STEP 2-B cont.)

#### **Wall Mounting Option**

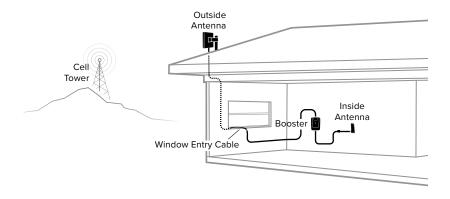


## **Step 3:** Route & Connect Cable To System

Connect the white **RG-6 Cable** to **Outside Antenna** and route cable into the home. All connections should be **finger tightened** only.

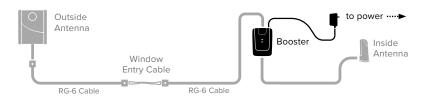


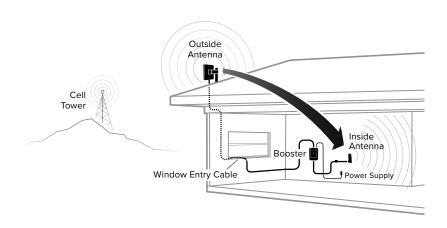
A Window Entry Cable is provided to help make cable entry easier. Route cable to the **Basic Home booster** and connect to top port labeled 'OUTSIDE'.



## **Step 4:** Power Up The Booster

Plug the **Power Supply** into wall outlet then connect to Basic Home booster and enjoy your boosted cell signal!





## Measuring Booster Performance

### How To Get Signal Strength As A Number

**iPhone**® iOS 11 and later no longer displays the decibel (dBm) reading

in 'Field Test Mode'. Tip: Using the dot signal strength indicator on your cell phone and/or data speed tests can assist you in finding the strongest signal direction as well as placing calls in different locations. For changes/updates on this issue,

periodically go to weboost.com/signalstrength.

**Android**<sup>™</sup> Settings > About Phone > Status or Network > Signal Strength

or Network Type and Strength (exact options/wording

depends on phone model).

iPhone is a registered trademark of Apple Inc. Android is a trademark of Google Inc.

#### All Other Phones & Alternate Methods

Go to www.weboost.com/test-mode-instructions/

#### (MEASURING BOOSTER PERFORMANCE cont.)

Signal	Strength	without	<b>Booster</b>

Note here:

### Signal Strength with Booster

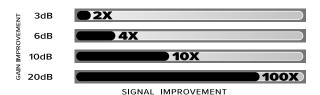
Note here:

### Compare Results

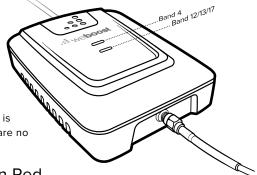
Having an accurate measurement of signal strength in decibels (dBm) is crucial when installing your system. Decibels accurately measure the signal strength you are receiving.

SIGNAL STRENGTH	EXCELLENT	GOOD	FAIR • ▌	POOR •	DEAD ZONE
3G/1x	-70dBm	-71 to -85dBm	-86 to -100dBm	-101 to -109dBm	-110dBm
4G/LTE	-90dBm	-91 to -105dBm	-106 to -110dBm	-111 to -119dBm	-120dBm

## DID YOU KNOW a signal increase of just 3dB is 2 times the power and signal amplification!



## **Light Patterns**



#### Solid Green

This indicates that your booster is functioning properly and there are no issues with installation.

#### Blinking Green, Then Red

Band has reduced gain. This indicates that one or more of the booster bands has reduced power due to a feedback loop condition called oscillation. This is a built in safety feature to prevent harmful interference with a nearby cell tower. If you are already experiencing the desired signal boost, then no further adjustments are necessary. If you are not experiencing the desired boost in coverage then refer to the Troubleshooting section.

#### Solid Red

Band has shutoff. This is due to a feedback loop condition called oscillation. This is a built in safety feature that causes a band to shut off to prevent harmful interference with a nearby cell tower. Refer to Troubleshooting section.

#### Blinking Green, Orange

Band has reduced gain. This indicates that one or more of the booster bands has reduced power due to overload from nearby cell tower. This is a built in safety feature to prevent harmful interference with a nearby cell tower. If you are already experiencing the desired signal boost, then no further adjustments are necessary. If you are not experiencing the desired boost in coverage then refer to the Troubleshooting section.

### Solid Orange

Band has shutoff due to overload from nearby cell tower. Outside Antenna must be adjusted. Refer to Troubleshooting section.

### Light Off

If the Signal Booster's light is off, verify your power supply has power.

## **Troubleshooting**

IF YOU ARE HAPPY WITH THE COVERAGE, THESE LIGHT ISSUES DON'T HAVE TO BE RESOLVED. YOUR CARRIER'S BAND HAS NOT BEEN AFFECTED.

#### FIXING ANY RED LIGHT ISSUES

This involves Solid Red & Blinking Green/Red lights.

- 1 Verify Outside Antenna faces away from the Inside Antenna. Un-plug and replug in power supply.
- Werify the Inside Antenna is at least 18" from the Booster and pointed away from the Booster. Unplug and re-plug in power supply.
- 3 Tighten all cable connections (be sure to finger tighten only, do NOT use tools). You may want to undo and redo the connection completely. Unplug and replug in power supply.
- 4 Increase the distance (horizontally or vertically) between the Outside and Inside antenna. Add included cable if needed. Un-plug and re-plug in power supply.

#### FIXING ANY ORANGE LIGHT ISSUES

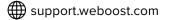
This involves Solid Orange & Blinking Green/Orange lights.

**Outside Antenna must be adjusted**. Wait 10 seconds between adjustments for the lights to reset.

**Pole Mount Option:** Rotate the Outside Antenna away from the strongest cellular signal in small increments (45°) until the light turns green. Unplug and re-plug power supply.

**Wall Mount Option:** Change mount location. Move the Outside Antenna to a wall outside the building to see if the lights turn green. Un-plug and re-plug power supply.

**NEED HELP?** 





## **Antenna Kit Options**

FIXED INSIDE ANTENNA KIT OPTIONS					
Kit #	Coax Type	Ln(ft)	Antenna Type	Ω	
301211	RG-174	5	Desktop Antenna 700-2100 MHz	50	
311135	Wilson-400	60	Wall Mount Panel Antenna	50	
311155	Wilson-400	60	Wall Mount Panel Antenna	75	
311135	RG-58	20	Wall Mount Panel Antenna	50	
311155	RG-6	30	Wall Mount Panel Antenna	75	
311155	RG-11	50	Wall Mount Panel Antenna	75	
304412	Wilson-400	10	4G Dome Antenna	50	
304412	RG-58	10	4G Dome Antenna	50	
304419	RG-11	10	4G Dome Antenna	75	
304419	RG-174	10	4G Dome Antenna	75	
304419	RG-6	10	4G Dome Antenna	75	

#### (ANTENNA KIT OPTIONS cont.)

FIXED OUTSIDE ANTENNA KIT OPTIONS				
Kit #	Coax Type	Ln(ft)	Antenna Type	Ω
314400	Wilson-400	75	Wide Band Directional	50
314411	RG-58	25	Wide Band Directional	50
314475	RG-6	30	Wide Band Directional	75
301111	RG-6	75	Yagi 700/800/900 MHz	50
301111	RG-58	50	Yagi 700/800/900 MHz	50
301126	LMR-100	10	Mini-Mag Antenna	50
301111	RG-11	40	Yagi 700/800/900 MHz	50
314453	RG-58	25	Pole Mount Panel Antenna	50
314453	Wilson-400	75	Pole Mount Panel Antenna	50
314473	RG-6	40	Pole Mount Panel Antenna	75
314475	RG-11	75	Wide Band Directional	75
301111	Wilson-400	170	Yagi 700/800/900 MHz	50
314473	RG-11	75	Pole Mount Panel Antenna	50
304421	RG-11	20	4G Omni Antenna	75
304421	RG-174	10	4G Omni Antenna	75
304421	RG-6	10	4G Omni Antenna	75
304421	RG-58	10	4G Omni Antenna	75
304422	Wilson-400	20	4G Omni Plus Antenna	50
304422	RG-58	10	4G Omni Plus Antenna	50
304422	RG-11	20	4G Omni Plus Antenna	50

## Safety Guidelines

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

Use only the power supply provided in this package. Use of a non-weBoost 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.

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.

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 any person.

You **MUST** cease operating this device immediately if requested by the FCC 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 for in-building use.

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

AT&T: https://securec45.securewebsession.com/attsignalbooster.com/

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

## **Specifications**

Basic Home

Product Number	U471001			
Model Number	460020			
FCC ID:	PWO460020			
Connectors	SMA-Female on the Inside Antenna / F-Female on the Outside Antenna			
Antenna Impedance	50 Ohms / 75 Ohms			
Frequency	698-716 MHz, 746-787 MHz, 824-894 MHz, 1850-1995 MHz, 1710-1755/2110-2155 MHz			
Power output for single cell phone (Uplink) dBm	700 MHz Band 12/17	700 MHz Band 13	1700 MHz Band 4	
	23.94	24.19	24.55	
Power output for single cell phone (Downlink) dBm	700 MHz Band 12/17	700 MHz Band 13	2100 MHz Band 4	
	11.64	11.92	11.9	
Noise Figure	5 dB nominal			
Isolation	> 110 dB			
Power Requirements	AC / DC 5V, 4A, w/2.5x5.5mm Jack			

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.

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.

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.

## 2 YEAR WARRANTY

weBoost Signal Boosters are warranted for two (2) 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 weBoost. weBoost shall, at its option, either repair or replace the product.

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

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

RMA numbers may be obtained by contacting Customer Support

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