



Cell Phone Signal Booster

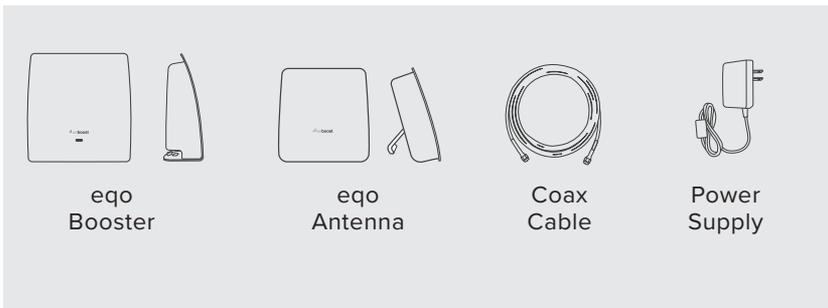


User Manual

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Package Contents



This device may be operated **ONLY** in a fixed location for in-building use. The signal booster unit is designed for use in an indoor, temperature controlled environment (< 100 degrees Fahrenheit)

Step 1: Find The dBm Reading On Your Phone

iPhone®

Dial *3001#12345#* then press Call.

Hold down power button until you see “Slide to Power Off” then release the power button.

Hold the Home button until your main screen appears.

If you want to check 3G/1x but your iPhone is picking up 4G/LTE signal, go to Settings>Cellular>Cellular Data Options>Enable LTE>Select Off

Android™

Settings > About Phone > Status or Network > Signal Strength or Network Type and Strength (exact options/wording depends on phone model).

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

All Other Phones & Alternate Methods

All Phones:

- Keep track of the network (3G or 4G) phone is connected to.
- Any signal readings you take are valid for that phone’s carrier. To get readings from other carriers, you’ll need phones from each carrier.
- When system is set-up, you can easily revert back to the “bar display” by restarting your phone.

Step 2: Place Booster In Strong Signal Location

IMPORTANT: This is the most critical step of the installation process because it will determine the overall performance of the Booster system. You must determine the location of the best available cellular signal to maximize performance from your Booster. **Do not power up Booster until STEP 4.**



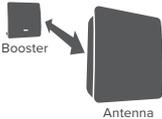
Turn off your cell phone's WiFi to ensure you are checking the cellular connection. The dBm reading will be refreshed every 30-60 seconds.



Want faster results? Once you have a reading, turn on airplane mode. Wait 15 seconds. Turn off airplane mode. The signal strength reading is refreshed.



Walk around your home/office taking signal strength readings until you find the area that has the best reception.



Place your Booster in the area with the strongest cell phone signal. The LED light should be facing into the room.

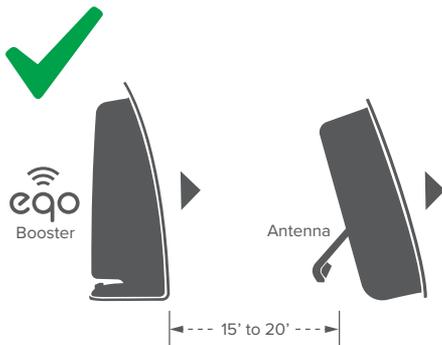
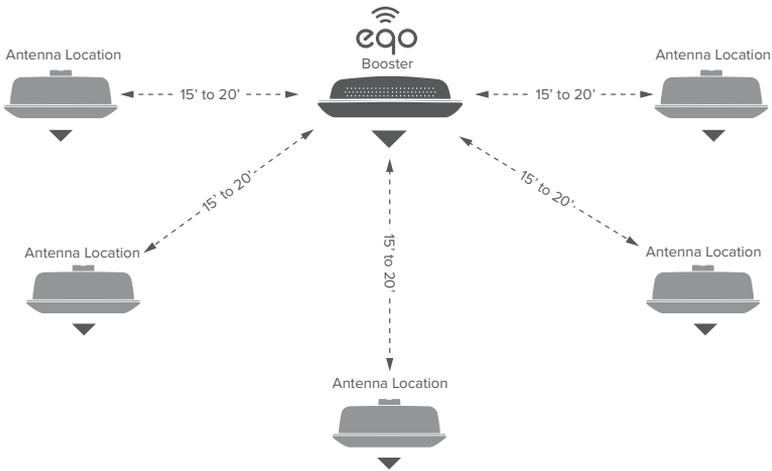
Having an accurate measurement of signal strength in decibels (dBm) is crucial when installing your system. Decibels accurately measure the signal strength you are receiving.

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

*If you receive **POOR** or a **DEAD ZONE** signal you may need an external antenna. Contact Customer Support to receive **FREE** external antenna.

Step 3: Place Antenna In Weak Signal Location

IMPORTANT: The further apart the Antenna is located from the Booster the better your coverage will be. To determine the best location for your Booster, note the dBm reading in a variety of locations.



The eqo Booster and Antenna should face the same direction 15 to 20 feet separation distance.

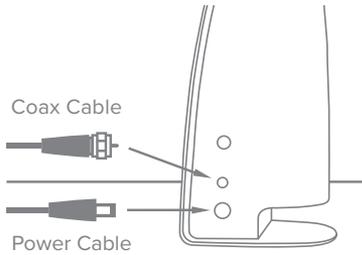


Never face to face



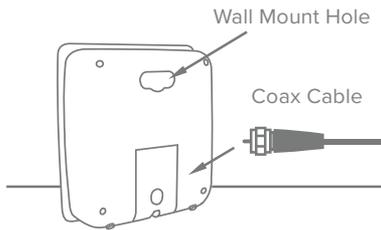
Never back to back

Step 4: Connect The System



1

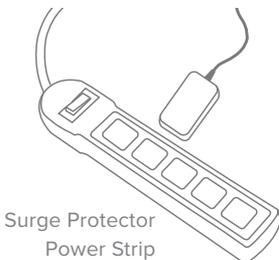
Connect the supplied **Coax Cable** and **Power Supply** on the side of the Booster.



2

Connect the other end of the **Coax Cable** to the Antenna.

Note: You can mount the Antenna on a wall by removing the soft cover.



3

Plug the Booster in. The light may change colors for the first 15 seconds. Check your coverage area. Refer to TROUBLESHOOTING section if needed.

Note: When repowering the Booster always un-plug and re-plug from a Surge Protector Power Strip. NEVER from the Booster.

Troubleshooting

Fixing Red Light Issues

This section is only applicable if the Booster light is red and you are not experiencing the desired signal boost. After each step, always un-plug and re-plug the power supply so the Booster can update the signal reading. Always un-plug and re-plug from a power strip NEVER from the Booster.

- 1 Unplug the Booster's power supply from the power strip.
- 2 Verify the Booster faces in the same direction as the Antenna.
- 3 Tighten all cable connections.
- 4 Relocate the Booster and Antenna further from each other.
- 5 Plug power supply back into power strip.
- 6 Monitor the indicator lights on your Booster. If, after 15 seconds of **'power on'** a red light appears, repeat above 'Troubleshooting' steps 1-5. Note: Parallel separation of the Booster and Antenna typically requires a shorter separation distance than perpendicular separation. If possible, try placing the Antenna directly in front of the location of the Booster. A combination of vertical and horizontal separation distance also works to increase system gain.

Fixing Orange Lights Issues

This section is only applicable if the Booster light is orange and you are not experiencing the desired signal boost. Orange light indicates there is a cell tower close by.

- 1 Unplug the Booster's power supply from the power strip.
- 2 Redirect the Booster to point in another direction. Typically, we recommend turning the Booster 5-10 degrees at a time.
- 3 Plug power supply back into power strip.
- 4 Monitor the indicator lights on your Booster. If, after 15 seconds of **'power on'**, a solid orange light appears, repeat above 'Fixing Orange Lights Issues' steps 1-3.

Light Off

If the eqo Booster's light is off, verify your surge protected power strip has power. Note: The eqo Booster can be reset by un-plugging and re-plugging the power supply from the power strip.

Green Light, But Poor Coverage

After each step, always un-plug and re-plug the power supply so the Booster can update the signal reading. Always un-plug and re-plug from a power strip NEVER from the Booster.

- 1 Increase separation between Antenna and Booster. Un-plug and re-plug power supply from power strip.
- 2 Rotate the Booster in small increments 5-10 degrees at a time. Un-plug and re-plug power supply from power strip.
- 3 Move the Booster to a different location. The stronger the signal at the Booster location, the better chance of improved coverage from the Antenna. Un-plug and re-plug power supply from power strip.
- 4 To determine what your signal is like before and after you power on the Booster, refer to STEP 1 on page 2 - Find The dBm Reading On Your Phone.

Unable To Get Coverage Needed

If you are unable to get the coverage area needed, contact Customer Support for a FREE external antenna kit.

Specifications

eqo Booster					
Product Number	U473020				
Model Number	460032				
FCC ID:	PWO460032				
IC:	4726A-460032				
Connectors	SMA-Female				
Antenna Impedance	50 Ohms				
Frequency	698-716 MHz, 729-756 MHz, 777-787 MHz, 824-894 MHz, 1850-1990 MHz, 1710-1755/2110-2155 MHz				
Passband Gain (nominal)	700 MHz Band 12/17 61	700 MHz Band 13 62	800 MHz Band 5 62	1700/2100 MHz Band 4 68	1900 MHz Band 2 70
20 dB Bandwidth (MHz)	700 MHz Band 12/17	700 MHz Band 13	800 MHz Band 5	1700/2100 MHz Band 4	1900 MHz Band 2
	Typical 31.8	32.1	37.9	79.9	81.9
Maximum	35.4	35.6	39.0	83.0	85.1
Maximum Power					
Power output for single cell phone (Uplink) dBm	700 MHz Band 12/17 23.94	700 MHz Band 13 24.19	800 MHz Band 5 23.49	1700/2100 MHz Band 4 24.55	1900 MHz Band 2 23.61
Power output for single cell phone (Downlink) dBm	700 MHz Band 12/17 11.64	700 MHz Band 13 11.92	800 MHz Band 5 12.1	1700/2100 MHz Band 4 11.9	1900 MHz Band 2 9.5
Power output for multiple received channels (Uplink) dBm					
Maximum Power					
No. Tones	700 MHz Band 12/17	700 MHz Band 13	800 MHz Band 5	700 MHz Band 4	1900 MHz Band 2
2	20.7	19.9	23.4	21.2	19.1
3	17.1	16.3	19.9	17.7	15.5
4	14.6	13.8	17.4	15.2	13.0
5	12.7	11.9	15.4	13.3	11.1
6	11.1	10.3	13.9	11.7	9.5
Power output for multiple received channels (Downlink) dBm					
Maximum Power					
No. Tones	700 MHz Band 12/17	700 MHz Band 13	800 MHz Band 5	2100 MHz Band 4	1900 MHz Band 2
2	12.7	13.3	11.8	11.9	12.6
3	9.2	9.8	8.2	8.4	9.1
4	6.7	7.3	5.7	5.9	6.6
5	4.8	5.4	3.8	4.0	4.7
6	3.2	3.8	2.2	2.4	3.1
Noise Figure	5 dB nominal				
Isolation	> 110 dB				
Power Requirements	5V/2.5A				

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 reduce the gain on that specific band.

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.

Safety Guidelines

Warnings

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 and eqo 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.

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 a 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.

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.

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

Sprint: 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>



Warranty

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

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NOT AFFILIATED WITH WILSON ANTENNA

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