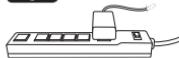


Signal 4G™

Need help?  www.weboost.com

 **Customer Support 866-294-1660**
Mon.-Fri. Hours: 7 am to 6 pm MST



IT IS VERY IMPORTANT TO POWER YOUR SIGNAL BOOSTER USING A SURGE PROTECTED AC POWER STRIP WITH AT LEAST A **1000 JOULE RATING**.

FAILURE TO DO THIS WILL VOID YOUR WARRANTY IN THE EVENT OF A POWER SURGE OR LIGHTNING STRIKE.



THE SIGNAL BOOSTER UNIT IS DESIGNED FOR USE IN AN INDOOR, TEMPERATURE-CONTROLLED ENVIRONMENT (LESS THAN 150 DEGREES FAHRENHEIT). IT IS NOT INTENDED FOR USE IN ATTICS OR SIMILAR LOCATIONS SUBJECT TO TEMPERATURES IN EXCESS OF 150°F.

Installation Instructions for the Following weBoost Signal Booster:

Signal 4G™ SmarTech III® Signal Booster
Model #470019 FCC ID: PWO460019 IC ID: 4626A-460019

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

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Signal 4G™



470019

Optional Kits

470119

Mini Mag
Outside Antenna
(301126)

5V / 2.5A
Power Supply
(859948)

3" RG174 w/SMA
(951151)

470219

Mini Mag
Outside Antenna
(301126)

6V / 2A
Power Supply
(859923)

3" RG174 w/SMA
(951151)

Optional Accessories

Lightning Surge Protector
(859902)

DC Plug-In 5.5V/2A Power Supply & USB Cable
(2D9910 / 359940)

Before Getting Started

Before you install your Signal 4G booster and start enjoying improved cellular reception, please do the following:

1. Read through all the installation steps. This will help you know what to expect from start to finish.
2. Watch the YouTube video demonstrating the Signal 4G installation at: weboost.com/us/signal4G.
3. Familiarize yourself with all materials in your product package. This will allow you to know which pieces are referenced in the instructions.

Quick Installation

You can install your Signal 4G booster using the following steps.

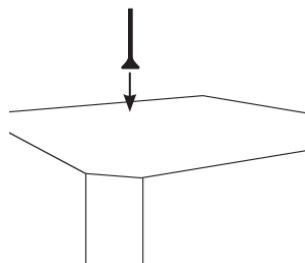
NOTE: Before completing your installation, create a "soft" installation by putting the components of your Signal 4G booster in place and testing the operation before mounting equipment.

1. Install the Outside Antenna. Select a

location on top of the structure that is:

- At least 12 inches from any other antennas.
- Free of obstructions.
- At least 8 inches from any people.

The Outside Antenna must be installed vertically on a metallic surface.



2. Select a location to install the Signal Booster that is away from excessive heat, direct sunlight, moisture and that

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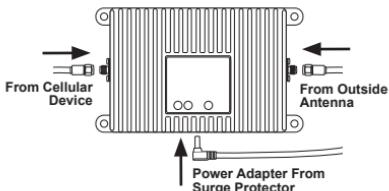


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has proper ventilation. Do not place the Signal Booster in an air-tight enclosure.

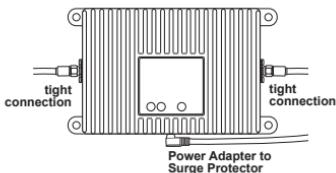
- Run the Outside Antenna cable to the Signal Booster and attach it to the connector labeled "Outside Antenna."



- An external adapter may be needed to connect the cellular device to the Signal Booster. The external adapter plugs into the included antenna extension cable and directly into a socket on the cellular device. Run the extension cable from the external adapter and attach it to the connector labeled "cell phone or data card" on the Signal Booster.

Note: Be careful when plugging the connector in so as not to bend the center pins on the connectors. Ensure all cables have a tight connection.

- Before powering up the Signal Booster verify that connections are tight. An AC surge protector is recommended for all installations (not included).



Troubleshooting & Understanding the Lights

The Signal Booster includes a indicator lights on the top of the Signal 4G. The indicator lights will either be green or red.

Green indicates that the booster is powered and operating at maximum gain.

Solid Red indicates that the booster has shut off on the associated frequencies to prevent oscillation (feedback).

Green/red Blinking indicates that the booster is operating at a reduced gain to prevent oscillation (feedback).

Fixing Red Light Issues

If one or more lights on the Signal Boost are red:

- Make sure all connections are tight.
- Increase the distance between the outside antenna and the Signal 4G, by moving them horizontally and/or vertically farther apart until the light change to green. Remember to keep the antenna at least 6 inches from any window or sunroof.
- Follow the same steps for a green/red blinking light until the light goes solid green.
- If more separation is not possible and the coverage of the booster is too small with a green/red blinking light indicating reduced gain, contact the weBoost Customer Support Team for assistance: 866-294-1660.

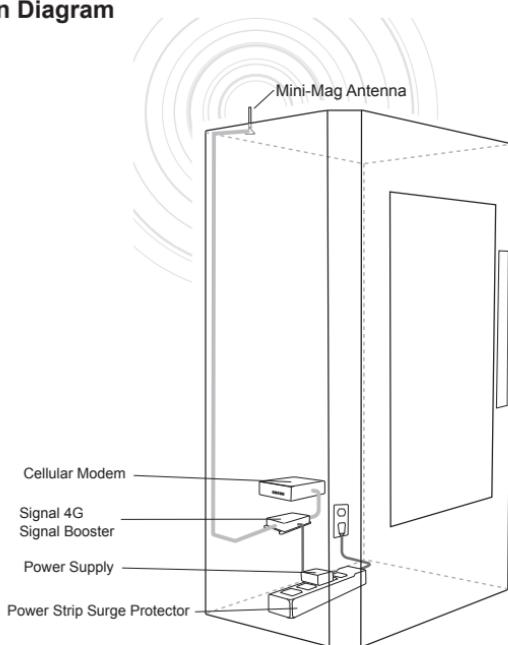
Lights Off

- Check connections on the power supply to see that it is firmly plugged into both the Signal 4G and the power source.
- If using a DC power supply in your vehicle, ensure the power supply is properly inserted. Then check the 12 volt power from the car socket and the fuse. Replace the fuse if necessary.
- If using a power strip in a building, ensure the power strip is plugged in and turned on and that power is coming from the outlet.



Installation Diagram

(Figure 1)



Additional FAQ:

What hours can I contact customer support?

Customer Support can be reached from 7:00am to 6:00pm MST, by calling (866-294-1660), or by email, at support@weboost.com.

How does weather affect the performance of my Outside Antenna?

Water vapor (e.g. rain, fog, snow or other precipitation) creates an effective filter to cellular signal. In times of heavy precipitation, you may see less performance.

What's the difference between the 800 MHz and the 1900 MHz bands? How do I know which MHz band my cell phone uses?

The Signal 4G booster works with all major North American cellular providers. Traditionally, 800/1900MHz are associated with voice and 3G data; while 700MHz and 1700/2100MHz are associated with 4G data.

Carrier Frequency Use

We recommend visiting www.wirelessadvisor.com (United States) or <http://bit.ly/1mQf2G1> (Canada) for information regarding the frequency band used by your cell service provider in a specific geographical location.

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Warnings and Recommendations

- WARNING:** Verify that both the Outside Antenna and the adapter extension cable are connected to the Signal Booster before powering up the Signal Booster.
- WARNING:** Use only the power supply provided in this package. Use of a non-weBoost products may damage your equipment.
- WARNING:** The Outside Antenna must be installed no higher than 10 meters (31'9") above ground.
- 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 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.

Mobile Antennas

Mini-Mag

301113 w/12.5' RG174 cable
- FME
301126 w/ 12.5' - RG174 cable
- SMA
12" Mag Mount w/ 12.5' RG174
- 311125 - 311128 - 314202
- 311703

Trucker antenna w/10.5' RG58
- 31101 - 311701

Trucker antenna w/13.5' RG58
- 311119 - 311133

4G Trucker antenna w/15' RG58
- 304415 - 304414
4G Marine antenna w/20' L-195
- 304416 - 304420

NMO Antenna's w/ RG174

Kit 31104-17410

800/1900 NMO antenna
10' RG174 cable
Kit 31112-17410
800/1900 NMO antenna
10' RG174 cable
Kit 314203-17410
800/900/1900 NMO antenna
10' RG174 cable
Marine Antenna w/RG58

Kit 311130-5810

Marine Antenna
10' RG58 cable

Glass Mount w/14' RG58 cable

311102

NMO Antenna's w/ RG58

Kit 31104-5810

800/1900 NMO antenna

10' RG58 cable

Kit 31112-5810

800/1900 NMO antenna

10' RG58 cable

Kit 314203-5810

800/900/1900 NMO antenna

10' RG58 cable

Outside Fixed Antennas

50 Ohm Outside Antenna Kits

Kit 314453-5825

50 Ohm Pole Mount

Panel Antenna

25' RG58 Cable

Kit 314411-5825

50 Ohm Wide

Band Directional

25' RG58 Cable

Kit 301111-5850

Yagi Directional Antenna

50' RG58 Cable

Kit 311203-5820

Omni-Directional antenna

20' RG58 Cable

Kit 314411-400170

50 Ohm Wide

Band Directional

Kit 311203-40020

Omni-Directional antenna

20' LMR400 Cable

Kit 301111-400170

Yagi Directional w/ N-Female

170' LMR400

Kit 314453-40075

50 Ohm Pole Mount

Panel Antenna

75' LMR400 Cable

Kit 304422-40020

50 Ohm 4G Omni Antenna

20' Wilson400 cable

Kit 304422-5810

50 Ohm 4G Omni Antenna

10' RG58 cable

"May need separate adapter

Kit 304422-1120

50 Ohm 4G Omni Antenna

20' RG11 cable

"May need separate adapter

75 Ohm Outside Antenna Kits

Kit 301111-0675

Yagi Directional Antenna

75' RG6 Cable

N-Male to F-Female adapter

Kit 311201-0620

Omni Directional

w/ F-Female

20' RG6 Cable

Kit 314473-0640

75 Ohm Pole Mount

Panel Antenna

40' RG6 Cable

Kit 314475-0630

75 Ohm Wide

Band Directional

30' RG6 Cable

Kit 311141-0620

75 Ohm Grey Brick Antenna

20' RG6 Cable

Kit 301111-1140

Yagi Directional Antenna

140' RG11 Cable

N-Male to F-Female adapter

Kit 311201-1120

Omni Directional

w/ F-Female

20' RG11 Cable



Kit 314473-1175
 75 Ohm Pole Mount
 Panel Antenna
 75' RG11 Cable
Kit 314475-1175
 75 Ohm Wide
 Band Directional
 75' RG11 Cable
Kit 311141-1120
 75 Ohm Grey Brick Antenna
 20' RG11 Cable
Kit 304421-1120
 75 Ohm 4G Omni Antenna
 20' RG 11 cable

Kit 304421-17410
 75 Ohm 4G Omni Antenna
 10' RG174 cable
 *May need separate adapter
Kit 304421-0610
 75 Ohm 4G Omni Antenna
 10' RG6 cable
Kit 304421-5810
 75 Ohm 4G Omni Antenna
 10' RG58 cable
 *May need separate adapter

Signal Booster Specifications

Signal 4G					
Model Number	470019				
Connectors	SMA				
Antenna Impedance	50 Ohms				
Frequency	698-716 MHz, 746-787 MHz, 824-894 MHz, 1850-1995 MHz, 1710-1755/2110-2155 MHz				
Passband Gain (typical)	700MHz Band12/17 11.8	700MHz Band13 11.0	800MHz 10.0	1700/2100MHz 7.1	1900MHz 8.6
20 dB Bandwidth (MHz)	700MHz Band12/17	700MHz Band13	800MHz	1700/2100MHz	1900MHz
Typical Maximum	29.5 33.9	31.6 33.9	38.4 40.6	81.8 85.4	75.4 77.4
Power output for single cell phone (Uplink) dBm	700MHz Band12/17 24.6	700MHz Band13 25.1	800MHz 23.9	1700MHz 23.9	1900MHz 23.5
Power output for single cell phone (Downlink) dBm	700MHz Band12/17 -6.27	700MHz Band13 -6.06	800MHz -6.5	2100MHz -6.8	1900MHz -5.8
Power output for multiple received channels (Uplink) dBm					
No. Tones	700MHz Band12/17	700MHz Band13	800MHz	1700MHz	1900MHz
2	26.1	25.8	21.0	21.3	21.9
3	22.6	22.3	17.5	17.8	18.4
4	20.1	19.8	15.0	15.3	15.9
5	18.1	17.8	13.0	13.4	13.9
6	16.5	16.3	11.5	11.8	12.3
Power output for multiple received channels (Downlink) dBm					
No. Tones	700MHz Band12/17	700MHz Band13	800MHz	2100MHz	1900MHz
2	-6.0	-5.9	-5.7	-6.8	-6.0
3	-9.5	-9.4	-9.2	-10.3	-9.5
4	-12.0	-11.9	-11.7	-12.8	-12.0
5	-14.0	-13.9	-13.7	-14.7	-14.0
6	-15.5	-15.4	-15.2	-16.3	-15.5
Noise Figure	5 dB nominal				
Isolation	> 40 dB				
Power Requirements	5.5 V 2 A				

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.

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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. weBoost 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 weBoost to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Failure to use a surge protected AC Power Strip with at least a 1000 Joule rating will void your warranty.

RMA numbers may be obtained by contacting Customer Support at 866-294-1660.

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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For patents go to: weboost.com/us/patents



3301 East Deseret Drive, St. George, UT 84790
web: www.weboost.com | email: support@weboost.com
phone: 866-294-1660 | local: 435-673-5021 | fax: 435-656-2432

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