

Security 4G™



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:

Security 4G™ SmarTech II® Signal Booster Model #471019 FCC ID: PWO460019 IC ID: 4726A-460019

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

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Package Contents









5V / 2.5A Power Supply (859948)

12" Adapter Cable (291153)





Optional Accessory



Lightning Surge Protector (859902)

30' RG58 coax cable (295833)

Before Getting Started

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

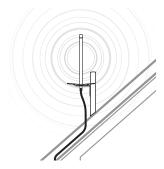
- Read through all the installation steps. This will help you know what to expect from start to finish.
- 2 Watch the YouTube video demonstrating the Security 4G installation at: weboost.com/us/ security4G.
- 3. Familiarize yourself with all materials in your product package. This will allow you to know which pieces are referenced in the instructions.

Quick Installation

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

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

1 Select a location on the roof or an outside wall where the Outside Antenna can be mounted without obstruction (at least three feet of clearance in all directions) and with at least 20 feet of vertical or 50 feet of horizontal separation from the Internal Antenna.

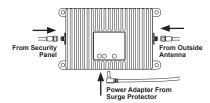


2 Select a location to install the Signal Booster that is away from excessive heat, direct sunlight, moisture and that has proper ventilation. Do not place the Signal Booster in an air-tight enclosure.





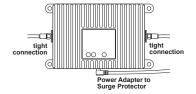
 Run the Outside Antenna cable to the Signal Booster and attach it to the connector labeled "Outside Antenna"



4. 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 "inside antenna" 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 Light

The Signal Booster includes indicator lights that 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:

- 1. Make sure all connections are tight.
- Increase the distance between the outside antenna and the Security 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

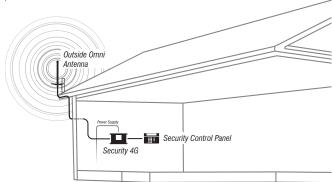
 Check connections on the power supply to see that it is firmly plugged into both the Security 4G and the power source.



- 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 Security 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/1mQf2GI (Canada) for information regarding the frequency band used by your cell service provider in a specific geographical location.



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.

VARNING: Use only the power supply provided in this package. Use of a non-weBoost products may damage

vour 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 vour 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

 301126 w/ 12.5 RG174 cable- SMA

12" Mag Mount w/ 12.5' RG174

- 311125
- 311128
- 314202
- 311703

Trucker antenna w/10.5' RG58

- 311101
- 311701

Trucker antenna w/13.5' RG58

- 311119
- 311133

NMO Antenna's w/ RG174

Kit 311104-17410

- 800/1900 NMO antenna
- 10' RG174 cable
- Kit 311112-17410
 - 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 311104-5810

800/1900 NMO antenna

- 10' RG58 cable
- Kit 311112-5810 • 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

- Yaqi Directional Antenna 50' RG58 Cable

Kit 311129-5840

- · 800 MHz Yagi Directional 40' RG58 Cable
- Kit 311203-5820
 - Omni-Directional antenna
 - 20' RG58 Cable
- Kit 311124-5830
 - 1900 MHz Yaqi Antenna
 - 30' RG58 Cable

Kit 314411-40075

- 50 Ohm Wide
- Band Directional
- 75' LMR400 Cable

Kit 311203-40020

- Omni-Directional antenna
- 20' I MR400 Cable

Kit 301111-400170

· Yagi Directional w/ N-Female 170' I MR400

Kit 311124-400100

- 1900 MHz Yaqi Directional
- 100' LMR400 Cable

Kit 311129-400100

- 800 MHz Yaqi Antenna
- 100' LMR400 Cable

- Kit 314453-40075 • 50 Ohm Pole Mount Panal Antonna
 - 75' LMR400 Cable

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 311129-0660

- 800 MHz Yaqi Directional
- 60' RG6 Cable
- . N-Male to F-Female adapter

Kit 311124-0650

- 1900 MHz Yaqi Directional
- 50' RG6 Cable





www.weboost.com

. N-Male to F-Female adapter

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 301111-11140

- Yaqi Directional Antenna
- 140' RG11 Cable
- N-Male to F-Female adapter

Kit 311201-1120

- Omni Directional w/ F-Female
- 20' RG11 Cable

Kit 311129-11110

- 800 MHz Yagi Directional
- 110' RG11 Cable . N-Male to F-Female adapter

Kit 311124-1180

- 1900 MHz Yaqi Directional
- 80' RG11 Cable
- N-Male to F-Female adapter

Kit 314473-1175

- 75 Ohm Pole Mount Panel Antenna
- 75' RG11 Cable

Kit 314475-1175

- 75 Ohm Wide
- Band Directional • 75' BG11 Cable

Kit 311141-1120

- 75 Ohm Grev Brick Antenna
- 20' RG11 Cable

Signal Booster Specifications

	Security 4G™						
Model Number	471019						
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)	700мнz Band12/17 11.8	700мнz Band13 11.0	800мн z 10.0	1700/2100 MHz 7.1	1900мн г 8.6		
20 dB Bandwidth (MHz)	700мнz Band12/17	700MHz Band13	800мнz	1700/2100MHz	1900мнг		
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	700мнz Band12/17	700MHz Band13	800мнz	1700мнz	1900мнг		
	24.7	24.9	24.1	25.6	25.0		
Power output for single cell phone (Downlink) dBm	700мнz Band12/17	700MHz Band13	800мнz	2100мнz	1900мнг		
	-6.3	-6.5	-6.5	-7.7	-5.8		
Power output for multiple							
received channels (Uplink) dBm No. Tones	700мнz Band12/17	700MHz Band13	800мнz	1700мнz	1900мнг		
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 (Downlinklink) dBm							
No. Tones	700мнz Band12/17	700мнz Band13	800мнz	2100MHz	1900мнг		
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				
			10.10				
Isolation			> 40 dB				

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 unit 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.





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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weBoost products covered by U.S. patent(s) and pending application(s)
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