

Drive 4G-S™ **Cellular Signal Booster** 



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.

## Drive 4G-S™ operates on (Band 12/17, 13) 700 / 800 / AWS (1700 / 2100) / (Band 2) 1900 MHz

FCC requires to never use the cell phone in the cradle next to your ear.

## Contents

ckage Contents	2
stallation Options	3
Option 1: Vehicle Installation	3
Option 2: In-Building Installation	4
ljusting the Drive 4G-S Arms	5
oubleshooting Understanding the Drive 4G-S Light	5
Iditional FAQ	ŝ
fety and Recommendations	ŝ
otional Accessories	7
gnal Booster Specifications	В
arrantyBack Cove	r

## Inside this Package



Drive 4G-S®



Mini-Magnet Mount Antenna (301126)



DC Plug-In Power Supply & USB cable (859911 / 291170)



Vehicle Dash Adhesive Mounting Bracket

## **Optional Accessories**



Antenna Window Mount (Used with Mini-Magnet Mount Antenna) (901128)

er in the Home Accessory Kit - 859100



Adjustable Desk Mount (901137)



Mobile Power Supply (859984)



Gooseneck Suction Cup Cradle Mount (901120)



Cup Holder Cradle Mount (901130)



Vehicle Dash Mounting Kit -Rugged/Screw Mount--Adhesive Mount-(901134) (included in some kits)

Appearance of device and accessories may vary. (This product is not marketed by Verizon Wireless or AT&T).

www.weboost.com



- All 3 available toget

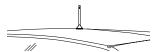
## **Installation Options**

## Option 1: Vehicle Installation

- Attach the Mounting Bracket to the vehicle's dashboard.
  - Clean the area where the bracket is to be mounted with the alcohol wipe included. Allow the area to dry.
  - Peel the backing to expose the adhesive and press the bracket onto the desired location on the dashboard. NOTE: Be sure the tab is positioned vertically.



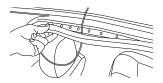
- Allow the adhesive to cure for 24 hours before you attach the Drive 4G-S (Step 4).
- 2. Install the Outside Antenna. Select a location on top of the car that is:
  - · Near the center of the vehicle's roof.
  - At least 12 inches from any other antennas.
  - · Free of obstructions.
  - At least 6 inches from any windows (including sunroofs).



· At least 8 inches from any people.

The Outside Antenna must be installed vertically.

3. Run the Outside Antenna cable into the car. The cable is strong enough that it may be shut in most vehicle doors without damaging the cable. For a cleaner look, carefully pull down the door seal, run the cable under the seal, and push the seal back into place. This method reduces wear on the cable as the door opens and closes.



4. Attach the Drive 4G-S to the Mounting Bracket. After waiting 24 hours for the adhesive on the bracket to cure, attach the Drive 4G-S by aligning the rectangular hole on the back of the Drive 4G-S with the tab on the Mounting Bracket, grasping the sides of the Drive 4G-S, and sliding it downward approximately ¼ inch into place.

The Mounting Bracket is designed to swivel for more convenient viewing angles. Once the Drive 4G-S is in place, you can adjust the angle of the bracket by loosening the knurled nut, applying gentle pressure to the top or bottom of the Drive 4G-S, and then tightening the nut when the desired angle is achieved.



Attach the antenna to the Drive 4G-S.
Connect the cable from the Outside
Antenna to the antenna connector on the
bottom of the Drive 4G-S. Do NOT plug
in the power supply (next step) until the
Outside Antenna cable is connected to
the Drive 4G-S.



Note: The Drive 4G-S has a convenient USB charging port located on the right side of your booster. This port allows for charging your phone or device, using your existing cable.





6. Power up your Drive 4G-S. Connect the power cable to the mini-USB port on the bottom of the Drive 4G-S. Then insert the adapter into the vehicle 12V DC power source. Use only the supplied weBoost power supply. While the Drive 4G-S may remain on, leaving the Drive 4G-S on in a vehicle when it is not running may discharge the battery in a day or two. Also note that some 12V DC power sources are shut down when the vehicle ignition is turned to off. Use a Bluetooth headset, wired hands-free device or speakerphone for talking on the phone.



## **Option 2: In-Building Installation**

Note: Home Office Accessory Kit sold separately

- Install the Outside Antenna to a window. For best results:
  - Select a window on the side of the building where you get the strongest cell signal.
  - Attach the suction cup bracket (sold separately) to the inside of a window so the cable will reach the location of the Mounting Bracket and Drive 4G-S. Place the bracket as high on the window as possible.



NOTE: Many newer energy efficient dual pane windows use a metal coating that may decrease the strength of a cellular signal, reducing the effectiveness of the Drive 4G-S. If you have dual pane windows, consider a weBoost signal boost product that provides an option for mounting an antenna on an outside wall or roof of a building.

 With the bracket in place, attach the magnet base of the antenna to the flat surface of the bracket. The antenna must be mounted vertically for the best signal.



Install the Mounting Bracket and Drive 4G-S.



Put your Drive 4G-S in the Mounting Bracket (see instructions under Vehicle Installation) and place it in a convenient location such as a desk or table top in the room where you will use the phone. The location should be at least three feet from the Outside Antenna to avoid oscillation (feedback). Your cell phone must be in the cradle for the Drive 4G-S to amplify the signal. Use a Bluetooth headset, wired hands-free device or speakerphone for talking on the phone.

Attach the antenna to the Drive 4G-S.
Connect the cable from the Outside
Antenna to the antenna connector on the
bottom of the Drive 4G-S. Do NOT plug
in the power supply (next step) until the
Outside Antenna cable is connected to the
Drive 4G-S.

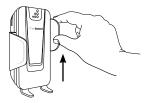


 Power up your Drive 4G-S. Connect the power cable to the mini-USB port on the bottom of the Drive 4G-S. Then insert the adapter and power it on. Use only the supplied weBoost power supply.

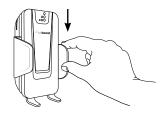


## Adjusting the Drive 4G-S Arms

To change arms, gently lift the arm upward until the arm slides free from the Drive 4G-S.

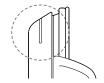


To reposition arms, move the arm above a different slot on the Drive 4G-S and gently slide the arm down until the arm is firmly in place.



# Troubleshooting & Understanding the Light

The Signal Boost includes a indicator light on the side of the Drive 4G-S. The indicator light 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).

## 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 Drive 4G-S, 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.
- If more separation is not possible and the coverage of the booster is too small 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 Drive 4G-S 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.

NOTE: The Signal Booster can be reset by disconnecting and reconnecting the power supply.

For additional descriptions on troubleshooting, see the install video at <u>weboost.com/us/</u> drive4G-Svideo.

## Additional FAQ:

## What hours can I contact customer support?

Customer Support can be reached Mon. -Fri. 6 am to 7 pm. Sat. & Sun. 8 am to 5 pm MST, by calling (866-294-1660), or by email, at <a href="mailto:support@weboost.com">support@weboost.com</a>.

## 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 Drive 4G-S works with all major North American cellular providers on the 850 & 1900 MHz frequencies. Traditionally, 850/1900MHz are associated with voice and 3G data; while 700MHz and 1700/2100MHz are associated with 4G data. For more detail see below.

## **Carrier Frequency Use**

We recommend visiting <a href="www.wirelessadvisor.com">www.wirelessadvisor.com</a> (United States) or <a href="http://bit.ly/1mQf2GI">http://bit.ly/1mQf2GI</a> (Canada) for information regarding the frequency band used by your cell service provider in a specific geographical location.

## Safety and Recommendations

in excess of that range.

WARNING: Connecting the Signal Booster directly to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of an adapter will damage the connection to the cell phone with use of the cell phone with use of the cell phone with use of the cell phone will be connected to the cell phone will be cell phone will be connected to the cell phone will be cell phone	NARNING:		an adapter will damage the o
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WARNING:	Use only the power supply provided in this package.	Use of a non-weBoost product may damage your
	equipment.	

/ WARNING:	G: To uphold compliance with network protection standards, all active wireless devices must mair			
_	least 18" of separation distance from mobile inside antennas, 4' of separation distance from desktop			
	antennas and 6' of separation distance from Panel and Dome antennas.			

WARNING: 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

WARNING: The outside antenna must be installed no higher than 10 meters (32'9") 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

- 301126 w/ 12.5
- RG174 cable- SMA
- 301113 w/125 RG174 cable- FME

## 12" Mag Mount w/ 12.5' RG174

- 311103
- 311125
- 311128
- 311703 314202
- 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

- Kit 311130-5810
  - Marine Antenna
  - 10' RG58 cable

## Glass Mount w/14' RG58 cable

- . 311114 (Mini Glass Mount)

## 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

## 4G Trucker Mirror mount

304414

## 4G Trucker Spring mount

304415

## 4G Marine Omni side cable w/ 20 ft RG58 cable

304416

## 4G Marine Omni bottom cable w/ 20 ft RG58 cable

304420

## **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 311129-5840

- 800 MHz Yaqi Directional
- 40' RG58 Cable

### Kit 311203-5820

- · Omni-Directional antenna
- 20' RG58 Cable

## Kit 311124-5830

- 1900MHz Yaqi Antenna
- 30' RG58 Cable

## Kit 314411-40075

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

## Kit 311203-40020

- Omni-Directional antenna
- 20' LMR400 Cable

- Kit 301111-400170 · Yaqi Directional w/ N-Female
  - 170' LMR400

- Kit 311124-400100
  - 1900 MHz Yagi Directional
  - 100' LMR400 Cable

### Kit 311129-400100

- 800 MHz Yagi Antenna
- 100' LMR400 Cable

- Kit 314453-40075
  - 50 Ohm Pole Mount
    - Panel Antenna
  - 75' LMR400 Cable

## 75 Ohm Outside Antenna Kits

#### Kit 301111-0675

- · Yaqi 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
- · 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
  - · Yagi 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 Yaqi 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 31///73-1175

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

## Kit 314475-1175

- 75 Ohm Wide
- **Band Directional** • 75' RG11 Cable

### Kit 3111/1-1120

- 75 Ohm Grey Brick Antenna
- 20' RG11 Cable

## **Signal Booster Specifications**

			Drive 4G-S		
Product Number			470007		
FCC/IC		PWO4	460007 / 4726A-460	007	
Connectors			SMA-Female		
Antenna Impedance			50 Ohms		
Frequency	698-746 MH	z, 746-787 MHz, 824-89	4 MHz, 1850-1990	MHz, 1710-1755/2110-2	155 MHz
Passband Gain (nominal)	700мнz Band12/17 20.3	700мнz Вапd13 18.7	800мнz Вапd5 18.6	1700/2100мнz Вапd4 18.4	1900мна Вапd2 17.2
20 dB Bandwidth (MHz)	700мнz Band12/17	700mHz Band13	800мнz Band5	1700/2100мнz Ваnd4	1900мн: Band2
Typical Maximum	30.0 32.6	30.4 32.6	41.8 43.4	81.5 83.9	87.6 88.0
Power output for single cell phone (Uplink) dBm	700мнz Band12/17	700мнz Band13	800мнг	1700мнz	1900мн
	24.4	23.1	24.9	22.0	22.7
Power output for single cell phone (Downlink) dBm	700мнz Band12/17	700мнz Band13	800мнz	2100мнz	1900мна
	-26.0	-27.8	-27.3	-28.6	-26.8
Power output for multiple received channels (Uplink) dBm No. Tones	700мнz Band12/17	700мнz Band13	800mHz	1700мнz	1900мн
2	18.8	20.1	25.7	21.7	25.4
3	15.3	16.6	22.2	18.1	21.9
4	12.8	14.1	19.7	15.6	19.4
5	10.9	12.1	17.8	13.7	17.5
6	9.3	10.5	16.2	12.1	15.9
Power output for multiple received channels (Downlinklink) dBm					
No. Tones	700мнz Band12/17	700мнz Band13	800мнz	2100мнz	1900мн
2	-22.2	-26.0	-26.2	-27.5	-27.5
3	-25.8	-29.5	-29.8	-31.0	-31.0
4	-28.3	-32.0	-32.3	-33.5	-33.5
5	-30.2	-34.0	-34.2	-35.5	-35.4
6	-31.8	-35.5	-35.8	-37.0	-37.0
Noise Figure			3 dB nominal		
			> 40 dB		
Isolation			> 40 UB		

Each Signal Booster is individually tested and factory set to ensure FCC compliance. The Signal Booster cannot be adjusted without factory reprogramming or disabiling 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.

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





NOTES.	

### 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



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