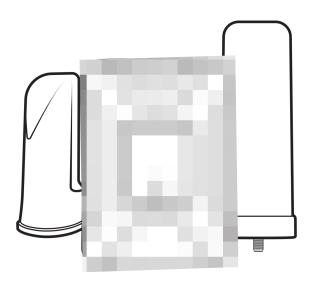


### **DRIVE 4G-X RV 50**

**RV Cell Signal Booster** 



### **User Manual**





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## Package Contents



Booster



Outside Antenna Kit



Inside Antenna + 13 foot Cable



30 Foot Cable



AC/DC Power Supply



12V DC Hardwire Power Supply



Cable Mounts + Ties



Hole Saw Bit



Cable Entry Cover



THE ALUMINUM CASING OF YOUR SIGNAL BOOSTER WILL ADJUST TO THE TEMPERATURE OF ITS ENVIRONMENT, BUT IS DESIGNED TO PROTECT THE SIGNAL BOOSTER TECHNOLOGY, FOR EXAMPLE, IN THE SUMMER, THE SIGNAL BOOSTER CASE MAY BE AS HOT AS 150 DEGREES INSIDE YOUR VEHICLE. THESE HIGH TEMPERATURES WILL NOT DAMAGE THE SIGNAL BOOSTER, NOR DO THEY POSE A FIRE RISK TO THE VEHICLE. AGAIN, BE SURE TO PLACE YOUR SIGNAL BOOSTER IN A LOCATION WITH ADEQUATE VENTILATION AND AWAY FROM DIRECT SUNLIGHT OR MOISTURE.

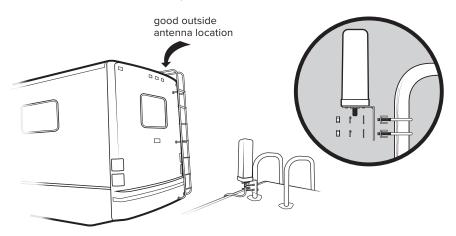


THE DRIVE 4G-X SIGNAL BOOSTER MAY REMAIN ON, IN VEHICLES WHOSE 12V DC POWER SOURCES DO NOT AUTOMATICALLY SHUTDOWN WHEN THE VEHICLE IS TURNED OFF. THIS COULD RESULT IN DISCHARGING THE VEHICLES BATTERY IN ONE TO TWO DAYS.

## **Step 1:** Mount Outside Antenna

Determine where you want to have the Outside Antenna on your RV. Mount Outside Antenna to a pole or ladder so that the entire Outside Antenna is above the roof line of the RV and clear of other metal obstructions.

NOTE: This must be in a location within reach of the booster with the 30' coax cable (installed in Step 4). The system performs best when there's max vertical and horizontal separation.



NOTE: Keep in mind to stay below the max height limit allowed by law, which varies from state to state (generally 14' in western states and 13'6" in eastern states).







## **Step 2:** Cable Entry

#### Determine where you want the cable to enter the RV.

NOTE: With this option, we recommend doing a 'soft install' before drilling the hole. Set up the system by routing the cable through an open door or window, completing the setup instructions, verifying the system works as desired, and then drilling the hole.



**Option A:** Using existing cable entry point.



**Option B:** Through the slider on your RV (using the slider gasket as a seal).



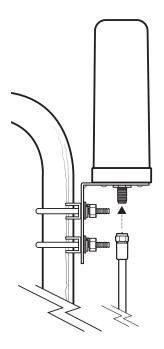
**Option C:** Drill a hole with the included hole saw bit.



WARNING: Be sure to stay clear of any power, pipes, etc. that may be damaged.

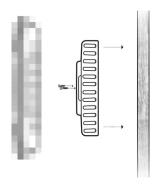
# **Step 3:** Connect Cable To Outside Antenna

Connect the RG-6 cable to the Outside Antenna and route as selected in **Step 2** inside of the RV.

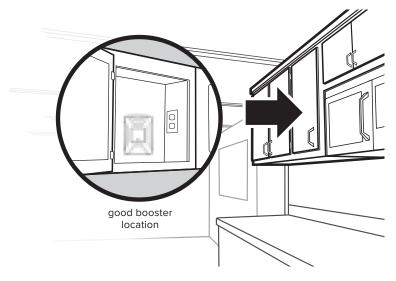


## Step 4: Booster Location

Find a location to place the booster, then mount by removing the bracket from back side of booster and fasten to desired surface. Snap booster back into bracket.

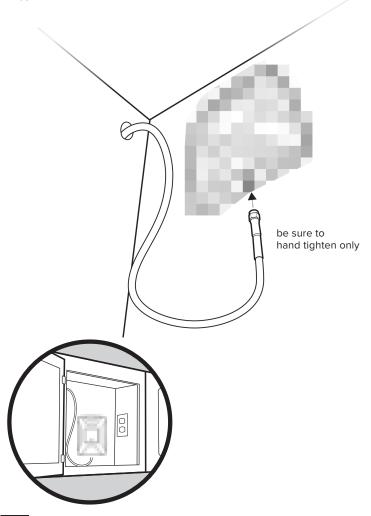


NOTE: We recommend in a cabinet near a power source. Be sure it's in a location that the 30' RG-6 cable can reach.



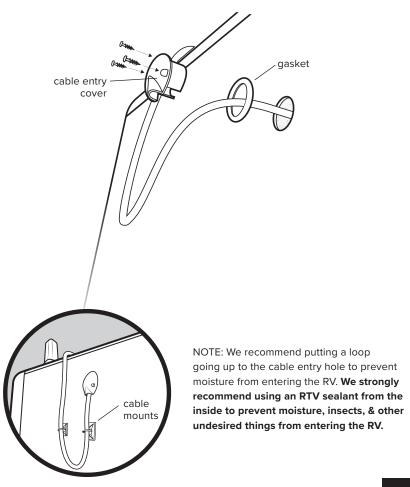
# **Step 5:** Connect Outside Antenna Cable To Booster

Fasten the end with smaller SMA connection to the 'Outside Antenna' port on the booster.



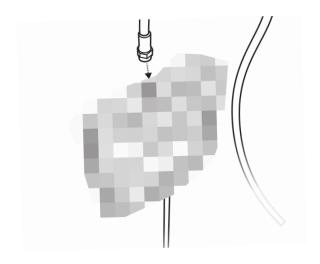
# **Step 6:** Mount Cable Entry Cover

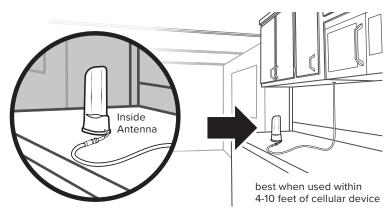
**Skip if you used Option A or B in STEP 2.** Pull the RG-6 cable through the rubber gasket, then place the cable entry cover into the entry hole like shown & fasten cover to side of RV. Use the cable mounts and ties to secure to the RV.



# **Step 7:** Connect Inside Antenna Cable To Booster

Connect the 13' RG-58 cable to the 'Inside Antenna' port on the booster. Route the cable where you want to receive the boosted signal. Connect the Inside Antenna to the cable.

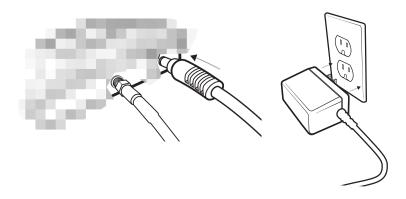




# **Step 8:** Power Up The Booster

Connect power cable to booster, then into 110V Wall plug and enjoy!

NOTE: We've included a fused 12V hardwire power supply option as well.



# Measuring Booster Performance

Put your cell phone in field test mode and determine the signal inside your RV. **Note it here:** 

#### iPhone®

Dial \*3001#12345#\* then press Call.

- Hold down power button until you see 'Slide to Power Off'.
- 2 Then release the power button.
- 3 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.

After you system is set up, you can go back to the dots signal by once again dialing \*3001#12345#\* then pressing call. When the menu comes back up, tap "phone" in the top left corner of your phone.

### iPhone®

iOS 11 no longer displays the decibel (dBm) reading in 'Field Test Mode'. Tip: Using the bar indicator on your cell phone 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™

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.

(MEASURING BOOSTER PERFORMANCE cont.)

#### All Other Phones & Alternate Methods

https://www.weboost.com/test-mode-instructions/

#### All Phones:

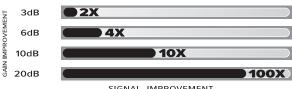
- Keep track of the network (3G or 4G) phone is connected to.
- Any signal readings you take are valid for that phone's carrier. To get readings from other carriers, you'll need phones from each carrier.
- When system is set-up, you can easily revert back to the "bar display" by dialing \*3001#12345#\* press Call, press the signal strength at the top left of screen to toggle between numbers and bars, then press the Home button to exit Field Test mode.

#### 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!



SIGNAL IMPROVEMENT

### **Light Patterns**

#### Solid Green

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

#### Blinking Red, Then Solid Green

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

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 below.

#### Light Off

If the Drive 4G-X Signal Booster's light is off, verify your power supply has power.

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

After troubleshooting you must initiate a new power cycle by disconnecting and then reconnecting power to the Booster.





### **Troubleshooting**

#### FIXING BLINKING OR SOLID RED ISSUES

This section is only applicable if the booster is red or blinking red and you are not experiencing the desired signal boost.

- 1 Unplug the Booster's power supply.
- Relocate the inside and outside antenna further from each other. The objective is to increase the separation distance between them, so that they will not create this feedback condition discussed before.
- 3 Plug power supply back in.
- Monitor the indicator light on your booster. If, after a few seconds of 'power on', a solid or blinking red light appears, repeat steps 1 through 3. Increase the separation distance until the condition is corrected and/or desired coverage area is achieved. Note: Horizontal separation of the two antennas typically requires a shorter separation distance than perpendicular separation.
- If you are having any difficulties while testing or installing your booster, contact 5 our weBoost Customer Support team for assistance (866.294.1660).

#### FREQUENTLY ASKED QUESTIONS

#### What hours can I contact customer support?

Customer Support can be reached monday thru friday by calling 866.294.1660, or through our support site at support.weboost.com.

#### Why do I need to create distance between the booster and the antenna?

Antennas connected to a booster create spheres of signal. When these spheres overlap, a condition called oscillation occurs. Oscillation can be thought of as noise, which causes the booster to shut down to prevent damage. The best way to keep these spheres of signal from overlapping is to maximize separation between the Booster and Antenna.





NEED HELP? support.weboost.com 6 866.294.1660



## **Antenna Kit Options**

#### **INSIDE FIXED**

Kit 311160-5813 Desktop Antenna 311160 With 13' RG-5

#### **OUTSIDE FIXED**

Kit 304422-5820
Omni Enterprise 304422 With 20' RG-58
Kit 304421-F820
Omni Consumer 304421 With 20' RG-58
Kit 304421-7410
Omni Consumer 304421 With 10' RG-174
Kit 304421-0630
Omni Consumer 304421 With 10' RG-174
Kit 304421-0630
Omni Consumer 304421 With 30' RG-6
Kit 311203-5820
Omni Directional Antenna (311203) With 20' RG-58
Kit 311201-0625
Omni Directional Antenna (311201) With 25' RG-6

## **Safety Guidelines**

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 150 degrees Fahrenheit). It is not intended for use in attics or similar locations subject to temperatures in excess of that range.

The desktop antenna must have at least 3' of separation distance from all active users.

Connecting the Signal Booster directly to the cell phone with use of an adapter will damage the cell phone.

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 32 feet 9 inches (10 meters) 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.

In Canada, **BEFORE USE** you must meet all requirements set out in ISED CPC-2-1-05. 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 (i.e., MUST NOT be installed within 20 cm of) any person.

You **MUST** cease operating this device immediately if requested by the FCC (or ISED in Canada) or licensed wireless service provider.

WARNING. E911 location information may not be provided or may be inaccurate for calls served by using this device.

### FOR MORE INFORMATION ON REQUIREMENTS SET OUT IN ISED CPC-2-1-05, SEE BELOW:

http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html

### 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

## **Specifications**

Drive 4G-X

Model Number	460056							
FCC ID:	PWO460056							
IC:	4726A-460056							
Connectors	SMA-Female							
Antenna Impedance	75 Ohms							
Frequency	698-716 MHz, 729	9-746 MHz, 777-787 M	Hz, 824-894 MHz, 18	50-1995 MHz, 1710-17	55/2110-2155 MHz			
	Maximum Power							
Power output for single cell phone (Uplink) dBm	700 MHz Band 12/17 28.3	700 MHz Band 13 29.1	800 MHz Band 5 29.50	1700 MHz Band 4 28.50	1900 MHz Band 2 28.30			
Power output for single cell ohone (Downlink) dBm	700 MHz Band 12/17 5.0	700 MHz Band 13 5.2	800 MHz Band 5 5.2	2100 MHz Band 4 5.0	1900 MHz Band 2 5.1			
Noise Figure	5 dB nominal							
Isolation	> 90 dB							
Power Requirements	6V 2A / 12V DC 110-240 V AC, 50-60 Hz, 8 W							

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 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.

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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