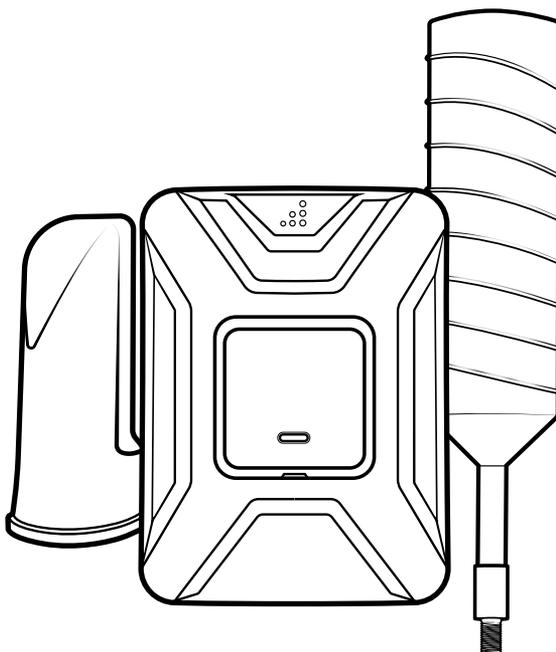


# DRIVE X RV

RV Cell Signal Booster



## User Manual

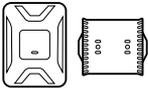
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# Package Contents



Drive X  
Booster & Bracket



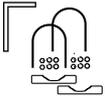
Inside  
Antenna



Outside Antenna &  
25 ft. RG-6 Cable



Mast Extension,  
Side-Exit Adapter  
& Spring



Outside Antenna  
Ladder Mount



AC/DC Wall Power  
Supply



DC/DC Hardwire  
Power Supply



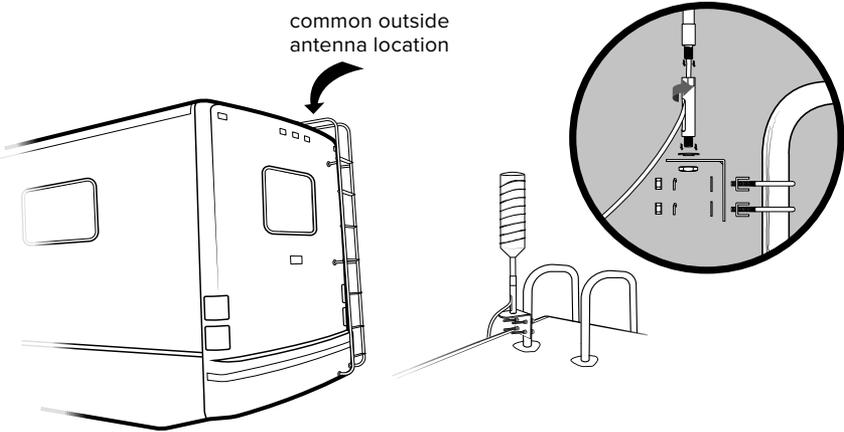
Installation  
Accessories

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# Step 1: Mount Outside Antenna & Route Cable

Determine where you want the Outside Antenna on your RV. Mount Outside Antenna to a ladder or pole 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 25' coax cable (installed in Step 4). The system performs best with maximum vertical and horizontal separation.



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

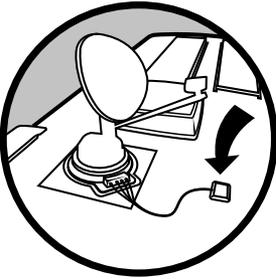


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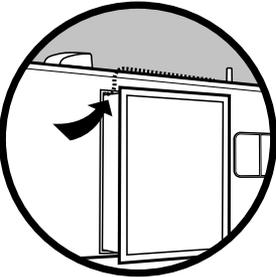
(STEP 1: MOUNT OUTSIDE ANTENNA & ROUTE CABLE cont.)

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

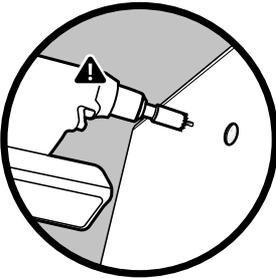
NOTE: With this option, we recommend doing a **'soft install' before drilling the hole**. Set up the system by routing the cable through an open door or window, completing the setup instructions, verifying the system works as desired, and then drilling the hole.



**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.

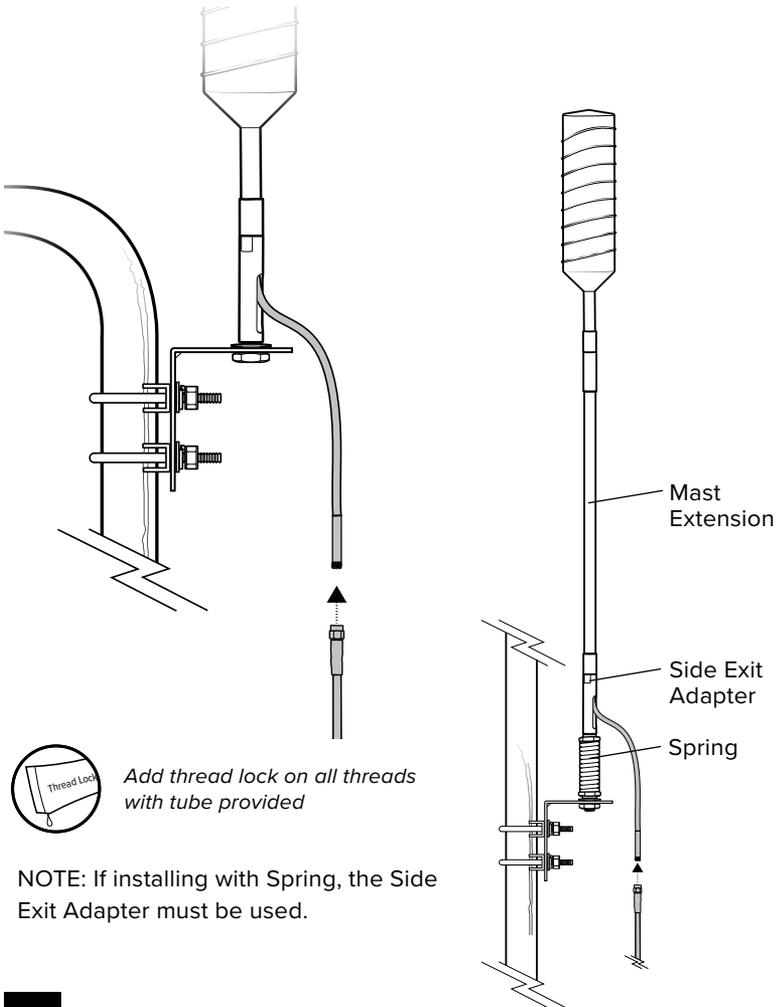


**WARNING:** Be sure to stay clear of any power, pipes, etc. that may be damaged.

---

# Step 2: Connect Cable To Outside Antenna

Determine where you want the cable to enter the RV, then connect the RG-6 cable to the Outside Antenna.



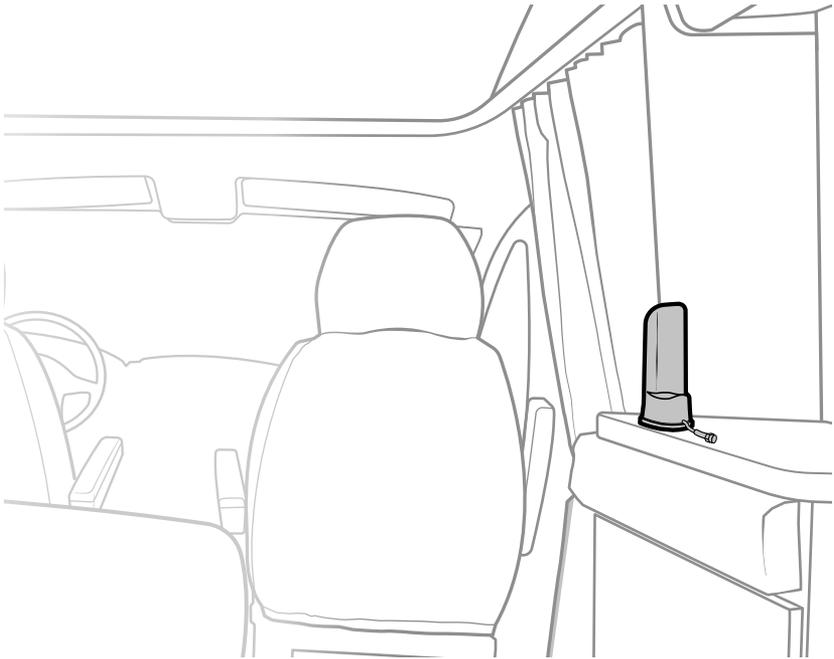
*Add thread lock on all threads with tube provided*

**NOTE:** If installing with Spring, the Side Exit Adapter must be used.

---

# Step 3: Inside Antenna Location

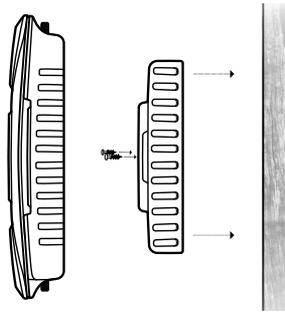
Place Inside Antenna where stronger signal is desired.



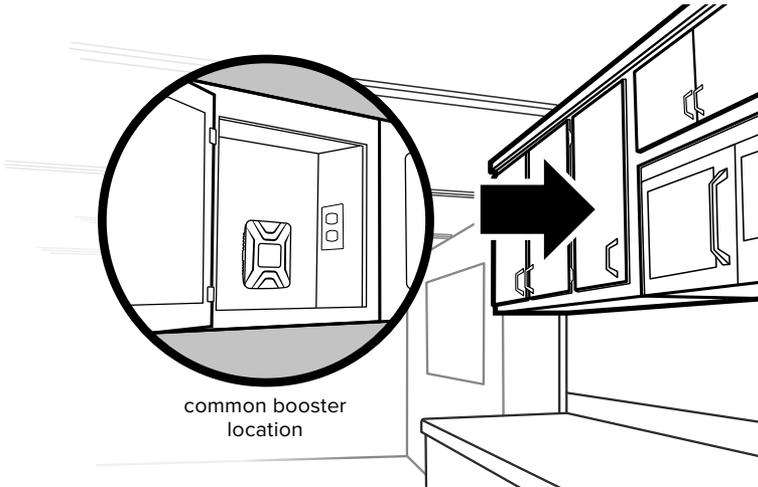
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# Step 4: Booster Location & Connect Cables

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.



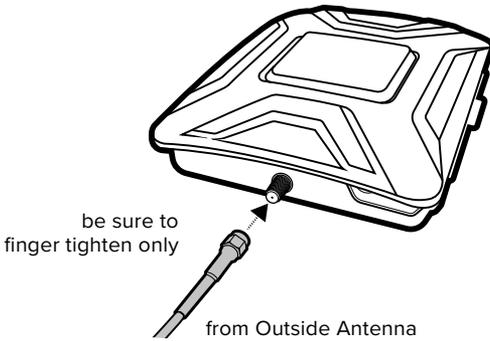
NOTE: We recommend mounting in a cabinet near a power source. Be sure it's in a location that cables from both Inside and Outside Antennas can reach.



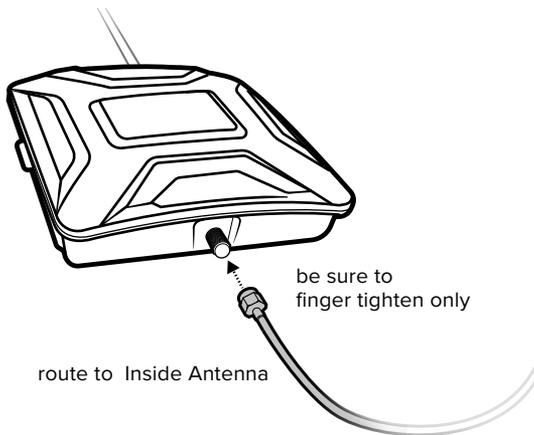
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(STEP 4: BOOSTER LOCATION & CONNECT CABLES cont.)

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



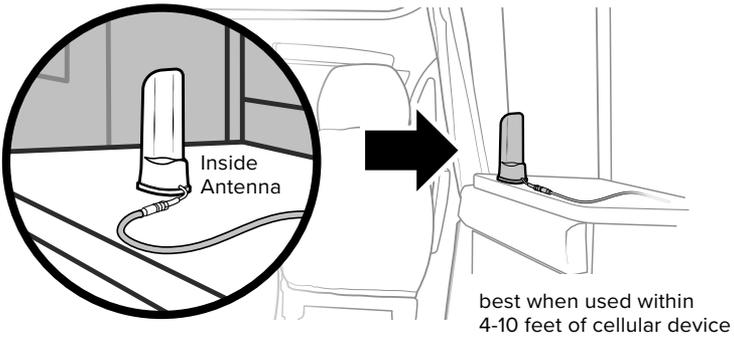
Connect the 13' RG-58 cable to the 'Inside Antenna' port on the booster. Route the cable to the Inside Antenna.



---

(STEP 4: BOOSTER LOCATION & CONNECT CABLES cont.)

Connect the 13' RG-58 cable to the 'Inside Antenna' port on the booster. Route the cable and connect to the Inside Antenna.

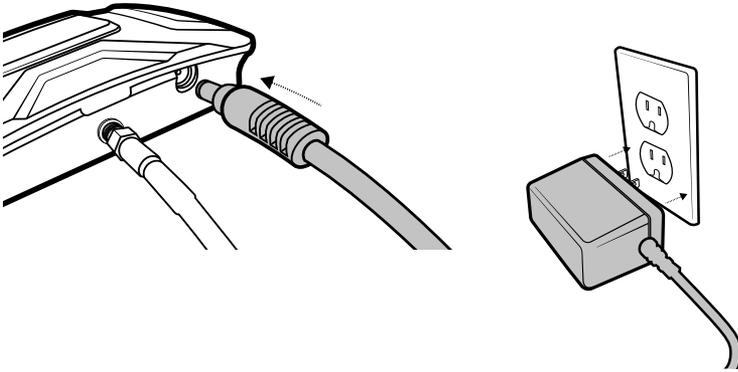


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# Steps 5 & 6: Power Up The Booster

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

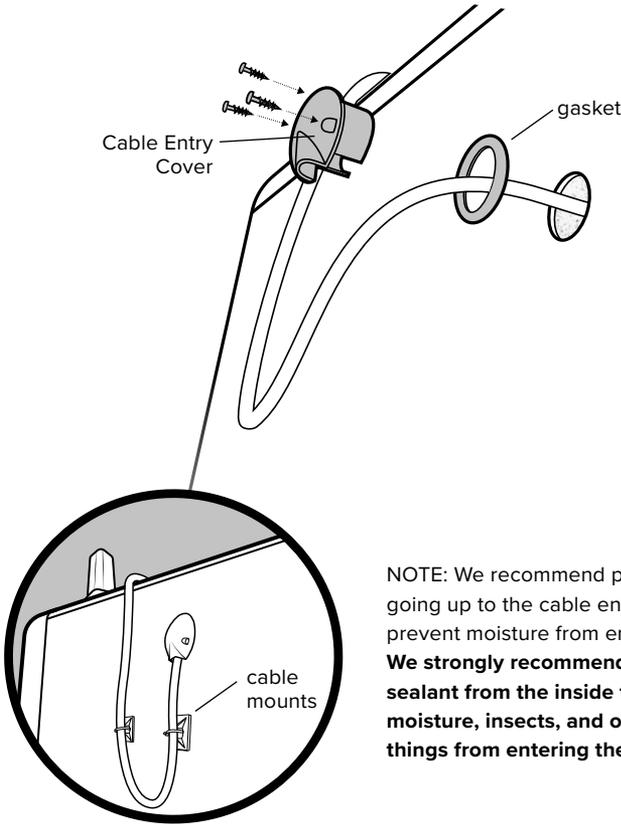
NOTE: A fused 12V hardwire power supply is also included.



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# Using The Optional Cable Entry Accessories

**Skip if you used Option A or B in STEP 1.** Pull the RG-6 cable through the rubber gasket, then place the Cable Entry Cover into the entry hole (as shown below) and fasten cover to side of RV. Use the cable mounts and ties to secure to the RV.



NOTE: We recommend putting a loop going up to the cable entry hole to prevent moisture from entering the RV. **We strongly recommend using an RTV sealant from the inside to prevent moisture, insects, and other undesired things from entering the RV.**

---

# Measuring Booster Performance

Using signal bars and data speed testing, determine the signal strength inside your RV. **Note it here:** \_\_\_\_\_

## **iPhone®** **iOS 11 - current**

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](http://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.

## 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.

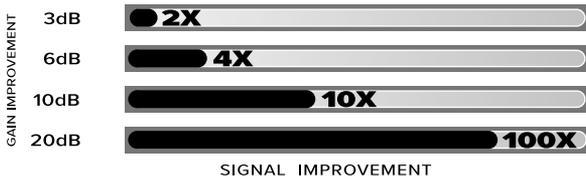
(MEASURING BOOSTER PERFORMANCE cont.)

## 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
<b>3G/1x</b>	-70dBm	-71 to -85dBm	-86 to -100dBm	-101 to -109dBm	-110dBm
<b>4G/LTE</b>	-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!



---

# 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 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.

---

**NEED HELP?**



support.weboost.com



866.294.1660

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# 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.
- 2 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.
- 4 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.
- 5 If you are having any difficulties while testing or installing your booster, contact our weBoost Customer Support team for assistance (866.294.1660).

---

## FREQUENTLY ASKED QUESTIONS

### How 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](http://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](http://support.weboost.com)



866.294.1660

# Antenna Kit Options

## MOBILE

### Inside Antenna Options

**4G Slim Low Profile**  
314401 - w/10' LMR 100  
**Desktop**  
311160 - w/ 13' RG58

### Outside Antenna Options

**Mini-Mag**  
301126 w/ 12.5 RG174 cable - SMA  
**12" Mag Mount w/12.5' RG58**  
311125  
**4G Trucker Antenna w/15' RG58**  
304415  
**4G Marine Antenna w/20' L-195**  
304420

### NMO Antenna 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  
**314405**  
4G NMO Antenna

## INSIDE FIXED

### Inside Antenna Expansion Kit

Kit **309900-50N**  
2 - Wall Panel antennas  
1 - 50 ohm 3-Way Splitter  
Kit **309905-50N**  
3 - Wall Panel Antennas  
3 - 2-Way 50 Ohm Splitters  
20' RG174  
Kit **309902-75F**  
2 - Wall Panel Antennas  
1 - 3-Way 75Ohm Splitter  
Kit **309903-75F**  
3 - Wall Panel Antennas  
3 - 2-Way 75Ohm Splitters  
Kit **309904-75F**  
1 - Wall Panel Antenna  
1 - 2-Way 75 Ohm Splitter

### Inside Antenna Kits

Kit **311155-0630**  
75 Ohm Wall mount Panel Antenna  
30' RG6 Cable  
Kit **311135-5820**  
50 Ohm Wall mount Panel Antenna

20' RG58 Cable  
Kit **311135-40060**  
50 Ohm Wall mount Panel Antenna  
60' Wilson 400  
Kit **311155-1150**  
75 Ohm Wall mount Panel Antenna  
50' RG11 cable  
Kit **311155-40060**  
75 Ohm 4G Dome Antenna  
60' Wilson 400 cable  
Kit **304412-40010**  
50 Ohm 4G Dome Antenna  
10' Wilson 400 cable  
Kit **304412-5810**  
50 Ohm 4G Dome Antenna  
10' RG 11 cable  
Kit **304419-1110**  
75 Ohm 4G Dome Antenna  
10' RG11 cable  
Kit **304419-17410**  
75 Ohm 4G Dome Antenna  
10' RG174 cable  
May need separate adapter  
Kit **304419-1610**  
75 Ohm 4G Dome Antenna  
10' RG6 cable

## OUTSIDE FIXED

### 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 **31203-5820**  
Omni-Directional antenna  
20' RG58 Cable  
Kit **314411-40075**  
50 Ohm Wide Band Directional  
75' LMR400 Cable  
Kit **31203-40020**  
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  
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 **314473-0640**  
75 Ohm Pole Mount Panel Antenna  
40' RG6 Cable  
Kit **301111-11140**  
Yagi Directional Antenna  
140' RG11 Cable  
N-Male to F-Female adapter  
Kit **314473-1175**  
75 Ohm Pole Mount Panel Antenna  
75' RG11 Cable  
Kit **314475-0630**  
75 Ohm Wide Band Directional  
40' RG6 Cable  
Kit **314475-1175**  
75 Ohm Wide Band Directional  
75' RG11 Cable  
Kit **304421-17410**  
75 Ohm 4G Omni Antenna  
10' RG174 cable  
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  
Kit **304421-1120**  
75 Ohm 4G Omni Antenna  
20' RG 11 cable

---

# 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. All inside panel and dome antennas must have at least 6' of separation distance from all active users, and low profile antennas must have at least 1.5' 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.

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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 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 REGISTERING YOUR SIGNAL BOOSTER WITH YOUR WIRELESS PROVIDER, PLEASE SEE BELOW:

**Sprint:** [http://www.sprint.com/legal/fcc\\_boosters.html](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 X RV

Product Number	U470010				
Model Number	460021				
FCC ID:	PWO460021				
IC:	4726A-460021				
Connectors	SMA-Female				
Antenna Impedance	50 Ohms				
Frequency	699-716 MHz, 729-756 MHz, 777-787 MHz, 824-894 MHz, 1850-1995 MHz, 1710-1755 MHz/2110-2155 MHz				
	Maximum Power				
Power output for single cell phone (Uplink) dBm	700 MHz Band 12/17 24.84	700 MHz Band 13 24.35	800 MHz Band 5 23.4	1700 MHz Band 4 21.3	1900 MHz Band 2 24.43
Power output for single cell phone (Downlink) dBm	700 MHz Band 12/17 2.87	700 MHz Band 13 2.79	800 MHz Band 5 2.8	2100 MHz Band 4 2.0	1900 MHz Band 2 1.92
Noise Figure	5 dB nominal				
Power Requirements	6V 2A / 12V DC 110-240 V AC, 50-60 Hz, 8 W				

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.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. 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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