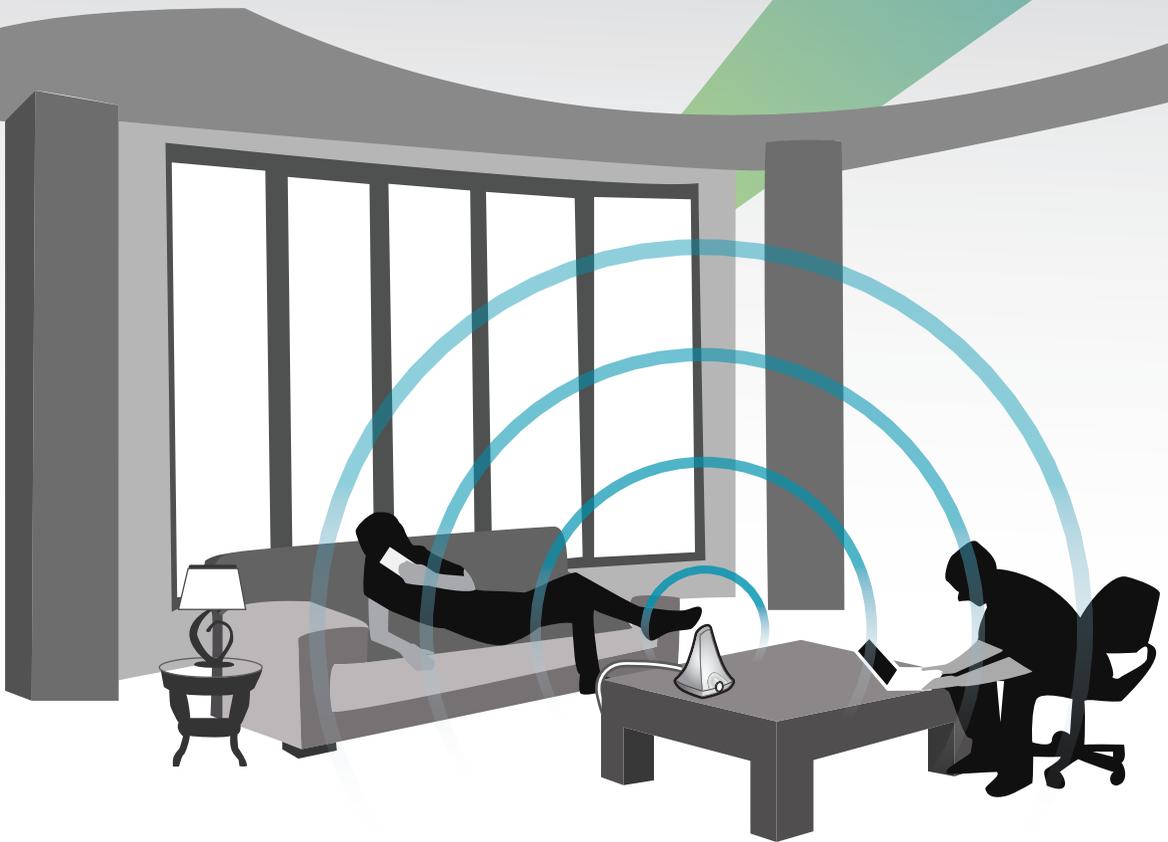


# Flare<sup>™</sup>

Home Cellular Signal Booster Kit for Voice & 4G Data

User Guide



Thank you for purchasing SureCall's Flare cellular signal booster kit. SureCall's Flare was specifically designed to eliminate frustrations over dropped calls and limited range by amplifying incoming and outgoing cellular signals in homes and offices.

Flare is a cellular booster that enhances voice and 4G data signal.

If you have any questions during setup, please reach out to our US-based experienced support technicians:

**Call:** 1-888-365-6283

**Email:** support@surecall.com

Or, **chat:** [www.surecall.com](http://www.surecall.com), 7:00 am – 5:00 pm PST, Monday – Friday



Watch installation, optimization and troubleshooting techniques on our SureCall YouTube channel



@SureCall



Stay up to date with all things SureCall

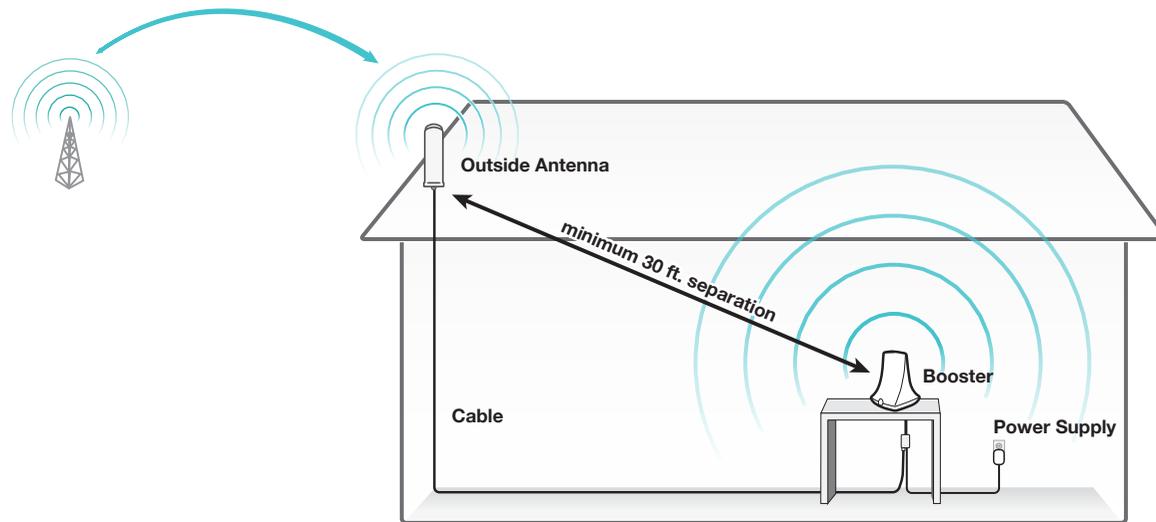
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SureCall's Flare is an all-carrier signal booster that enhances cellular voice and 4G data signals to areas that are prone to weak cellular coverage.

## How it works

1. An outside antenna collects signal from the cell tower.
2. The outside antenna sends the signal to the booster through coax cable.
3. The booster amplifies the cell signal and rebroadcasts the signal indoors to all mobile devices within range.
4. The booster amplifies outgoing cell signal back to the tower.



How SureCall Flare Booster Works

## PACKAGE CONTENTS

1. Unpack all package contents. For missing or damaged items, contact your reseller.
2. Turn over the signal booster and record the model and serial number for reference:  
Serial #: \_\_\_\_\_  
Purchase Date: \_\_\_\_\_
3. Keep the carton and packing material to store the product in case you need to return. Your Flare signal booster package includes the following items:
  - SureCall Flare signal booster
  - Outside Omni Antenna
  - Power Supply
  - Cable for connecting the outside antenna to the signal booster

Flare Cellular Booster



Outside Omni Antenna



Power Supply



Indoor Cable (50 ft.)



**Warning:** Unauthorized antennas, cables, and/or coupling devices are prohibited by FCC new rules. Please contact FCC for details: 1-888-CALL-FCC. Changes or modifications not expressly approved by SureCall could void the user's authority to operate the equipment.

## BEFORE INSTALLATION

1. Prior to securing the location of any booster parts, a “soft install” is recommended as adjustments may be needed to optimize performance.
2. Your planned location for the booster (central to where signal is needed) should be near an existing electrical outlet.
3. Ensure adequate separation between the planned locations of the booster and outside antenna (at least 30 ft.).
4. Ensure sufficient cable length between the outside antenna location and booster location. The length of the provided cable is 50 ft.

### Installation Overview

Step 1. Find the outside area with the strongest signal.

Step 2. Install the outside antenna in the area identified in Step 1.

Step 3. Place the Flare on a table or desktop, center of the area where signal is needed.

Step 4. Connect the booster to an AC power source.

## FLARE INSTALLATION

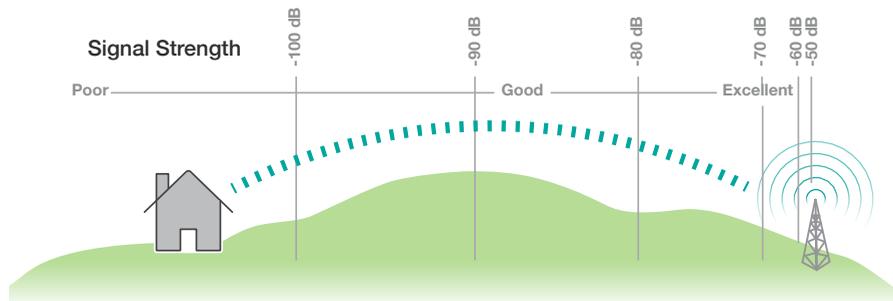
### Step 1. Find the Area With the Strongest Signal

#### Finding Your Strongest Cellular Signal

To send and receive cell phone calls you need to have an adequate cellular signal. This usually means having to be somewhat close to a cell phone tower. Your cellular signal is measured in decibels (dB), which represents the power of the signal. Signal readings appear as a negative number, for example -85dB. The stronger your signal is the closer it gets to zero. As the illustration below shows a -50 dB signal reading is very strong while a signal reading of -100 dB and above is very weak.

#### How to Determine Your dB Signal Reading

- Using an iPhone: Dial \*3001#12345#\*, a Field Test screen will appear press down on the home button for a few seconds so your dB reading will appear in the upper left hand corner.
- Using an Android: Download the “Network Signal Info” within the Google Play store. Once installed, you will be able to view your dB strength.
- Internet: Go to: [www.speedtest.net](http://www.speedtest.net) to test your 3G and 4G data rates.



### Step 2. Install the Outside Antenna

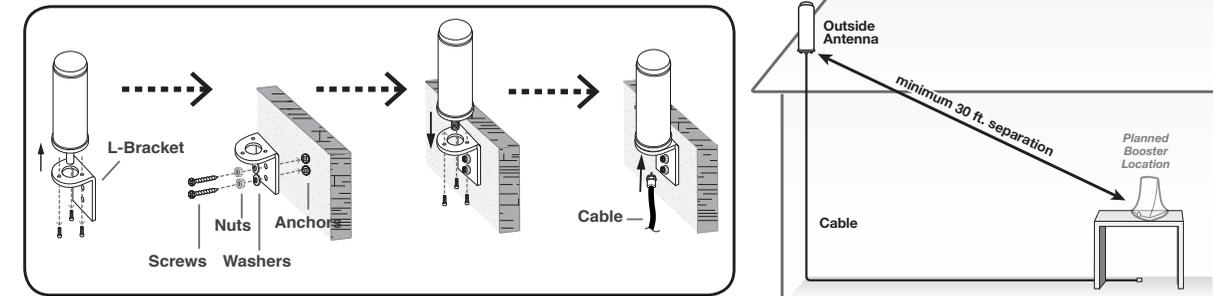
Before antenna placement, note the following:

Do not collocate antennas or operate the outdoor antenna with any other antenna or signal booster. For best performance, be sure to place the outdoor antenna at least 30 feet from the booster and as high as possible.

If installing a Yagi, or directional antenna, mount horizontally and position facing the direction of your carrier’s nearest cellular towers identified in step 1.

The provided antenna is omni-directional, which receives and sends signals in a 360° radius.

1. After identifying the area of strongest signal, choose the surface where you will mount the outside antenna. The omni antenna should be mounted in an upright position (See “Outside Antenna Install Illustration” on page 7) and may be mounted directly to a surface or to a J-mount (not included), if needed.
2. Unscrew antenna from L-mounting bracket on antenna base with hands, or wrench, if needed.
3. Using vertical plate of bracket, mark position of desired placement with pencil or marker.
4. Unscrew nut on end of stucco screw and remove it along with lock washer and regular washer.
5. Place vertical plate into desired location and tap the screws head first, along with anchor, into stucco 1/2” to 5/8” deep into place.
6. In this order, place washer, lock washer and nut on each screw and tighten until secure. When tightening screw, anchor will expand to secure plate. Screw antenna securely back onto horizontal plate.
7. Connect antenna to one end of the provided RG6 cable and hand tighten the connection. Run the cable along route to planned location of your booster.



Outside Antenna Install Illustration

Ensure adequate separation between the planned locations of the booster and outside antenna (at least 30 ft.).

### Step 3. Place the Booster

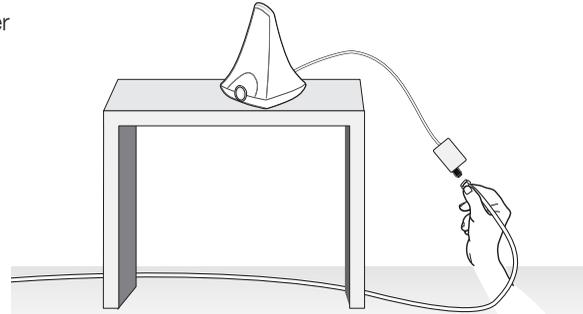
Place the booster in a central location where signal is needed and at least 30 ft. from the outdoor antenna location. When placing the booster, note that further separation between the booster and outside antenna will increase booster performance. Connect the open end of the RG6 cable from the outside antenna to the booster and hand-tighten.

Please note that the performance and range of your booster depends on three factors:

1. Signal strength at the location of the outside antenna.
2. Interior building materials between the booster and your mobile device.
3. Distance between the outside antenna and booster (while at least 30 ft. separation is recommended, further separation will increase performance).

Note: Fixed stations operating in the 1710-1755 MHz bands are limited to a maximum antenna height of 10 meters above ground.

This booster should not be used near open fire or flame. Storage and transportation: Store and place in non-extreme room-temperature and dry environment.

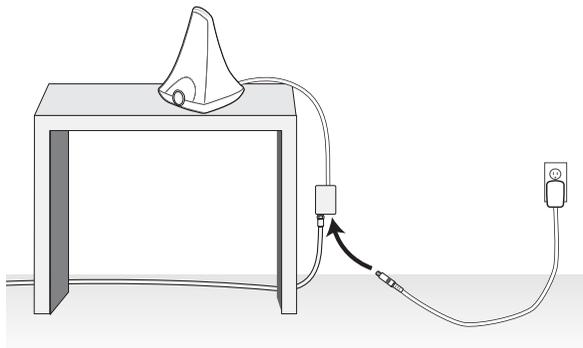


Placing Booster and connecting cable

### Step 4: Connect to Power

Once the booster and outside antenna are connected and in place, connect the power cord to the signal booster and plug into a power outlet.

Note: This booster is rated for 5-15V input voltage. DO NOT use the booster with a higher voltage power supply. This can damage the booster, cause personal injury, and void your warranty.



Connecting the Power Supply

### Step 5: Enjoy Boosted Signal

Place a call in the room where the booster is located to confirm that your phone is receiving a boosted signal. Remember: Bars are not always a reliable measure of signal. The best way to confirm signal coverage is the ability to place and hold a call.

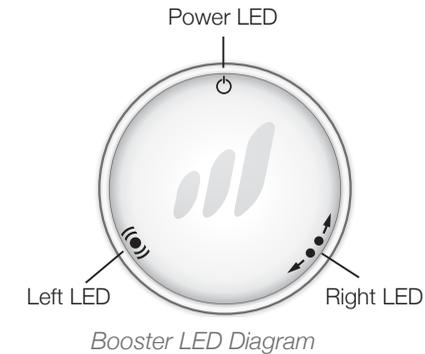
## IF YOU WANT TO IMPROVE PERFORMANCE

- Identify a location outside that receives a stronger signal and move the outside antenna to that location (higher is usually better).
- Increase the distance between the booster and outside antenna.
- If using an omni outside antenna, change to a directional yagi antenna that can be aimed toward your closest tower.

Please Note: Changes or modifications not expressly approved by SureCall could void user's authority to operate the equipment.

## LED INDICATORS

LED Position	LED Color	LED Condition	Indication
Left	Yellow	Flashing	Automatic Gain Control (AGC) is self-adjusting. This is part of normal operation.
Left	Red	Flashing	The booster is receiving too strong of a signal which could cause the booster to automatically turn off. When this happens: Relocate the outside antenna to a location where the signal is weaker.
Right	Red	Flashing	Self-oscillation has been prevented. If this happens: Increase the separation between outside antenna and the booster.



Booster LED Diagram

## TROUBLESHOOTING

If you have any questions during setup, please reach out to our US-based experienced support technicians:

**Call:** 1-888-365-6283

**Email:** support@surecall.com

Or, **chat:** [www.surecall.com](http://www.surecall.com), 7:00 AM – 5:00 PM PST, Monday – Friday

Problem	Resolution
Signal booster has no power	Connect the power supply to an alternate power source. Be sure the power source is not controlled by a switch that can remove power from the outlet. Check the green POWER LED on the signal booster. If it is OFF, return the power supply to SureCall. Contact tech support at to receive an RMA at: 1-888-365-6283 or support@surecall.com, or go to <a href="http://www.surecall.com">www.surecall.com</a> 7:00 AM – 5:00 PM PST, Monday – Friday to chat with a representative.
After installing your signal booster system, you have no signal or reception	Verify that cable connections are tightly fitted to the booster and antenna. Try further separating the booster and antenna. Verify that there is usable signal where the antenna is placed. <b>Remember:</b> Bars are not always a reliable measure of signal. The best way to confirm signal coverage is the ability to place and hold a call.

**FLARE SPECIFICATIONS**

	U.S.	Canada
Uplink Frequency Range (MHz):	698-716 / 776 – 787 / 824-849 / 1850-1915 / 1710-1755	
Downlink Frequency Range (MHz):	728-746 / 746 – 757 / 869-894 / 1930-1995 / 2110-2155	
Donor/Server Port Impedance:	75 ohm / 50 ohm	
Maximum Gain:	72 dB	65.5 dB
Noise Figure:	7 dB	
VSWR:	≤2.0	
Supported Standards:	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO 4G and all cellular standards	
AC Input:	Input: AC 110 – 240 V, 60 Hz ; Output: DC 5V / 3A	
Maximum Output Power:	1 Watt EIRP	
Cable:	RG6 (50 ft.)	
RF Connectors:	Donor port: F Female, Server port: Integral	
Power Consumption:	<12W	
Weight:	1. 8125 lb.	
Dimensions:	5.125 × 7.25 × 5.625 inches	
FCC ID / IC:	RSNDT	7784A-DT

Frequency (MHz)	Bandwidth (MHz)	Input (dBm)	Mean Power (dBm)	Gain (dB)
Uplink: 1710-1755	69.3	-47.5	18.6	66.1
Uplink: 1850-1915	76.0	-46.0	19.4	65.4
Uplink: 824-849	36.6	-43.3	17.5	60.8
Uplink: 698-716	24.8	-41.0	17.6	58.6
Uplink: 777-787	22.3	-42.8	16.1	58.9
Downlink: 2110-2155	87.6	-59.9	5.1	65.0
Downlink: 1930-1995	73.5	-62.7	8.4	71.1
Downlink: 869-894	37.1	-50.3	8.9	59.2
Downlink: 728-746	33.9	-46.8	9.1	55.9
Downlink: 746-756	34.2	-46.9	7.3	54.2

\*Mean power: Measurements obtained on section 6.2 where Pmean = P01+3dB

**Kitting Information**

Component	Product number	Gain/Loss					Note
		707 MHz	731 MHz	800 MHz	1900 MHz	1700 / 2100 MHz	
<b>Outdoor Antenna*</b>							
	SC-289W	3 dBi	3 dBi	3 dBi	4 dBi	4 dBi / 4 dBi	
	SC-231W	10 dBi	10 dBi	10 dBi	10 dBi	10 dBi / 10 dBi	
<b>Outdoor Cable*</b>							
	SC-RG6-50	3.32 dB	3.32 dB	3.75 dB	6.42 dB	6.22 dB / 6.68 dB	50 Feet or longer
<b>Indoor Antenna</b>							
	SC-322W	2.5 dBi	2.5 dBi	3 dBi	5 dBi	4 dBi / 5 dBi	

\* All equivalent cables, antennas and lower gain antennas are suitable for use with the Flare booster

## WARRANTY

### Three-Year Product Warranty

Register at [www.SureCall.com](http://www.SureCall.com)

SureCall warrants its products for three years from the date of purchase against defects in workmanship and/or materials. Specifications are subject to change. The three-year warranty only applies to products meeting the latest FCC Certification Guidelines stated on 2/20/2013 and going into effect April 30, 2014. A two-year warranty applies to any products manufactured before May 1, 2014.

Products returned by customers must be in their original, un-modified condition, shipped in the original or protective packaging with proof-of-purchase documentation enclosed, and a Return Merchandise Authorization (RMA) number printed clearly on the outside of the shipping container.

Buyers may obtain an RMA number for warranty returns by calling the SureCall Return Department toll-free at 1-888-365-6283. Any returns received by SureCall without an RMA number clearly printed on the outside of the shipping container will be returned to sender. In order to receive full credit for signal boosters, all accessories originally included in the signal booster box must be returned with the signal booster. (The Buyer does not need to include accessories sold in addition to the signal booster, such as antennas or cables.)

This warranty does not apply to any product determined by SureCall to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages the product's physical or electronic properties.

SureCall warrants to the Buyer that each of its products, when shipped, will be free from defects in material and workmanship, and will perform in full accordance with applicable specifications. The limit of liability under this warranty is, at SureCall's option, to repair or replace any product or part thereof which was purchased up to THREE YEARS after May 1, 2014 or TWO YEARS for products purchased before May 1, 2014, as determined by examination by SureCall, prove defective in material and/or workmanship. Warranty returns must first be authorized in writing by SureCall. Disassembly of any SureCall product by anyone other than an authorized representative of SureCall voids this warranty in its entirety. SureCall reserves the right to make changes in any of its products without incurring any obligation to make the same changes on previously delivered products.

As a condition to the warranties provided for herein, the Buyer will prepay the shipping charges for all products returned to SureCall for repair, and SureCall will pay the return shipping with the exception of products returned from outside the United States, in which case the Buyer will pay the shipping charges.

The Buyer will pay the cost of inspecting and testing any goods returned under the warranty or otherwise, which are found to meet the applicable specifications or which are not defective or not covered by this warranty.

Products sold by SureCall shall not be considered defective or non-conforming to the Buyer's order if they satisfactorily fulfill the performance requirements that were published in the product specification literature, or in accordance with samples provided by SureCall. This warranty shall not apply to any products or parts thereof which have been subject to accident, negligence, alteration, abuse, or misuse. SureCall makes no warranty whatsoever in respect to accessories or parts not supplied by it.

#### Limitations of Warranty, Damages and Liability:

EXCEPT AS EXPRESSLY SET FORTH HEREIN, THERE ARE NO WARRANTIES, CONDITIONS, GUARANTEES, OR REPRESENTATIONS AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTIES, CONDITIONS, GUARANTEES, OR REPRESENTATIONS, WHETHER EXPRESSED OR IMPLIED, IN LAW OR IN FACT, ORAL OR IN WRITING.

SURECALL AGGREGATE LIABILITY IN DAMAGES OR OTHERWISE SHALL NOT EXCEED THE PAYMENT, IF ANY, RECEIVED BY CELLPHONE-MATE, INC. FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH IS THE SUBJECT OF CLAIM OR DISPUTE. IN NO EVENT SHALL SURECALL BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, HOWSOEVER CAUSED.

All matters regarding this warranty shall be interpreted in accordance with the laws of the State of California, and any controversy that cannot be settled directly shall be settled by arbitration in California in accordance with the rules then prevailing of the American Arbitration Association, and judgment upon the award rendered may be entered in any court having jurisdiction thereof. If one or more provisions provided herein are held to be invalid or unenforceable under applicable law, then such provision shall be ineffective and excluded to the extent of such invalidity or unenforceability without affecting in any way the remaining provisions hereof.

### Limitations of Warranty, Damages and Liability

SureCall has made a good faith effort to ensure the accuracy of the information in this document and disclaims the implied warranties of merchantability and fitness for a particular purpose and makes no express warranties, except as may be stated in its written agreement with and for its customers. SureCall shall not be held liable to anyone for any indirect, special or consequential damages due to omissions or errors. The information and specifications in this document are subject to change without notice. © 2016. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.

SureCall, Inc  
48346 Milmont Drive  
Fremont, California 94538, USA  
888.365.6283 | [www.surecall.com](http://www.surecall.com)

## FCC & IC INFORMATION

Important: Before installing your booster you need to register it with your carrier. You can do so online at the following urls:

**Verizon:** <http://www.verizonwireless.com/wcms/consumer/register-signal-booster.html>

**AT&T:** <https://securec45.securewebsession.com/attsignalbooster.com/>

**T-Mobile:** <https://www.signalboosterregistration.com/>

**Sprint:** [https://www.sprint.com/legal/fcc\\_boosters.html](https://www.sprint.com/legal/fcc_boosters.html)

**U.S. Cellular:** <http://www.uscellular.com/uscellular/support/fcc-booster-registration.jsp>

#### FCC Information:

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.

This device may be operated ONLY in a fixed location for in-building use.

WARNING: E911 location information may not be provided or may be inaccurate for calls served BY USING THIS DEVICE.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

#### Industry Canada:

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following 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

Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

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.

La puissance de sortie nominale indiquée par le fabricant pour cet appareil concerne son fonctionnement avec porteuse unique. Pour des appareils avec porteuses multiples, on doit réduire la valeur nominale de 3,5 dB, surtout si le signal de sortie est retransmis et qu'il peut causer du brouillage aux utilisateurs de bandes adjacentes. Une telle réduction doit porter sur la puissance d'entrée ou sur le gain, et ne doit pas se faire au moyen d'un atténuateur raccordé à la sortie du dispositif

This is a **CONSUMER** device.

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