

# Fusion2Go<sup>™</sup>

Adjustable 2G, 3G, 4G Vehicle Signal Booster Kit



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Thank you for purchasing SureCall's Fusion2Go cell phone signal booster kit. Fusion2Go provides enhanced 2G and 3G voice and 4G data reception and is configurable for any size vehicle.

If you need any assistance during product installation please contact tech support at 1-888-365-6283 or email us at support@surecall.com.

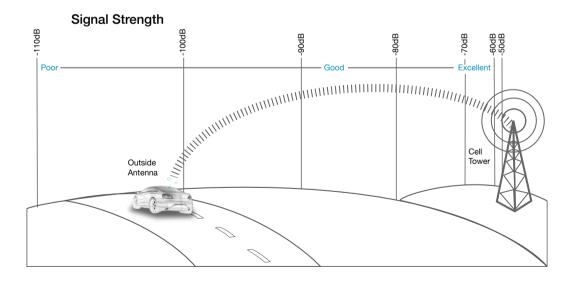
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The SureCall Fusion2Go is a high-quality bidirectional booster that enhances cellular signals for cars, motor homes, and other vehicles.

#### The Fusion2Go works with two antennas:

- An inside antenna that communicates with your cell phone.
- An outside antenna that communicates with the cell tower.

Signals sent from a cell tower are received by the outside antenna, amplified by the booster and then sent to your cell phone via the inside antenna. When your phone transmits, the signal is sent to the inside antenna, and then sent to the cell tower via the outside antenna. A minimum amount of cellular reception is required for the Fusion2Go to work properly. Cellular signal strength is measured in dBm, an abbreviation of the radio power per milliwatt. A minimum of -100 dBm is required. Signal readings usually appear as a negative number (for example, -85). The stronger the signal, the closer it gets to zero. See graph below.



# **Package Contents**

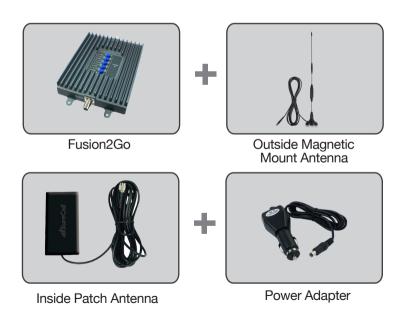
- 1. Unpack all package contents. For missing or damaged items, contact your reseller.
- 2. Turn over the signal booster and record the model and serial number for reference:

| Serial #:      |  |  |
|----------------|--|--|
|                |  |  |
| Purchase Date: |  |  |

3. Keep the carton and packing material to store the product in case you need to return it.

Your Fusion2Go signal booster package includes the following items:

- One SureCall Fusion2Go signal booster
- One magnetic-mount outside antenna with attached cable
- One inside antenna with attached cable
- One DC car charger for vehicle
- Velcro® and screw-mounting kit



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.

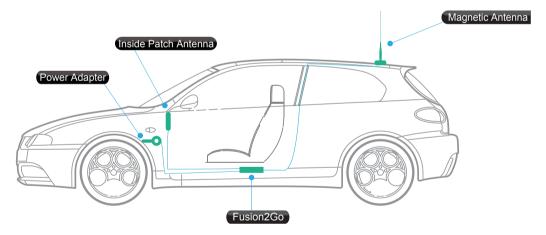
# **Installation Steps:**

### Step 1. Installing your Hardware

Connect the Outside Antenna

- 1. Connect the magnetic outside antenna to the roof of the car in a location that:
  - Is on top of the vehicle
  - Has at least a 12-inch radius clear of obstructions and other radiating elements, such as a radio antenna.
  - Is at least 4-6 feet from the inside antenna.
- Using the supplied cable, connect the outside antenna to the booster connector marked OUTSIDE.
- 3. Run the outside antenna cord across the car's roof and under the front door insulation lining to hide and protect the antenna cable. Wrap up any loose cable
- 4. Hand tighten the connection

Note: The outside antenna must not be collocated or operating with any other antenna or booster.



FCC 27.5 (d)(4) Statement: Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band as well as mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

Pursuant to the latest certification requirement you will need to register your booster. Please go to the link below for your cellular service carrier's registration site.

AT&T: https://securec45.securewebsession.com/attsignalbooster.com/

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

Sprint: http://www.sprint.com/legal/fcc\_boosters.html

T-Mobile: http://support.t-mobile.com/docs/DOC-9827 Click on the "Signal Booster Registration Tool" US Cellular: http://www.uscellular.com/uscellular/support/fcc-booster-registration.isp? requestid=38383

# Installation

### Step 2. Connect the Inside Antenna

- 1. Mount the inside antenna so it is:
  - Within 2-3 feet of the cell phone
  - Mounted on a surface that is at least 4" (10cm) away from metal.
- 2. Using the supplied cable, connect the antenna to the booster connector marked INSIDE
- 3. Hand tighten the connection

## Step 3. Install the Signal Booster

- 1. Mount the booster under the seat of the vehicle, or on the front or middle console of the vehicle. The location you select should:
  - Be away from excessive heat, direct sunlight, or moisture.
  - Provide proper ventilation.

Refer to the illustration on page 7 for the following steps:

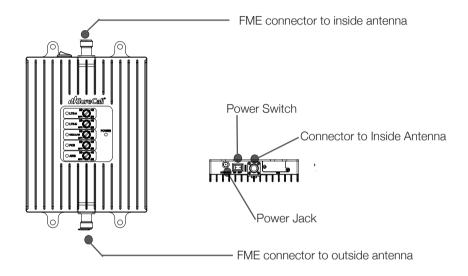
- 2. Connect the outside antenna cable to the signal booster connector marked **OUTSIDE**. Hand-tighten the connection.
- 3. Connect the inside antenna cable to the signal booster connector marked **INSIDE**. Hand-tighten the connection.
- 4. Connect the DC power cord to the signal booster. Once you've connected the DC power cord to the signal booster, connect the plug on the other end of the DC power outlet to the cigarette lighter adapter. Turn the power switch on.
  - The signal booster turns on automatically.
  - The Power LED lights up to show that the signal booster is ready for use.
  - The Alert LEDs flash 5 times on each band to show the band is activated.

Note: The Patch antenna must be at least 20cm away from the phone or cradle that phone is sitting in.

Note: Laboratory tests show that patch antennas can work from as close as 2 ft. from the outside antenna if the patch antenna is facing away from the outside antenna. If the alert lights blink red, showing oscillation, turn the dial of the oscillating band down 3 dBs.

### **Booster Hardware**

The following image shows the key hardware components on the cellullar booster. Refer to this image as you install your Fusion2Go kit components.



# Troubleshooting

In the event you encounter a problem, follow the suggestions below to resolve the issue.

| Problem   | Resolution   |
|---|--|
| Signal booster has no power   | Verify that the booster power switch is turned on.  Make sure the DC power outlet is plugged into the cigarette lighter adapter. If the green POWER LED on the signal booster is OFF, return the power supply to SureCall. Contact tech support at 1-888-365-6283 or support@surecall.com, or go to www.surecall.com and log on to online support to receive a Return Merchandise Authorization. (RMA) |
| After installing your signal booster system, you have no signal or reception. | Double-check all signal booster and antenna cable connections.<br>Be sure your signal booster's dB gain is turned up to at least 40 dB<br>- 45 dB on each dial.  |
| One of the red LEDs next to the dials on your signal booster is flashing red. | Lower the dial above the blinking LED by 5dB (for example, from 50 to 45) and monitor the bars on your cell phone to see whether reception has improved.  Be sure the inside panel antenna is facing away from the outside antenna.  Use the recommended 4-6 feet of antenna separation:   |
| The Alert LEDs Continue to flash  | Each SureCall signal booster is equipped with Auto Shutdown to prevent cell tower interference. The location where your car is parked may be too close to a cell tower. Once away from the original location, turn off and restart the booster.  |
| Solid Yellow Light Resolution   | This is not a problem, it's simply indicating an inactive uplink band. The light will go off automatically when the band is active.  |
| Yellow and red lights are alternately flashing.                               | Oscillation is detected. First try increasing the separation between the indoor and outdoor antennas. If this doesn't eliminate oscillation, lower the dB gain in small dB increments.   |
| Yellow light is flashing.<br>Resolution:                                      | Automatic Gain Control (AGC) is adjusting, this is part of normal operation.   |

| Product Name                    | Fusion2Go   |
|---------------------------------|---|
| Uplink Frequency Range (MHz):   | 698-716 / 776 – 787 / 824-849<br>1850-1915/ 1710-1755 ( G Block included )  |
| Downlink Frequency Range (MHz): | 728-746 / 746 – 757 / 869-894<br>1930-1995 / 2110-2155 ( G Block included ) |
| Input Impedance:                | 50 Ω  |
| Maximum Gain:                   | 50 dB   |
| Noise Figure:                   | 5 dB  |
| VSWR:                           | ≤2.0  |
| Supported Standards:            | CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE and all cellular standards         |
| DC Car Charge                   | 5-15V   |
| Maximum Output Power:           | 1 Watt EIRP   |
| Cable:                          | RG-174  |
| RF Connectors:                  | FME Male (both ends )   |
| Power Consumption:              | <25W  |
| Operation Temperature:          | -4°F to +158°F  |
| Dimensions:                     | 7-7/8" X 5" X 1-3/16"   |
| Weight:                         | 2 LB 3 oz   |
| FCC (USA):                      | RSNMOBILE5  |

# **Kitting Information**

### Vehicle Kit

| Component       | Prod No.<br>Description | Gain/Loss |        |        |         |                 |  |
|-----------------|-------------------------|-----------|--------|--------|---------|-----------------|--|
|                 |                         | LTE-A     | LTE-V  | 800MHz | 1900MHz | 1700MHz\2100MHz |  |
| Outdoor Antenna | SC200W                  | 3dBi      | 3dBi   | 3dBi   | 5dBi    | 5dBi\5dBi       |  |
| Outdoor Cable   | SC174-10FT<br>10Feet    | 3.8dB     | 3.8dB  | 4.3dB  | 8.8dB   | 6.98dB\8.96dB   |  |
| Indoor Antenna  | SC110W                  | 1.1dBi    | 1.1dBi | 1.1dBi | 3dBi    | 3dBi\3dBi       |  |
| Indoor Cable    | SC174-10FT<br>10Feet    | 3.8dB     | 3.8dB  | 4.3dB  | 8.8dB   | 6.98dB\8.96dB   |  |

**Note:** Due to the recent change of our company name from Cellphone-Mate (CM) to SureCall (SC) we have changed the prefix on all of our antennas, cables and accessories from CM to SC-.

# Warranty

#### Marine Kit

| Component       | Prod No.                   | Gain/Loss       |                 |        |        |                |                         |
|-----------------|----------------------------|-----------------|-----------------|--------|--------|----------------|-------------------------|
| Component       | Description                | <b>cription</b> | 1700MHz\2100MHz | Notes  |        |                |                         |
| Outdoor Antenna | SC288W<br>or Galaxy 5412-P | 3dBi            | 3dBi            | 3dBi   | 4dBi   | 4dBi\4dBi      |                         |
| Outdoor Cable   | SC240-40FN<br>40Feet       | 3.52dB          | 3.52dB          | 3.98dB | 6.52dB | 6.12dB\6.92dB  |                         |
| Indoor Antenna  | SC248W                     | 7dBi            | 7dBi            | 7dBi   | 10dBi  | 10dBi\10dBi    | Wall Mounted<br>Antenna |
| Indoor Cable    | SC240-20FN<br>20Feet       | 2.06dB          | 2.06dB          | 2.29dB | 3.56dB | 3.36dB\ 3.76dB |                         |

<sup>\*</sup>All equivalent antennas and cables are suitable for use with the Fusion2Go booster.

### Desktop or RV Kit

| Component Prod No.<br>Description | Prod No.             | Gain/Loss |        |         |                 |               | Notes                |
|-----------------------------------|----------------------|-----------|--------|---------|-----------------|---------------|----------------------|
|                                   | LTE-A                | LTE-V     | 800MHz | 1900MHz | 1700MHz\2100MHz | Notes         |                      |
| Outdoor Antenna                   | SC288W               | 3dBi      | 3dBi   | 3dBi    | 4dBi            | 4dBi\4dBi     |                      |
| Outdoor Cable                     | SC240-40FN<br>40Feet | 3.52dB    | 3.52dB | 3.98dB  | 6.52dB          | 6.12dB\6.92dB |                      |
| Indoor Antenna                    | SC120W               | 1.2dBi    | 1.2dBi | 1.2dBi  | 3dBi            | 3dBi\3dBi     | Table Top<br>Antenna |

<sup>\*</sup>All equivalent antennas and cables are suitable for use with the Fusion2Go booster.

### **Three-Year Product Warranty**

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.

SAFETY 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.

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

48346 Milmont Drive Fremont, California 94538 USA 888.365.6283 Fax: 510.996.7250 www.surecall.com

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. © 2014. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.

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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.

FCC 27.50(d)(4) Statement: Fixed, mobile and portable (hand-held) stations operating in the 1720-1755 MHz band are limited 1 Watt EIRP. Fixed stations operating in this band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in this band must employ a means for limiting power to the minimum necessary for successful communications.