

# Fusion2Go® XR Fleet

5G Cell Signal Booster for Professional Vehicles

## **User Manual**







Thank you for purchasing SureCall's Fusion2Go XR Fleet cell phone signal booster kit. Fusion2Go XR Fleet provides seamless 5G, 4G and LTE connectivity for any vehicle.

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



Please note: This product is designed for professional installation as the antenna is mounted securely through a hole drilled into the vehicle's sheet metal.

A "soft installation" should first be performed by assembling the NMO antenna and routing the cable through an open window. After completing the remaining installation steps and successful operation is verified, proceed with final installation.

#### **Table of Contents**

INTRODUCTION	
How It Works	
Package Contents	4
INSTALLATION	
Step 1: Mount Outside Antenna	
Step 2. Install the Inside Patch Antenna	6
Step 3. Place Booster and Connect Cables	6
Step 4. Connect Power	
Verify Your System is Working	8
'POWER' LED	
Troubleshooting	8
SPECIFICATIONS	
Antenna Kitting Information	
CONSUMER GUIDELINES	. 12
THREE-YEAR PRODUCT WARRANTY	13

#### INTRODUCTION

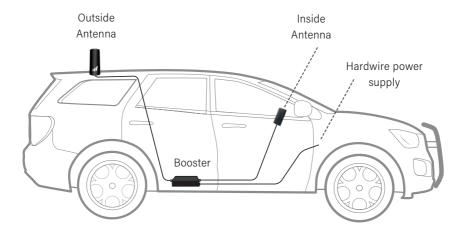
#### **How It Works**

The SureCall Fusion2Go XR Fleet is a high-quality bidirectional booster that enhances cellular signals for vehicles.

The Fusion2Go XR Fleet 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.



Quickly optimize your antenna separation with the 'SureCall' mobile app that is available in the Google Play or Apple's App Store

## **Package Contents**

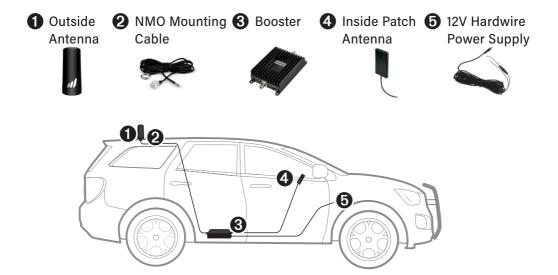
- Unpack all package contents. For missing or damaged items, contact your reseller.
- Turn over the signal booster and record the model and serial number for reference:

Serial #: _		 	 	_
Purchase [	Date:			

Your Fusion2Go XR Fleet signal booster package includes the following items:

- Outside non-magnetic NMO antenna
- 2 NMO mounting cable
- 3 SureCall Fusion2Go XR signal booster
- 4 Inside patch antenna
- **5** 12v Hardwire power supply

Fusion2Go XR Fleet is also compatible with SureCall's AC adapter power cable (5.9V/2.8A) for added versatility. Part # SC-AC-59V28A-B.



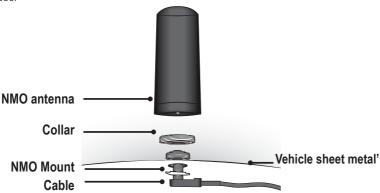
#### INSTALLATION

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

Identify a location on the vehicle's roof that (1) has at least a 12-inch radius clear of obstructions and other radiating elements, such as a radio antenna and (2) at least 6 inches away from any windows.

Using a drill with a 3/8" hole saw bit, drill hole in the center of the desired location. Remove the metal collar from the connector and insert the NMO mounting cable through the hole. (see illustration).

Position threads of the cable mount to extend through the center of drilled hole and above vehicle surface.

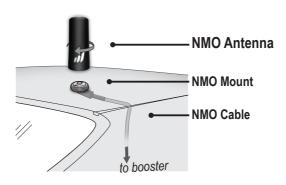


Screw the collar to the base mount, ensuring the mount is centered and tighten with a wrench. Next, thoroughly clean the mounting area before screwing the antenna onto the NMO mount. Ensure full contact of the antenna to the vehicle surface.

Note: Optionally, vehicle-specific antenna brackets are also available, which allow for no-hole mounting of the NMO antenna on a variety of pickup trucks, SUVs and OTR vehicles.

Once the antenna installation is complete, route the NMO antenna cable inside the vehicle. To hide the cable, run under headliner and trim to the desired booster location on the floor of the vehicle.

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



## Step 2. Install the Inside Patch Antenna

Identify a location for the inside antenna on or near your front dashboard that is

- 1. Within 2-3 feet of the typical cell phone location
- 2. At least 8 inches (20cm) from cellular devices and
- 3. At least 4 inches (10cm) from metal

Next, peel Velcro backing and apply to a clean dry surface in your chosen location.

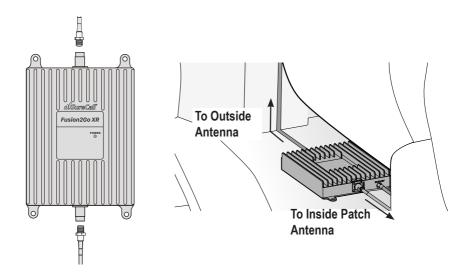
Or try this - Use the free vent clip provided with your product as a mounting surface then simply clip to an air vent.



## **Step 3. Place Booster and Connect Cables**

Select a well-ventilated location for the booster that is away from excessive heat, direct sunlight, and moisture. We suggest installing beneath a seat or within the front or center console.

Connect the cable from the outside antenna to the connection marked OUTSIDE and connect the cable from inside patch antenna to the connection marked INSIDE. Tighten the connections and wrap up any loose cable.

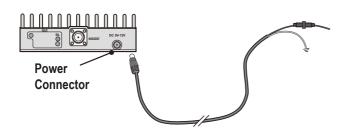


#### **Step 4. Connect Power**

Before and while wiring the power supply, disconnect vehicle battery. Hardwire installation requirements vary by vehicle. The following is only a general guide. Check with your manufacturer's vehicle for specific electrical placement or requirements.

Locate a +12V accessory ("ACC") wire that will switch on and off with the ignition. Connect to the power source and ground.

Once connections are complete, verify operation by connecting the DC power cord connector to the signal booster. The Power LED will briefly flash YELLOW/ RED to indicate it is receiving power and is ready for use. Secure power cable.



## **Verify Your System is Working**

Place a call in a location where you previously experienced poor cell service and confirm that your phone is receiving a boosted signal.

To improve performance, antenna adjustments may be needed. Review the following potential causes:

- Verify the two antennas have sufficient separation/isolation from the other another.
- Verify the outside antenna has sufficient clearance above any metal objects and has at least 12 inch radius from other radiating elements, such as a radio antenna.

Note that the booster case may become warm during operation. This is normal.

#### 'POWER' LED

During initialization, the LED will briefly flash YELLOW/RED. This is part of normal operation. Place a call in a location you have previously experienced poor signal and confirm that your phone is receiving a boosted signal. Normal operation is indicated a GREEN LEDs. In the event RED LEDs appear, antenna adjustments may be needed.

LED State	Status	Indication
Solid GREEN	Normal	Normal
Solid RED	Alert – Oscillation detected	Indicates that oscillation has caused the booster to shut off.  Antenna repositioning is needed. Verify that there is sufficient separation between the outside and inside antennas, as well as any potentially interfering objects or antennas.

## **Troubleshooting**

Problem	Resolution				
Signal booster has	Verify that the Power LED is ON.				
no power	Connect the power supply to an alternate power source.				
	Verify that the power source is operational and the fuse is intact.				
	If it remains OFF, contact tech support at: 1-888-365-6283 or				
	support@surecall.com				
After completing	Verify that cable connections are tightly fitted to the booster.				
installation, signal	Try further separating the antennas.				
has not Improved	① Note: 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.				

## **SPECIFICATIONS**

Product	Fusion2Go XR Fleet
Uplink Frequency Range (MHz):	698-716 / 776-787 / 824-849 / 1850-1915 / 1710-1780
Downlink Frequency Range (MHz):	728-746 / 746-757 / 869-894 / 1930-1995 / 2110-2180
Supported Standards:	5G, 4G LTE cellular standards
Cellular Bands:	12 / 17 / 13 / 5 / 2 / 25 / 4
Input / Output Impedance:	50 Ω
Maximum Gain:	50 dB
Gain Adjustment:	20 dB (Automatic)
Maximum Uplink Power	29.0 dBm
VWSR:	≤ 2.0
DC Power:	6-15V
Maximum Output Power:	1 Watt EIRP
Exterior Cable:	LMR 200 / 15 ft
Interior Cable:	302 series / 10 ft
RF Connectors:	FME Male (both ends)
Power Consumption:	≤ 12W
Operation Temperature:	-4° to +158° F
Dimensions:	5.625 x 4 x 1.125 inches
Weight:	1.43 lbs
Certification:	FCC: RSN-FUSION2G05G (Fusion2Go 5G) Contains FCC ID: XPYNINAB1

WARNING: The booster is rated for 5-15V input voltage. DO NOT use the booster with a higher voltage power supply. This can damage the booster and/or cause personal injury.

## **Antenna Kitting Information**

		Gain / Loss (dBi / dB)						
Component	Prod No. Description	LTE-A	LTE-V	800 MHz	1900 MHz	1700 MHz	2100 MHz	
Vehicle (Integrate	ed cable)							
Inside Antenna and Cable	SC-110W and SC-174 (10 ft)	-2.7	-2.7	-3.2	-5.8	-3.98	-5.96	
	SC-111W and 302-3 (10 ft)	1.8	1.8	2	3.5	2.2	3	
Outside Antenna and Cable	SC209W and LMR100 (12.5 ft)	1.58	1.58	2.58	2.48	2.30	2.20	
	SC-550W and RG-58U (10 ft)	1.3	1.3	1	0.7	0.8	0.5	
	SC-550W-1 and RG-58U (15 ft)	0.7	0.7	0.3	-0.5	-0.2	-0.9	
	SC-200W and SC-174 (10 ft)	-2.3	-2.3	-2.3	-5.8	-3.98	-5.96	
	SC-203WN and RG-58U (17 ft)	1.3	1.2	1	1.6	1.7	0.1	
	SC-208W and 302-3 (12.5 ft)	-0.95	0	1	1.5	0.3	-0.3	

<sup>\*</sup>All equivalent antennas and cables are suitable for use with the Fusion2Go 5G

		Gain / Loss (dBi / dB)					
Component	Prod No. Description	LTE-A	LTE-V	800 MHz	1900 MHz	1700 MHz	2100 MHz
Marine (Non-integrated cable)							
Inside Antenna	SC548W	5	5	6	7	7	7
	SC302W	2.5	2.5	3	5	4	5
Inside Cable	SC240-20FN (20 ft)	-2.06	-2.06	-2.29	-3.56	-3.36	-3.76
Outside Antenna	Galaxy 5412-P	3	3	3	4	4	4
	SC588W	3	3	3	4	4	4
Outside Cable	SC240-40FN (40 ft)	-3.52	-3.52	-3.98	-6.52	-6.12	-6.92
	SC240-20FN (20 ft)	-2.06	-2.06	-2.29	-3.56	-3.36	-3.76
Desktop / RV (Non-integrated cable)							
Inside Antenna	SC120W	1.2	1.2	1.2	3	3	3
Inside Cable	SC240-40FN (40 ft)	-3.52	-3.52	-3.98	-6.52	-6.12	-6.92
Outside Antenna	SC588W	3	3	3	4	4	4
Outside Cable	SC240-40FN (40 ft)	-3.52	-3.52	-3.98	-6.52	-6.12	-6.92

<sup>\*</sup>All equivalent antennas and cables are suitable for use with the Fusion2Go 5G

	PreAGC			PreAGC			
	Pulse GSM			4.1 MHz AWGN			
Frequency (MHz)	Input (dBm)	Output (dBm)	Gain (dB)	Input (dBm)	Output (dBm)	Gain (dB)	
Uplink: 698-716	-21.9	26.4	48.3	-22.1	25.0	47.1	
Uplink: 777-787	-20.2	27.5	47.7	-20.7	25.7	46.4	
Uplink: 824-849	-19.5	26.6	46.1	-19.1	25.2	44.3	
Uplink: 1710-1755	-20.6	25.8	46.4	-20.2	25.0	45.2	
Uplink: 1850-1915	-19.4	25.9	45.3	-18.2	25.2	43.4	
Downlink: 728-746	-41.0	4.8	45.8	-42.8	2.9	45.7	
Downlink: 746-757	-43.5	3.3	46.8	-45.1	1.5	46.6	
Downlink: 869-894	-43.4	3.7	47.1	-44.2	2.2	46.4	
Downlink: 2110-2155	-39.6	5.7	45.3	-41.8	3.8	45.6	
Downlink: 1930-1995	-39.8	5.3	45.1	-41.4	3.7	45.1	

#### CONSUMER GUIDELINES

#### 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.

Register your cellular booster with your wireless carrier 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://support.t-mobile.com/docs/DOC-9827 Sprint: https://www.sprint.com/legal/fcc\_boosters.html

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

FCC 15.105 Statement 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.

**15.19** This device complies with Part 15 of the FCC Rules. 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.

**Warning:** Unauthorized antennas cables and/or coupling devices are prohibited by FCC rules. Please contact FCC for details 1-888-CALL-FCC. The antenna, cables, and other accessories of the booster kits shall not be modified without the approval of the Cellphone-Mate Inc., otherwise it shall deemed invalid.

FCC 27.50(d)(4): 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.

When used with any mobile device utilizing the 1710-1755 MHz band, the FCC limits booster equipment placement to a maximum of 10 meters above ground level. Installation of this equipment which does not comply with federal requirements may subject the owner to FCC enforcement action.

#### THREE-YEAR PRODUCT WARRANTY

#### Register at www.surecall.com/activate

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.

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.

© 2024. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.

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