SureCall®
RAISE YOUR BARS

Fusion2Go™ 3.0 NMO

Vehicle Voice and 4G Data Signal Booster

User Manual

05.16.2019

Thank you for purchasing SureCall's Fusion2Go 3.0 cell phone signal booster kit. Fusion2Go 3.0 NMO provides enhanced voice, text and 4G data signal 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 permanently 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 permanent installation.

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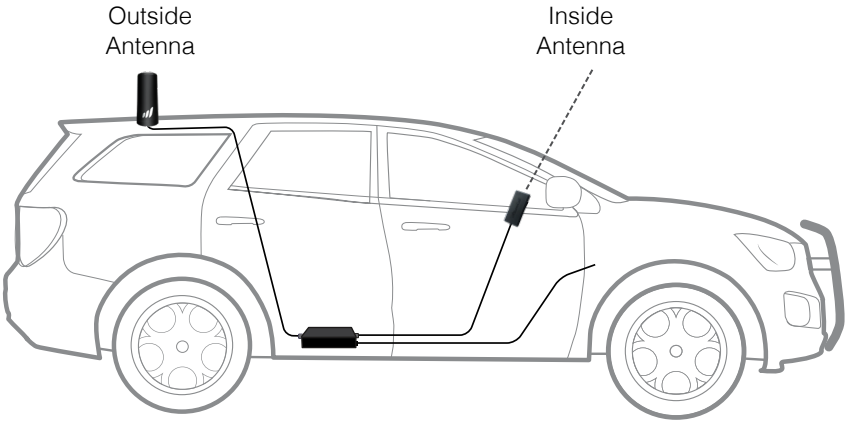
How It Works

The SureCall Fusion2Go 3.0 NMO is a high-quality bidirectional booster that enhances cellular signals for vehicles.

The Fusion2Go 3.0 NMO 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.



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: _____

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

Your Fusion2Go 3.0 NMO signal booster package includes the following items:

1. One SureCall Fusion2Go 3.0 signal booster
2. 12v Hardwire power supply
3. One inside patch antenna
4. One outside non magnetic NMO antenna
5. NMO mounting cable

One free magnetic vent clip

1. Fusion2Go 3.0 Amplifier

2. 12v Power Supply

3. Inside Patch Antenna

4. Outside NMO Antenna

5. NMO Mounting Cable

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 3/4" 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).

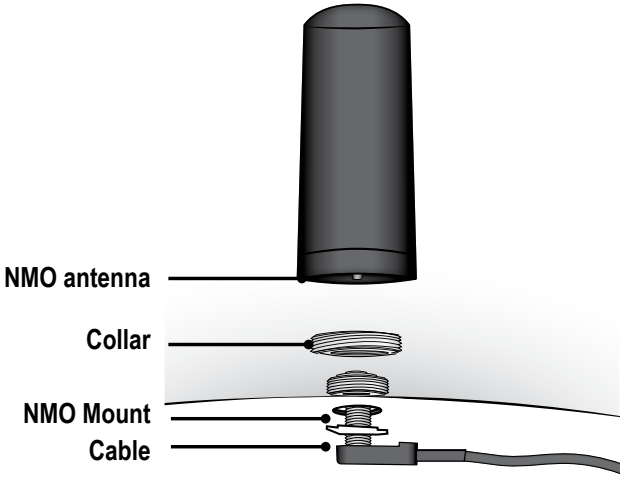
Position threads of the cable mount to extend through the center of drilled hole and above vehicle surface.

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

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.

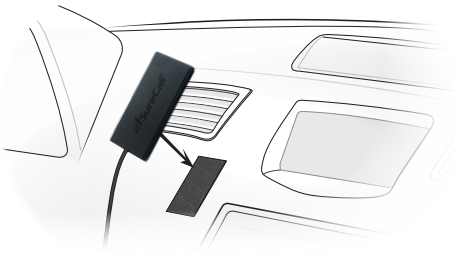
Note: The outside antenna must not be collocated or operating with any other antenna or booster.



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



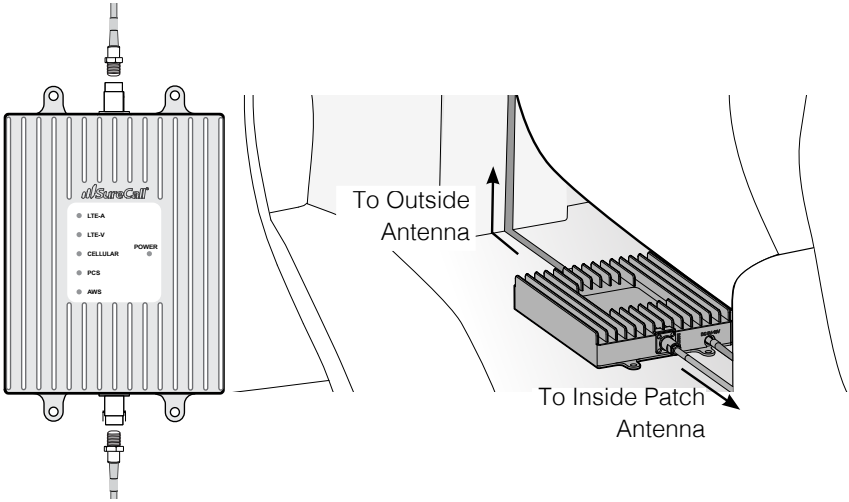
Next, peel Velcro backing and apply to a clean dry surface in your chosen location.

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 often suggest installing beneath a seat or within the front 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.

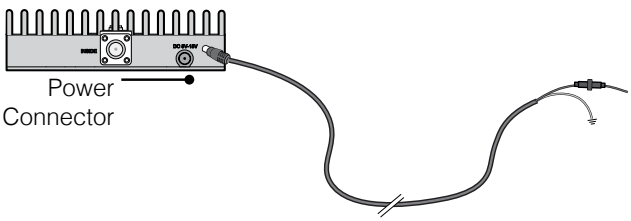
Once connections are complete, verify operation by connecting the DC power cord connector to the signal booster. The Power LED on the signal booster will illuminate to indicate it is receiving power and is ready for use. Permanently secure power cable.

Connect the power cord connector to the signal booster and insert the other end into your cigarette lighter adapter[1].

The Power LED illuminates to show that the signal booster is ready for use. The Alert LEDs flash 5 times to show the frequency band is operational.

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

[1] 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.



LED Indicators

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 by Green LEDs (both flashing and solid). In the event Red LEDs appear, antenna adjustments may be needed.

Color	Condition	Indication
Green	Solid	Indicates normal operation.
Green	Flashing	Normal operation. Indicates that Automatic Gain Control (AGC) is self-adjusting due to over-signal or antenna proximity.
Red	Flashing	Indicates issues caused by overpowering or oscillation. Adjustment of your outside antenna placement is likely needed. Verify that it has sufficient separation from the inside antenna, as well as, any potentially interfering objects or antennas

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

Troubleshooting

Problem	Resolution
Signal booster has no power	1. Verify that the Power LED is ON. 2. Connect the power supply to an alternate power source. 3. Verify that the power source is operational and the fuse is intact. 4. If it remains OFF, contact tech support at: 1-888-365-6283 or support@surecall.com
After completing installation, signal has not Improved	Verify that cable connections are tightly fitted to the booster. Try further separating the antennas. ⓘ 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.

* 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.

Specifications

Product	**Fusion2Go 3.0 NMO**	
Uplink Frequency Range (MHz):	698-716 / 776-787 / 824-849 / 1850-1915 / 1710-1755 (G Block Included)	
Downlink Frequency Range (MHz):	728-746 / 746-757 / 869-894 / 1930-1995 / 2110-2155 (G Block Included)	
Input / Output Impedance:	50 Ω	
Maximum Gain:	50 dB	
Gain Adjustment:	20 dB (Automatic)	
Maximum Uplink Power	29.0 dBm	
Noise Figure:	≤ 5 dB	
VWSR:	≤ 2.0	
Supported Standards:	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE and all cellular standards	
DC Power:	6-15V	
Maximum Output Power:	1 Watt EIRP	
Cable:	SC-174 / RG-58U	
RF Connectors:	FME Male (both ends)	
Power Consumption:	≤ 10W	
Operation Temperature:	-4° to +158° F	
Dimensions:	5.625 x 4 x 1.125 inches	
Weight:	1.43 lbs	
Certification:	FCC ID: RSNF2GO3 (Fusion2Go 3.0)	IC: 7784A-F2GO3 (Fusion2Go 3.0 v2)

Note: The term “IC” before the radio certification number only signifies that Industry Canada technical specifications were met.

Antenna Kitting Information

Component	Prod No. Description	Gain				
		LTE-A	LTE-V	800 MHz	1900 MHz	1700 MHz / 2100 MHz
Vehicle						
Outdoor Antenna and Cable	SC-203WN and RG-58U (17 ft)	1.3 dB	1.2 dB	1.0 dB	1.6 dB	1.7 / 0.1 dB
Outdoor Antenna and Cable	SC-208W and SC174-12.5 ft (12.5 ft)	-3.16 dB	-5.15 dB	-5.65 dB	-2.85 dB	-3.34 dB / NG
Outdoor Antenna and Cable	SC200W and SC174-10 ft (10 ft)	-2.3 dB	-2.3 dB	-2.3 dB	-5.8 dB	-3.98 / -5.96 dB
Indoor Antenna and Cable	SC110W and SC174-10 ft (10 ft)	-2.7 dB	-2.7 dB	-3.2 dB	-5.8 dB	-3.98 / -5.96 dB

*All equivalent antennas and cables are suitable for use with the Fusion2Go 3.0

Component	Prod No. Description	Gain				
		LTE-A	LTE-V	800 MHz	1900 MHz	1700 MHz / 2100 MHz
Marine						
Outdoor Antenna and Cable	SC288W or Galaxy 5412-P and SC240-40FN (40 ft)	-0.52 dB	-0.52 dB	-0.98 dB	-2.52 dB	-2.12 / -2.92 dB
Indoor Antenna and Cable	SC248W Panel and SC240-20FN (20 ft)	4.94 dB	4.94 dB	4.71 dB	6.44 dB	6.64 / 6.24 dB
Indoor Antenna and Cable	SC302W and SC240-20FN (20 ft)	0.44 dB	0.44 dB	0.71 dB	1.44 dB	0.64 / 1.24 dB
Desktop / RV						
Outdoor Antenna and Cable	SC288W and SC240-40FN (40 ft)	-0.52 dB	-0.52 dB	-0.98 dB	-2.52 dB	-2.12 / -2.92 dB
Indoor Antenna	SC120W whip	1.2 dB	1.2 dB	1.2 dB	3 dB	3 / 3 dB
Indoor Antenna and Cable	SC302W and SC240-20FN (20 ft)	0.44 dB	0.44 dB	0.71 dB	1.44 dB	0.64 / 1.24 dB

*All equivalent antennas and cables are suitable for use with the Fusion2Go 3.0

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

* **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.
  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.

	PreAGC			PreAGC		
	Pulse GSM			4.1 MHz AWGN		
Frequency (MHz)	Input (dBm)	Output (dBm)	Gain (dB)	Input (dBm)	Output (dBm)	Gain (dB)
Uplink: 1710-1755	-27.2	20.0	47.2	-25.3	20.7	46.0
Uplink: 1850-1915	-25.6	20.9	46.5	-25.9	19.6	45.5
Uplink: 824-849	-25.3	22.3	47.6	-21.7	25.6	47.3
Uplink: 698-716	-24.1	28.0	47.1	-20.1	26.6	46.7
Uplink: 777-787	-21.3	25.6	46.9	-20.5	25.9	46.4
Downlink: 2110-2155	-48.5	-3.7	44.8	-49.4	-4.5	44.9
Downlink: 1930-1995	-45.7	1.0	46.7	-46.7	0.2	46.9
Downlink: 869-894	-51.1	-5.5	45.6	-51.6	-5.8	45.8
Downlink: 728-746	-48.0	-0.3	47.7	-48.4	-1.8	46.6
Downlink: 746-757	-49.4	-2.8	46.6	-50.9	-4.3	40.6

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.

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.

In Canada, **BEFORE USE** you must meet all requirements set out in ISED CPC-2-1-05[1]

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 operation of this device immediately if requested by the FCC (or ISED in Canada) 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.

Ce produit est un appareil de CONSOMMATION

AVANT DE L'UTILISER, vous **DEVEZ ENREGISTRER CE DISPOSITIF** auprès de votre fournisseur de services cellulaires et obtenir son consentement. La plupart des fournisseurs de services cellulaires autorisent l'utilisation d'amplificateurs de signal. Il se peut que certains fournisseurs n'autorisent pas l'utilisation de ce dispositif sur leur réseau. Si vous n'êtes pas sûr, contactez-le.

Au Canada, **AVANT DE L'UTILISER** vous devez répondre à toutes les exigences ISED CPC-2-1-05[2]

Vous DEVEZ utiliser ce dispositif avec les antennes et les câbles autorisés, tel que le spécifie le fabricant. Les antennes DOIVENT être installées à au moins 20 cm (8 po) (NE DOIVENT PAS être installées à moins de 20 cm) de toute personne avoisinante.

Vous DEVEZ arrêter cet appareil immédiatement à la demande de la FCC (ISED au Canada) ou de tout fournisseur de services cellulaires autorisé.

AVERTISSEMENT: Il se peut que les informations relatives à la localisation E911 ne soient pas disponibles ou soient inexactes pour les appels qui utilisent cet appareil.

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

CAN ICES-3 (B)/NMB-3(B) (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.

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.

Cet appareillage numérique de la classe B répond a toutes les exigencies de l'interférence canadienne causant des réglements d'équipment. 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 intérference reçue, y compris l'intérference qui peut causer l'opération peu désirée.

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.

1 For details on the requirements specified in ISED CPC-2-1-05, visit: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html
2 Pour plus de détails sur les exigences ISED CPC-2-1-05, reportez-vous au site: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html

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.

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