

# M2M<sup>™</sup>

## Dual-Band 2G-3G Signal Booster Kit User Guide



# Introduction

Thank you for purchasing SureCall's M2M cellular signal booster kit. The M2M was specifically designed to enhance machine-to-machine data by amplifying incoming and outgoing cellular signals for M2M applications. The M2M provides enhanced cellular signals for multi-carrier 2G and 3G data transmission. If you have any questions while installing this kit, please contact tech support at 1-888-365-6283 or email us at: support@surecall.com.

SureCall's M2M is a high-quality bidirectional signal booster that enhances cellular signals to areas that are prone to weak cellular coverage. The M2M works with one antenna and a cable connected to a modem inside the M2M device: The signal is received by the antenna from the cell tower, then amplified and transmitted directly to your wireless modem (in the ATM, lotto machine or other machine-to-machine application) through the cable to the booster. When the modem transmits, The signal is received by the booster, and transmitted to the cell tower through the outside antenna.

## Package Contents:

Your M2M signal booster package includes:

- One SureCall M2M signal booster (SC-SOLO1-15)
- One outside magnetic mount antenna with attached cable for connecting to the booster (SC-200-S-S)
- RG58 cable for connecting the modem to the signal booster
- One power supply
- One FME to SMA adapter

**Note: Data cable for use with a computer to connect to a data card (SMA male to FME female, not included).**

## Unpacking

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 or if you need to return it.

**Warning: Unauthorized antennas, cables, and/or coupling devices are prohibited by FCC new rules. Please contact the FCC for details: 1-888-CALLFCC.**

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

Step 1. Make sure you have positioned the booster close enough to an existing electrical outlet.

## Installing your Hardware

### Connecting the antenna:

Select a location away from walls, trees, hills, and other obstacles that can block or reflect wireless signals (12-inch clear radius is recommended). Attach the magnetic mount antenna to the top of the M2M device on a metallic surface. The best location will be clear of obstacles. Make sure the area under the magnet is clean. Connect the antenna cable to the booster connector marked "OUTSIDE" and hand tighten.

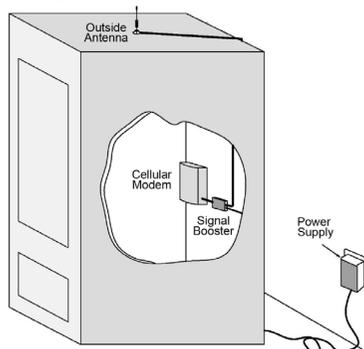
### Connecting the Modem

Connect one end of the RG58 cable to the booster marked "INSIDE" and the other end to a modem or data card cable and tighten connections.

# Installing your Hardware

You can leave the booster on top of a flat surface or use the enclosed Velcro straps to mount it. To prevent damage to the booster, before plugging in the booster to an AC power outlet.

1. Select a location close to a working AC outlet. Do not expose the signal booster to excessive heat, direct sunlight, moisture, and airtight enclosures.
2. Connect the AC power cord to the booster.
3. Connect the outside antenna cable to the signal booster connector marked OUTSIDE. Hand-tighten the connection.
4. Connect the RG58 modem cable to the signal booster connector marked INSIDE. Hand-tighten the connection.
5. Connect the plug on the other end of the 110V AC power outlet.
6. The booster turns on automatically. The LED light will glow indicating that the booster is ready to use.



## Troubleshooting

Problem	Resolution
Signal booster has no power	Make sure the power supply is plugged in. If the power LED is still off, return the power supply to SureCall. Contact SureCall's tech support at 888-365-6283 or @surecall.com, or go to <a href="http://www.surecall.com">www.surecall.com</a> 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.	Verify that all signal booster and antenna cable connections are secure.
Radio or electronic receiver interference	Add additional separation between the booster and these devices

## Specifications

Uplink Frequency Range (MHz):	1850-1910	824-849
Downlink Frequency Range (MHz):	1930-1990	869-894
Supported Standards:	CDMA, GSM, EDVO, EDGE, HSPA	
Maximum Gain:	15 dB	
Noise Figure:	5 dB	
Input/Output Impedance:	50Ω	
VSWR:	≤2.0	
AC Power Transformer	110VAC, 60Hz IN / 5-12V DC OUT	
Maximum Output Power:	1 Watt EIRP	
Cable:	RG58	
RF Connectors:	SMA Female Connectors (both ends)	
Power Consumption:	<10W	
Dimensions:	4-7/8" x 2.75" x 1"	
Weight:	0.57	
FCC ID (USA)	RSNM2M	

## Kitting Information

Component	Product Number Description
Magnetic Mount Antenna	SC-200-S-S
M2M Cable	RG58 (Modem to Booster Cable)

## 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.**

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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.