

EZBoost^a 3G

Home Signal Booster Kit

User Guide



Thank you for your purchase of SureCall's EZBoost 3G cellular signal booster kit. EZBoost 3G was specifically designed to eliminate frustrations over dropped calls, limited range and slow data rates by amplifying incoming and outgoing cellular signals in homes.

EZBoost 3G enhances 2G and 3G voice and reception data for all major U.S. carriers.

If you need any assistance while installing this product please contact tech support at 1-888-365-6283 or email us at: support@surecall.com.

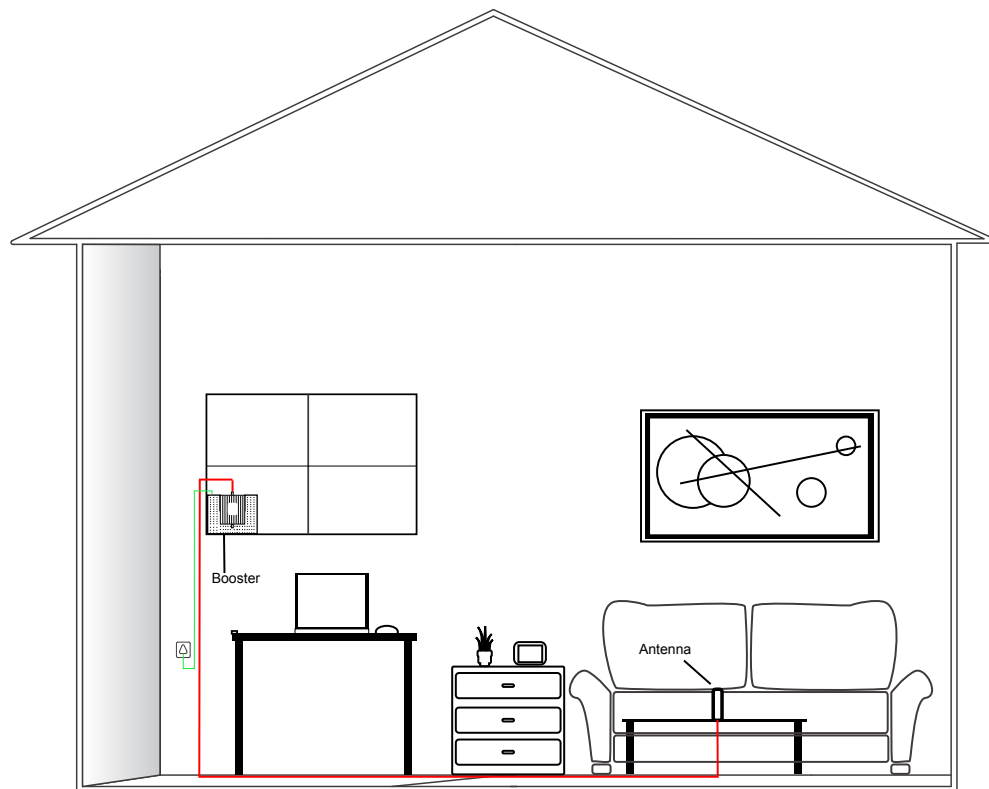
How It Works	Pg. 4
Package Contents	Pg. 5-6
Installing Your Hardware	Pg. 7
Installation Overview	Pg. 7
Finding the Strongest Signal	Pg. 8
Installing the Outside Antenna	Pg. 9-10
Installing the Inside Antenna	Pg. 11-12
Installing Signal Booster	Pg. 13-14
Configure Gain Setting	Pg. 14
Troubleshooting	Pg. 15
Specification	Pg. 17
Warranty	Pg. 18-19
Safety Information	Pg. 19

SureCall's EZBoost 3G is a high-quality bidirectional signal booster that enhances cellular signals to areas that are prone to weak cellular coverage.

EZBoost 3G works with two antennas:

- An inside desktop antenna that communicates with your cell phone.
- An antenna built into the back of the booster that communicates with the cell tower.

Signals sent from a cell tower are received by EZBoost 3G, amplified and then broadcast to your phone via the inside antenna. When your phone transmits, the signal is sent to the inside antenna, amplified and then sent to the cell tower via the EZBoost.



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 EZBoost 3G signal booster package includes the following items:

- One SureCall EZboost 3G signal booster
- One outside antenna
- Cable for connecting the outside antenna to the signal booster
- One inside antenna
- Cable for connecting the inside antenna to the signal booster
- One power supply

EZBoost 3G with built-in SC-303 antenna



SC-302W Desktop Antenna



Indoor Cable SC240-50NN (White)



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.

Step 1. Make sure you have positioned the booster in a window with the strongest signal close enough to an existing electrical outlet.

Step 2. Make sure you have sufficient cable length between proposed inside antenna location and booster connector.

Installation Overview

Step 1. Find the outside area that has the strongest signal. (See page 7 for instruction)

Step 2. Install the inside antenna. (See page 8 for instruction)

Step 3. Mount the signal booster, connect the inside antenna cable to the signal booster, and connect the booster to an AC power source. (See page 9 for instruction)

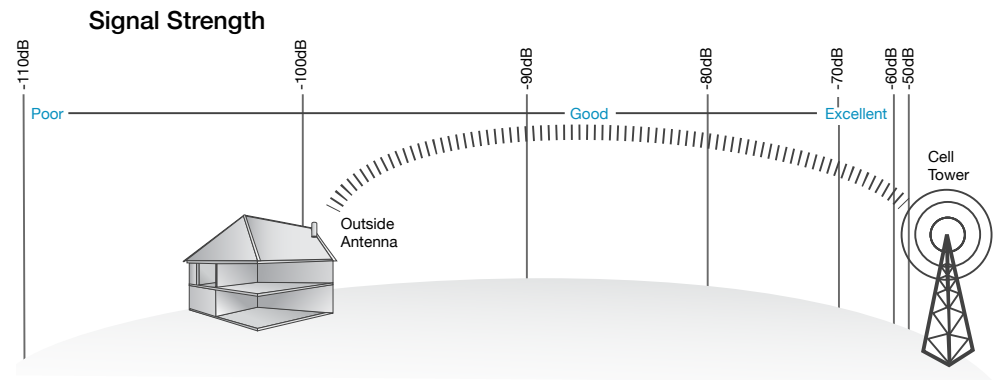
Step 4. Configure gain settings on the signal booster if needed.

Step 1. Find the area with the Strongest Signal

The signal booster requires a minimum cellular signal of low -100 dBm to high -90 dBm. Signal readings usually appear as a negative number (for example, -85). The stronger the EZBoost signal, the closer it gets to zero. Aim for a signal close to -50 dB. Signals stronger than -50 dB may cause the booster to shut down (see the graph below). Before installing the outside antenna, find the area with the strongest cellular signal source from your service provider by following the directions below. You can also go to www.antennasearch.com to find the general location of your carrier’s towers.

Measure the strength of the existing cellular signal in various locations

- Apple iPhones: Dial*3001# 12345#* and press **Call**. In the top-left corner, a number appears instead of bars.
- Android devices: download apps such as “Network Signal Info” in the Google Play store to measure signal strength. Search check real signal strength to find other cell signal measurement apps.
- Internet: go to www.speedtest.net



2. Select a window sill location away from buildings, walls, trees, hills, and other terrain features that can block or reflect wireless signals with the strongest signal.

Note: Where you install your booster in relation to the carrier’s cell phone tower also determines signal strength. Although cell phone carriers try to place towers for maximum coverage, local ordinances and terrain features can restrict tower locations, which can limit signal strength at your location.

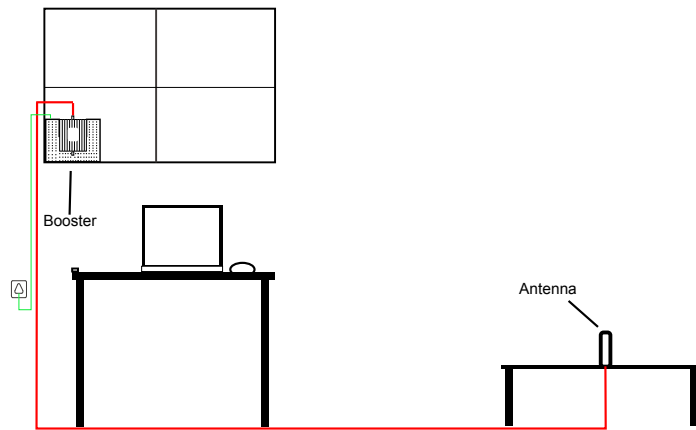
Step 3. Install the Inside Antenna

For areas of 1000 square feet and below allow 30-35 feet of separation between the booster and the desktop antenna.

The range of the antenna is dependent on three factors:

- 1) physical obstructions,
- 2) power generated by booster
- 3) reception from outside signal received and distributed by outside antenna.

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



Warning: Window films that are used to block UV rays also block cellular signals. When using a cellular signal booster with a home comprised of film-coated windows a booster that comes with an outdoor antenna must be used.

Step 4. Install the Signal Booster

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. In areas where there are higher temperatures, install the booster vertically, so air can move between the metal channels on the faceplate.
2. Use supplied screws or appropriate screws for surface of mounting location and drill through screw tabs holes on boosters.
3. Connect the inside antenna cable to the signal booster connector marked **INSIDE** (see page 14). Hand-tighten the connection.
4. Connect the AC power cord to the signal booster.
5. Connect the plug on the other end of the 110V AC power outlet.
6. Turn the booster's 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** LED flash up to 15 seconds on each band to show the band is activated

Note: If the Power LED does not turn ON or the Alert LEDs continue to flash, see Troubleshooting page 11-12.

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.

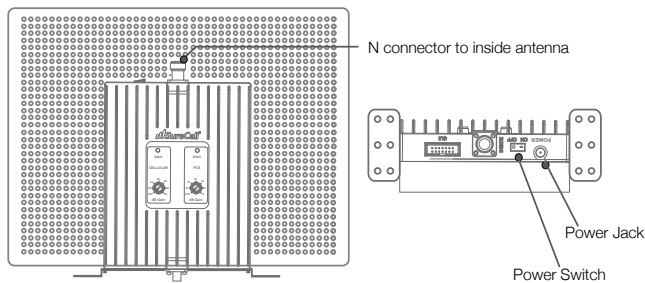
1. The back of the booster should be pointed in the direction of the nearest cell tower. Go to www.antennasearch.com for information.
2. Place the table-top antenna in a central location at least 20 feet from the booster.
3. To set the attenuation value please use the chart below for reference. Distance between antenna and equipment

Distance between antenna and equipment	Attenuation value
10-20 feet	15-20 dB
20-35 feet	10-15 dB
35-50 feet	5-10 dB

4. The equipment must be restarted when attenuation adjustments are completed.

Booster Hardware

The following image shows the key hardware components on the cellular booster. Refer to this image as you install your EZBoost 3G kit components.



Lighting type	Indication
Green light	ON: Power up. OFF: No power.
Yellow light	ON: Uplink inactivity in that band. OFF: Working properly.
Yellow light blinking	Blinking: AGC operating. OFF: Working properly.
Red light blinking	Red light blinking: Shut down due to over-powering. OFF: Working properly.
Red light yellow light alternately blinking	Red light and yellow light blinking: Self-oscillating. OFF: Working properly.

Step 5. Configure Gain Settings

1. Find the PCS and Cellular on the top of the signal booster (See above).
2. Set the dials according to the coverage area and the distance between the indoor antenna and boost.

If you Want to Improve Coverage

- Find a location that receives a stronger signal and relocate the booster to that location.
- Increase the distance between the booster and inside antenna.
- Be sure your signal booster’s dB gain is turned up to maximum gain on each dial.

Warning: Do not adjust the uplink and downlink dB attenuation settings more than 20dB, this could cause the booster to shut down.

Troubleshooting

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

Table 2-1. Troubleshooting Table

Problem	Resolution
Signal booster has no power	Verify that the booster switch is turned on. Connect the power supply to an alternate power source. Be sure the AC outlet is working and is not controlled by a wall switch that can cut power to the outlet. 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.	Check the strength of the outside signal as close as you can to the EZBoost Double-check all signal booster and antenna cable connections. Be sure your signal booster’s dB gain is turned up to full power on each dial.

Problem	Resolution
LED flashing yellow	This means that the Automatic Gain Control (AGC) is adjusting which is part of the boosters normal operation
Red Flashing LED	Signal coming into booster from cellular tower is too strong causing the booster to automatically shut down. There are two possible solutions: 1. Add an inline attenuator to the cable coming into the booster 2. Relocate the EZBoost to a location where the signal is weaker.
Your signal booster restarted and shut down for 15 minutes, and is now shut down permanently.	Each SureCall signal booster is equipped with Auto Shutdown to prevent cell tower interference. The outside antenna may be close to a cell tower. Move the outside antenna to a location that provides sufficient distance from the cell tower to prevent the signal booster from automatically enabling Auto Shutdown. Once away from the original location.
The red LED goes ON.	More antenna separation is needed. If you cannot provide more antenna separation and the Alert LEDs flash after the initial activation period, 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 improves.
The Power LED does not turn ON.	Be sure the AC outlet is working and is not controlled by a wall switch that can cut power to the outlet.
Yellow/Red Flashing LED	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 5dB increments.
The Alert LEDs continue to flash.	The signal booster shuts down automatically, and then restarts after 60 seconds. Turn down the PCS or Cellular dial that is oscillating to prevent the signal booster from shutting down automatically. This may indicate that additional antenna separation is needed.
Your signal booster has no power.	Verify that the switch on the power supply is turned on and Green LED is ON. 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 1-888-365-6283 or support@surecall.com, or go to www.surecall.com and log on to online support to receive an RMA.

Specification	EZBoost 3G
Uplink Frequency Range (MHz):	824-849 / 1850-1910
Downlink Frequency Range (MHz):	869-894 / 1930-1990
Supported Standards:	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE and all cellular standards
Input/Output Impedance:	50 ohm
Maximum Gain:	65dB-Cellular / 72dB- PCS
Noise Figure:	7dB
VSWR:	≤2.0
AC Input:	110V
Maximum Output Power:	1 Watt EIRP
Cable:	SC-240-50NN
RF Connectors:	N Female (both ends)
Power Consumption:	<10W
Dimensions:	9" x 11.375" x 2.5"
Weight:	2 lbs 5 oz
FCC ID:	RSNEZBOOST

Kitting Information

Component	Product Number	Gain / Loss		Note
		800 MHz	1900 MHz	
Built-in Outside Antennas*	SC-303	5 dBi	8 dBi	
Indoor Antenna*	SC-302W	3 dBi	5 dBi	
Inside Cable*	SC-240-50NN 50 Feet	4.83 dB	8 dB	50 Feet or longer

*All equivalent antennas and cables are suitable for use with the EZBoost booster.

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-.

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.

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.

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.

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

48346 Millmont 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.

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.

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.