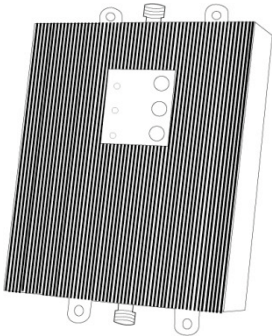


# Tri-Band Wireless Adjustable Signal Booster



3G – 4G Multi-use Signal Booster Kit  
TRIFLEX-2GO-V for Verizon 2G thru 4G  
(TRIFLEX-2GO-V)

## User Guide

TRIFLEX-2GO-V MULTIUSE KITS

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## **Congratulations on purchasing the SureCall TriFlex-2Go-V kit for 2G-3G, all carriers, and 4G LTE for Verizon, the finest multi-use cellular signal booster available!**

SureCall adjustable cellular boosters and kits from Cellphone-Mate remove the frustration over dropped calls, limited range, and slow data rates by amplifying incoming and outgoing cellular signals in buildings, offices, and homes. The TriFlex-2Go-V is designed with leading-edge technologies to detect and amplify weak incoming signals your cellular device would otherwise miss and to broadcast a significantly stronger signal back to the cell tower.

This guide contains all the information you need to get your SureCall TriFlex-2Go-V booster system up and running.

### **Principles of Operation**

The SureCall TriFlex-2Go-V is a high-quality bidirectional signal booster that boosts cellular signals for cars, watercraft, motorhomes (RVs), and desktop use. The TriFlex-2Go-V 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 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.

Some cell signal is required for the TriFlex-2Go-V to enhance cellular signal coverage. The weakest cell signal for the TriFlex-2Go-V to work is low -100dBm to high -90dBm. dBm is an abbreviation for the power ratio in decibels of the radio power per one milliwatt.

To measure your existing cell signal on an Apple iPhone, dial **\*3001#12345#\*** and press **Call**. In the top-left corner, a number appears instead of bars.

For Android devices, you can download several apps to measure exact signal strength. Look up **check real signal strength** to find a cell signal measurement app.

## SureCall TriFlex-2Go-V Packages

### TriFlex-2Go-V Antenna Kitting Information

#### Vehicle Kit

| Component             | Product Number/<br>Description | Gain/Loss                             | Notes          |
|-----------------------|--------------------------------|---------------------------------------|----------------|
| Outdoor antenna*      | CM200                          | 5 dBi                                 | Cable attached |
| Coax cable, CM174*    | 10 feet                        | 2.8 dB/4.9 dB at<br>Cellular/PCS band |                |
| Indoor patch antenna* | CM110W                         | 3 dBi                                 | Cable attached |
| Coax cable CM174*     | 10 feet                        | 2.8 dB/4.9 dB at<br>Cellular/PCS band |                |

#### Marine Kit

| Component             | Product Number/<br>Description | Gain/Loss                                  | Notes                                   |
|-----------------------|--------------------------------|--|---|
| Outdoor antenna*      | CM288W<br>Galaxy 5412-P        | 3 dBi<br>3 dBi                             | Sold in Shakespeare®<br>Aura Marine Kit |
| CM240 cable*          | CM004-40FN (40 feet)           | -3.9 dB at 800 MHz<br>-6.0 dB at 1900 MHz  |   |
| Indoor panel antenna* | CM248W                         | 7 dB at 800 MHz<br>10 dB at 1900 MHz       |   |
| CM240 cable*          | CM004-20FN (20 feet)           | -1.95 dB at 800 MHz<br>-3.0 dB at 1900 MHz |   |

#### Desktop/RV Kit

| Component                   | Product Number/ Description | Gain/Loss                                       |
|-----------------------------|-----------------------------|---|
| Outdoor antenna*            | CM288W                      | 3 dBi   |
| CM240 cable, outdoor side.* | CM004-40FN (40 feet)        | -3.9 dB at cellular band<br>-6.0 dB at PCS band |
| Right angle antenna*        | CM120                       | 3 dBi   |

\* All equivalent antennas and cables are suitable for use with the TriFlex-2Go-V booster.

**Note:** For the signal booster to work, the following items are required:

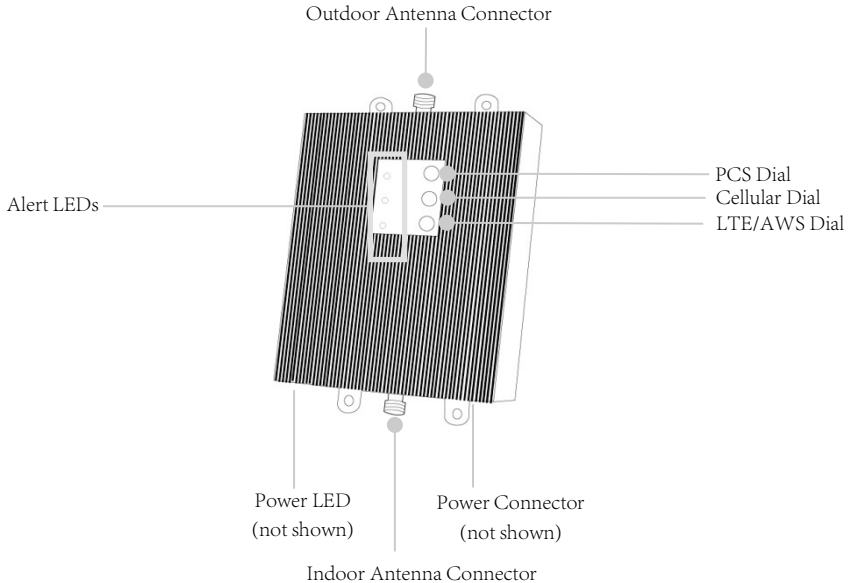
- × Outside antenna
- × Cable for connecting the outside antenna to the booster
- × Signal booster
- × Inside antenna
- × Cable for connecting the inside antenna to the booster
- × Power supply
- × DC car charger and 18-foot cord
- × Velcro® and screw-mounting kit
- × Optional: AC power supply to use booster as an indoor desktop system

**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 Cellphone-Mate could void the user's authority to operate the equipment.

## TriFlex-2Go-V Booster Hardware

The following figure shows the key hardware components on the TriFlex-2Go-V signal booster. Refer to this figure as you install your SureCall TriFlex-2Go-V components.



## Package Contents

Unpack all package contents and check for damage. For missing or damaged items, contact your reseller. Keep the carton and packing material to store the product or if you need to return it.

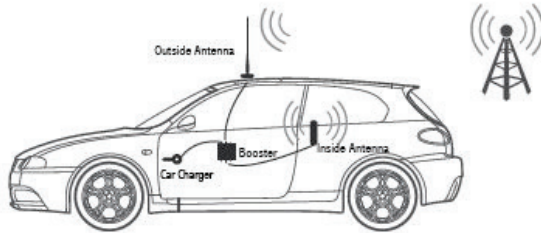
## Site Selection

For optimum performance, select a location for your outside antenna that:

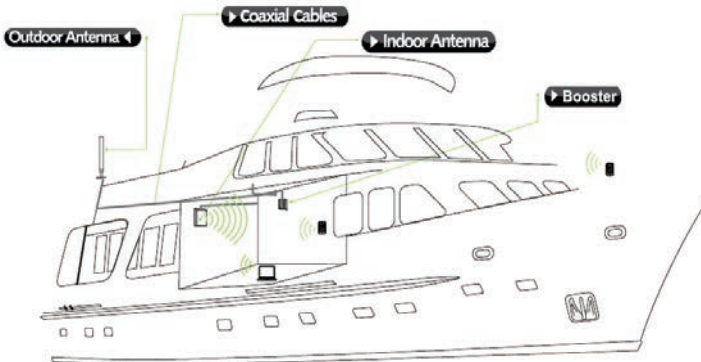
- × Is under the seat of the vehicle, for example.
- × Is away from excessive heat, direct sunlight or moisture.
- × Has proper ventilation.

**Installation Instructions**

The TriFlex-2Go-V booster kit is suited for installation in a vehicle, such as a car, boat, or motorhome, or on a desktop. Refer to the figure below when performing the following procedures.



**Figure 1. Example of Car Installation**



**Figure 2. Example of Marine Installation**

**Step 1. Connect the Outside Antenna**

1. Mount the magnetic antenna in location that:
  - x Is on top of the vehicle.
  - x Has at least a 12-inch radius clear of obstructions and other radiating elements, such as a radio antenna.
  - x Is at least 4-6 feet from the inside antenna.
2. Vehicle/RV installations:
  - a. Using the supplied cable, connect the outside antenna to the booster connector marked **OUTSIDE** (see page 5).
  - b. Run the outside antenna cord under front door insulation lining to hide and protect antenna cable. Wrap up any loose cable.
  - c. Hand tighten the connection.
3. Marine installations for mounting to a mast:
  - a. Use flange mount and suitable hardware. Mount flange mount to a flat, stable location.
  - b. Drill a hole in the middle of the mounting location wide enough in diameter to fit CM288W CM240-M cable connector and cable through.
  - c. Feed the N connector end of the outside antenna cable through ferrule. Then screw the cable connector to the antenna and screw ferrule to antenna base.
  - d. Mount the outside antenna base (screws not provided).

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



**Step 2. Connect the Inside Antenna (Vehicle, Motorhome, and Desktop Installations)**

1. Mount the inside antenna:
  - × Within 2-3 feet of the cell phone for best results.
  - × On a surface that is at least 4 inches (10cm) from metal
2. Using the supplied cable, connect the inside antenna to the booster connector marked **INSIDE** (see page 5).
3. Hand tighten the connection.

**Step 3. Mount the Booster (Optional for Vehicle Installations)**

1. Select a location for your booster, such as under the driver's seat.

**Step 4. Connect to DC Power**

1. Connect the DC power cord to the booster before plugging it in to the cigarette lighter adapter. Verify that all connections to the booster are tight and secure.
2. Turn the power switch on the lighter adapter to the ON position.
  - × The LED light glows, indicating that the booster is ready to use. The booster turns on automatically.
  - × The **Power** LED goes ON to show that the booster is ready for use (see page 5).
  - × If the Power LED does not go ON, be sure the DC outlet and adapter are working.

If the red LED goes ON, it is the result of one or two factors:

1. More antenna separation is needed. Most likely, the easiest way to achieve this is to move the magnetic mount antenna farther to the back of the vehicle away from the inside patch antenna.
2. Your vehicle is too close to a cell tower.

If unable to provide more antenna separation and the Alert LEDs flash after the initial activation period, lower the dial above the blinking LED by 5dBs (for example, from 50 to 40) and monitor the bars on your cell phone to see whether reception has improved.

The booster case may become warm during operation. This is normal.

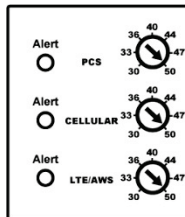
Press any key on your cell phone to refresh communication with the base.

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

**Note:** You can purchase an optional AC power supply if you want to use the booster as an indoor desktop system.

**Step 5. Configure Gain Settings (Marine Installations Only)**

When using the booster in marine installations, set the **PCS**, **Cellular**, and **LTE / AWS** dials on the top of the booster (see page 5) according to the coverage area and distance between the indoor and outdoor antennas. For more information, refer to the Shakespeare® Halo Marine Kit user manuals.



In the unlikely event you encounter a problem, use the following steps to identify and resolve the issue.

| Problem   | Resolution   |
|---|--|
| Booster has no power  | <ol style="list-style-type: none"> <li>1. Verify that the switch on the power supply is turned on and red LED is ON.</li> <li>2. Connect the power supply to an alternate power source.</li> <li>3. Be sure the power source is not controlled by a switch that can remove power from the outlet.</li> <li>4. Check the green POWER LED on the booster. If it is OFF, return the power supply to Cellphone-Mate. Contact tech support at 1-888-365-6283, email support@surecall.com, or go to surecall.com and log on via online support to receive a Return Merchandise Authorization (RMA).</li> </ol>   |
| After installing the booster system, you have no signal or reception.                         | <ol style="list-style-type: none"> <li>1. Check the strength of the outside signal as close as you can to the outside antenna. To measure your existing cell signal:<br/>Apple iPhone: dial *3001#12345#*and press Call. In the top-left corner, a number replaces the bars.<br/>Android devices: download apps to measure exact signal strength, such as Network Signal Info in the Google Play store. Search "check real signal strength" to find other cell signal measurement apps.</li> <li>2. Double-check all booster and antenna cable connections.</li> <li>3. Be sure your booster's dB gain is turned up to full power on each dial.</li> </ol> |
| Marine version only: One of the red lights next to the dials on your booster is flashing red. | <ol style="list-style-type: none"> <li>1. Turn down the dB gain on the dial until the light goes OFF or turns yellow.</li> <li>2. Be sure the inside panel antenna is facing away from the outside antenna.</li> <li>3. Use the recommended antenna separation: <ul style="list-style-type: none"> <li>· 50dB — 30-40 ft. separation</li> <li>· 45dB — 20-30 ft. separation</li> <li>· 40dB — 10-20 ft. separation</li> <li>· 35dB — 10 ft. separation</li> </ul> </li> </ol>  |

| Problem  | Resolution   |
|--|--|
| Your booster restarted and shut down for 15 minutes, and is now shut down permanently. | Each SureCall 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 booster from automatically enabling Auto Shutdown. Once away from the original location, perform the procedure under Step 4. Connect to DC Power on page 9. |
| 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 5 dB (for example, from 50 to 45) and monitor the bars on your cell phone to see whether reception improves.   |
| The <b>Power</b> LED does not turn ON.   | Be sure the DC outlet is working and is not controlled by a wall switch that can remove power from the outlet.   |
| The <b>Alert</b> LEDs flash after the initial activation period.                       | Lower the dial above the blinking LED by 5 dB (for example, from 50 to 45) and monitor the bars on your cell phone to see whether reception has improved.  |
| The <b>Alert</b> LEDs continue to flash.   | The booster shuts down automatically, and then restarts after 60 seconds. Turn down the <b>PCS</b> , <b>Cellular</b> , or <b>LTE/AWS</b> dial that is oscillating to prevent the booster from shutting down automatically.   |

## FREQUENTLY ASKED QUESTIONS

For a list of Frequently Asked Questions and a comprehensive, up-to-date Troubleshooting Guide, please visit our website at: [www.surecall.com](http://www.surecall.com) or call us at 1-888-365-6283.

You can also consult a Cellphone-Mate technical specialist directly by emailing us at [support@surecall.com](mailto:support@surecall.com).

Record the model and serial number for your products:

Serial #: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

## Two-Year Product Warranty

Cellphone-Mate warrants its products for two years from the date of purchase against defects in workmanship and/or materials.

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 Cellphone-Mate Return Department toll-free at 1-888-365-6283. Any returns received by Cellphone-Mate 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 Cellphone-Mate to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages the product's physical or electronic properties.

Cellphone-Mate 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 Cellphone-Mate's option, to repair or replace any product or part thereof which shall within TWO YEARS of purchase as determined by examination by Cellphone-Mate, prove defective in material and/or workmanship. Warranty returns must first be authorized by Cellphone-Mate, Inc., either in writing or by phone. Disassembly of any Cellphone-Mate, Inc. product by anyone other than an authorized representative of Cellphone-Mate voids this warranty in its entirety. Cellphone-Mate 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 Cellphone-Mate for repair, and Cellphone-Mate 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 Cellphone-Mate 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 Cellphone-Mate. This warranty shall not apply to any products or parts thereof which have been subject to accident, negligence, alteration, abuse, or misuse.

Cellphone-Mate 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.

CELLPHONE-MATE 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 CELLPHONE-MATE, INC. 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.

| Specification             | TRIFLEX-2GO-V   |
|---------------------------|---|
| Uplink Frequency Range:   | Cellular-800: 824 – 849 MHz<br>PCS: 1850 – 1910 MHz<br>LTE-V: 776 – 787 MHz |
| Downlink Frequency Range: | Cellular-800: 869 – 894 MHz<br>PCS: 1930 – 1990 MHz<br>LTE-V: 746 – 757 MHz |
| Supported Standards:      | CDMA, GSM, LTE  |
| Input/Output Impedance:   | 50 $\Omega$   |
| Maximum Gain:             | Cellular-800: 50 dB<br>PCS: 50 dB<br>LTE-V: 50 dB                           |
| Noise Figure:             | 5 dB  |
| VSWR:                     | $\leq 2.0$  |
| DC Car Charger:           | 12 V  |
| Maximum Output Power:     | 1 Watt EIRP   |
| Cable:                    | CM174 and CM240 recommended   |
| RF Connectors:            | N Female (both ends )   |
| Power Consumption:        | <9 W  |
| Dimensions:               | 9.3 x 6.3 x 1.4 in.<br>(23.622 x 16.002 x 3.556 cm.)                        |
| Weight:                   | 3.5 lbs.<br>(1.587 kgs.)  |
| FCC ID (USA):             | RSNTRIFLEX-2GO-V  |



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.



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[www.surecall.com](http://www.surecall.com)

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