

## CONTENTS

Booster & Power Supply



Outside Antenna - Directional Yagi  
Outside Cable - RG-11, 50 ft  
Connector (optional) - for additional cable length, if needed

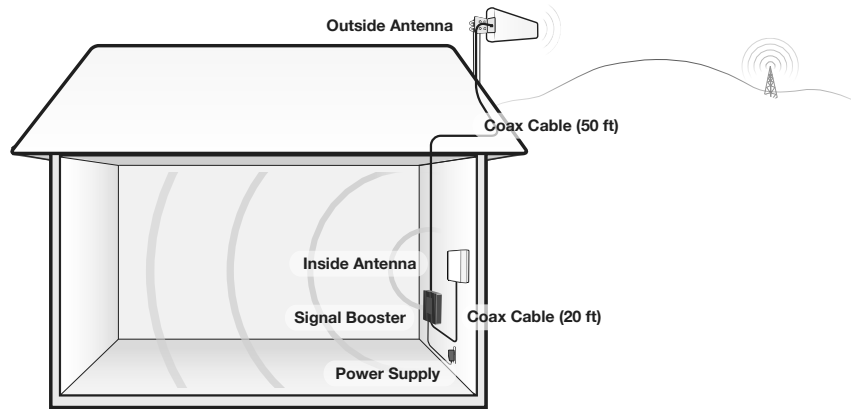


Inside Antenna - Directional Panel  
Inside Cable - SC-240, 20 ft



Before installation, ensure adequate separation between the locations of the outside antenna and Inside antenna – at least 25 ft.

## 1. FIND AREA OUTSIDE WITH STRONGEST SIGNAL



Install Overview

Identify the outside location with the strongest signal. Generally, this is found on the side facing your nearest cell tower and as high as possible.

Note that 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. For specific measurements, use the methods below to see your phone's signal as a dB measurement. Note that decibels (dB) usually appear as a negative number where numbers approaching to 0, are stronger signal (eg. -100 dB would be considered a weak signal while -65 dB a strong signal).

*Apple iPhones: Dial \*3001#12345#\* and press Call to enter test mode and identify your signal in dB instead of bars.  
Android devices: download the app "Network Signal Info" in the Google Play store.*

This signal booster requires a minimum cellular signal reading of -100dB at the location of the outside antenna. Signal between -70dB and -90dB is recommended for best performance.

Please note: Signal stronger than -50dB may cause the affected frequency bands to turn off.

## Have questions?

We have answers! Reach out to our US-based support team:

**Call:** 1-888-365-6283

**Email:** support@surecall.com

**Visit:** [www.surecall.com/support](http://www.surecall.com/support) to download the user manual for:

» Detailed setup instructions    » Troubleshooting tips    » Warranty information

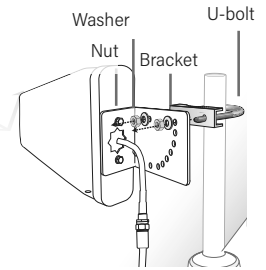
## 2. INSTALL THE OUTSIDE ANTENNA

Once you have located the area of strongest signal, mount the antenna to a pole or pipe (not included) at the highest possible elevation. The directional Yagi antenna works best when facing the direction of your carrier's cellular tower. For help finding the location of your carrier's closest cell tower go to [www.cellreception.com](http://www.cellreception.com).

To install the outside antenna, assemble the u-bolt, bracket, nuts and washers to a pole or mast, as shown in the illustration. Keep the connections loose enough to allow the antenna to rotate until the optimum direction is found.

Note: The outside antenna may be installed on a variety of pipe angles. Ensure that the mounting area has at least a 12-inch radius clear of obstructions and other radiating elements and orient the antenna vertically with the drip hole at the bottom.

Once the outside antenna is secured to a pipe or pole, connect one end of the provided 50 ft. coax cable to the antenna and tighten the connection.



Outside Antenna Assembly

## 3. INSTALL THE SIGNAL BOOSTER AND INSIDE ANTENNA

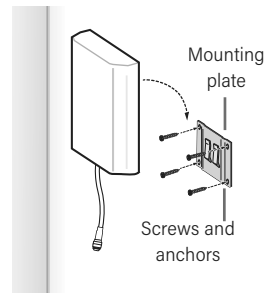
Choose a location for mounting the directional panel antenna on vertical surface. The antenna should be at the approximate height of your cell phone when in use and facing a central area where signal is needed. Please note: Be sure to provide enough separation from outside antenna - at least 25 ft. Also, the outside and inside antennas should face away from one another.

Using the plate, mark position of desired screw placement and screw mounting plate into place with the slide panel protruding towards you (see panel antenna illustration below). Slide antenna securely onto mounting plate.

To install the booster, select a location that is near the inside panel antenna and a working AC outlet. Use the supplied screws or appropriate screws for surface of mounting location and drill through screw tab holes on booster (see *Booster Components Diagram* illustration) and mount the booster to a wall.

Connect the inside antenna and booster by connecting one end of the provided 20 ft. of coax cable to the inside antenna and the other end of the cable to the booster port marked "INSIDE" and hand-tighten the connection.

Next, connect the outside antenna and booster by connecting the remaining end of the 50 ft. cable leading from the outside antenna to the port of the booster marked "OUTSIDE".



Inside Antenna Assembly

## 4. CONNECT POWER

Connect the AC power cord to the booster and plug into a 110V AC power outlet. Once the booster has been completely assembled, turn the booster's power switch on.

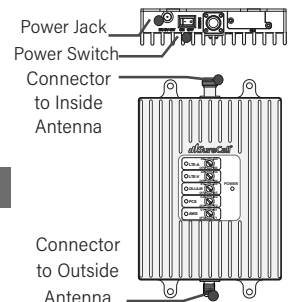
Note: If the Power LED does not turn ON or the Alert LEDs continue to flash, see the Troubleshooting section. This booster is rated for 5-15V input voltage. DO NOT use the booster with a higher voltage power supply. This can damage the booster, cause personal injury and void your warranty.

## CHECK AND OPTIMIZE SYSTEM, IF NEEDED

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

The gain dials on the booster should always be at maximum level unless a control light is FLASHING RED-YELLOW. Additionally, the gain should only be reduced if other recommended actions do not resolve the issue

In any case, the first action should be to increase the antenna isolation between the inside and outside antenna as much as possible and restart the booster.



Booster Components

## Performance Optimization

The Fusion Install automatically reduces gain (coverage performance) because of insufficient RF separation between the inside and outside antennas. Consider the options listed in the this section to resolve issues with inadequate antenna isolation.

Note, in smaller wood constructed homes some reduction in gain (slow YELLOW flash) is considered 'normal' operation. Keep in mind, identifying the setup that yields the best possible results for your environment will come from testing -- balancing the elimination of interference and while also receiving the best possible signal.

1. Verify that the minimum distance of 25 vertical feet has been achieved. Separation up to 40 - 50 ft may be needed, however, especially where vertical separation is not possible.
2. Check for sources of interference such as, cellular modems or hotspots.
3. Verify neither antenna is placed near a window.
4. Ensure that the antennas are aimed away from one another.

## LED Indicators

The gain dials on the booster should always be at maximum level unless a control light is FLASHING RED-YELLOW. Additionally, they should only be reduced if other recommended actions do not resolve the issue. Visit [www.surecall.com/support](http://www.surecall.com/support) to download the user manual for additional information.

CONDITION	INDICATION
OFF	<b>This is part of normal operation.</b> Light is off while band is active.
YELLOW SOLID	<b>This is part of normal operation.</b> Indicates that the band is Inactive. After a period of time, if there's no activity the band will go into sleep mode. Light is off while band is active.
YELLOW FLASHING	<b>This is part of normal operation.</b> Indicates that the Automatic Gain Control (AGC) is self-adjusting.
RED FLASHING	Indicates that the booster is receiving too much signal which could cause the affected band to automatically turn off. When this happens: <ol style="list-style-type: none"><li>1. For kits using a YAGI outside antenna, turn the antenna in short increments away from the signal source.</li><li>2. Increase the separation between antennas (additional vertical separation works best).</li><li>3. Add an inline attenuator to the cable coming into the outside port of the booster.</li><li>4. As a last resort, turn down the dB gain on the dial until the light goes OFF or flashes yellow.</li></ol>
YELLOW/RED ALTERNATELY FLASHING	Oscillation is detected. First, try increasing the separation between the inside and outside antennas. If your booster kit uses two directional antennas (example: outside Yagi antenna and inside panel antenna), ensure that they are facing away from one another.  If oscillation continues, lower the dB gain in small increments until the light turns off or flashes yellow.
RED SOLID	Band is off. If a red light has been flashing for an extended time, the band will automatically shut off and display a solid red light.  This can also happen when the booster attenuation has been turned all the way down.

*WARNING: Do not attenuate the uplink and downlink dB settings below 35dB. This could cause the affected frequency band to turn off.*

## Troubleshooting

PROBLEM	RESOLUTION
Signal booster has no power	Connect the power supply to an alternate power source. Verify that the power source is not controlled by a switch that has removed power from the outlet. If the POWER LED on the signal booster remains OFF, contact tech support at: 1-888-365-6283 or <a href="mailto:support@surecall.com">support@surecall.com</a>
After completing installation, indoor signal coverage has not improved	(1) Verify that all cable connections are tightly fitted. (2) Try further separating the antennas. (3) Verify that there is usable signal where the outside antenna is placed. <b>ⓘ Remember:</b> 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.

## 3-Year Warranty

Thank you for your SureCall purchase. Please register your new product at [www.surecall.com/activate](http://www.surecall.com/activate).

SureCall warranties its products for three 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 at the customer's expense 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. RMA numbers are obtained by contacting Customer Support.

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.

For complete warranty text, including limitations and liability, see the Fusion-Install full user manual, available online.

## Specifications

Uplink Frequency Range (MHz):	698-716 / 776-787 / 824-849 / 1850-1915 / 1710-1755
Downlink Frequency Range (MHz):	728-746 / 746-757 / 869-894 / 1930-1995 / 2110-2155
Supported Standards:	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE and all cellular standards
Input Impedance:	75Ω server / 50Ω donor port
Maximum Gain:	72 dB
Noise Figure:	8 dB
VSWR:	≤2.0
AC Input:	Input AC110V, 60 Hz; Output DC 5-15V
Maximum Output Power:	1 Watt EIRP
Cable:	RG-11 / SC-240
RF Connectors:	F Female donor / N Female server
Power Consumption:	<15W
Operation Temperature:	-4° to +158° F
Certifications:	FCC ID: RSNF4HOME3 IC: 7784A-F4HOME3

### 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 (i.e., **MUST NOT** be installed within 20 cm of) any person.

You **MUST** cease operating this device immediately if requested by the FCC or licensed wireless service provider.

**WARNING:** E911 location information may not be provided or may be inaccurate for calls served by using this device.

This device may operate in a fixed location only, for in-building use.

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.