

N-Range™ 2.0

Vehicle Voice and 4G LTE Data Signal Booster

User Guide



Thank you for purchasing SureCall's N-Range 2.0 cell phone signal booster kit. N-Range 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

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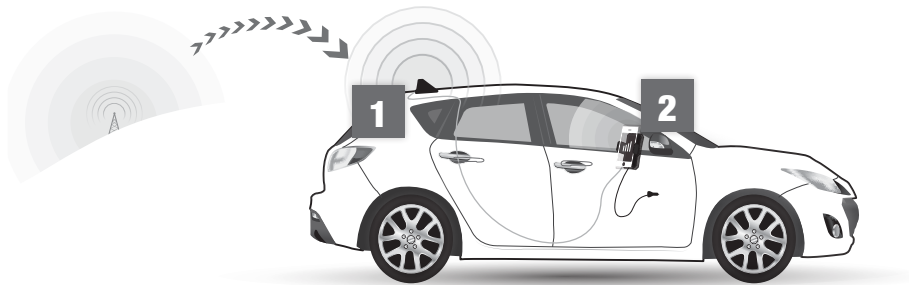
How It Works

Using SureCall's Extended Range Technology™, N-Range captures the signal outside of the vehicle at its strongest point, strengthens the signal and feeds the improved signal directly to the cellular device held by the cradle antenna.

The N-Range 2.0 uses two primary components:

- 1** The outside magnetic antenna receives and sends signals to the cell tower.
- 2** The cradle antenna communicates directly with your device transmitting mobile device communications back to the outside antenna.

These components work together to keep your phone connected and within range of hard to reach or faraway cell towers.



Package Contents

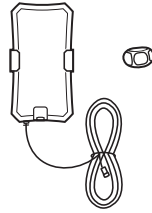
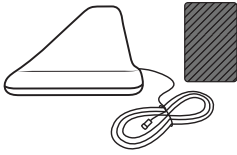
SureCall offers many accessories to customize your signal booster kit to your specific needs. To learn more about these accessories or to replace damaged or missing items contact your reseller.

For exchanges or returns, your reseller may request original packaging and basic product information. Turn over the signal booster and record the model and serial number for easy reference:

Serial #: _____

Purchase Date: _____

Your signal booster package includes the following items:



Cradle hardware for dash-mount (permanent or adhesive)

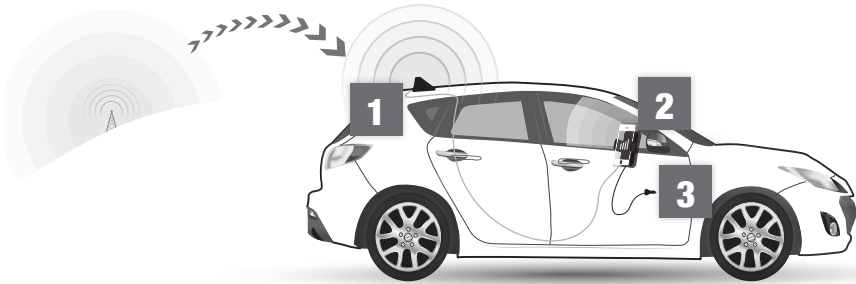
or vent clip mount options



1 N-Range Antenna with Optional Adhesive Mount

2 IMPROVED Cradle phone mount with integrated antenna

3 12V DC Power Adapter



Step 1: Attach N-Range Antenna to the Vehicle's Roof

Attach the N-Range Antenna to the roof of your vehicle and at least 12-inches away from obstructions and other radiating elements, like other antennas.

Suggestion: For non-metal or non-magnetic vehicle surfaces, use the optional adhesive tape.

Run the cable to the inside of the vehicle. For a seamless look, run the cable underneath the door seal and under seats and floor-mats.



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

Step 2: Place Phone Mount Antenna & Connect Components

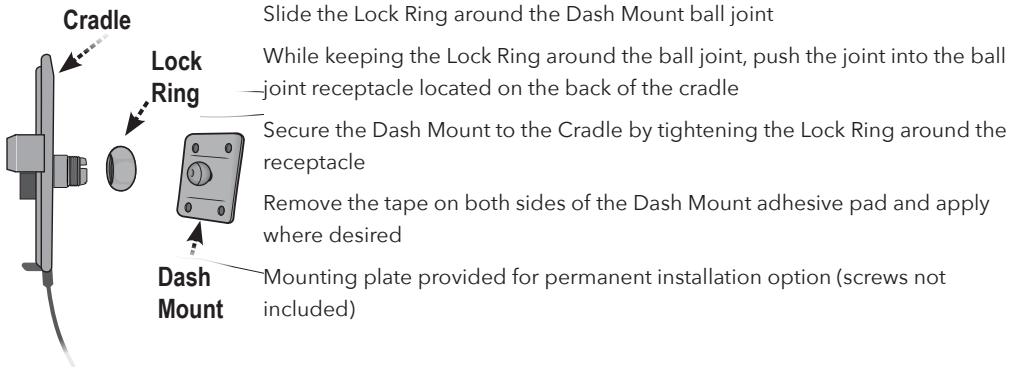
Choose your preferred mounting method using either the vent clip or dash mount option. We suggest a location that is:

- Within 2-3 feet of the typical location of the cell phone
- At least 8 inches (20cm) from other cellular devices
- At least 4 inches (10cm) from metal surfaces

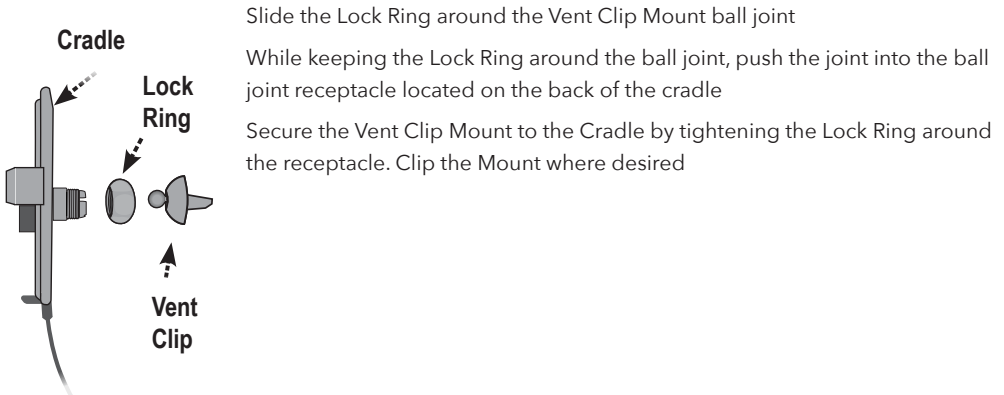


Select your Cradle Mounting option:

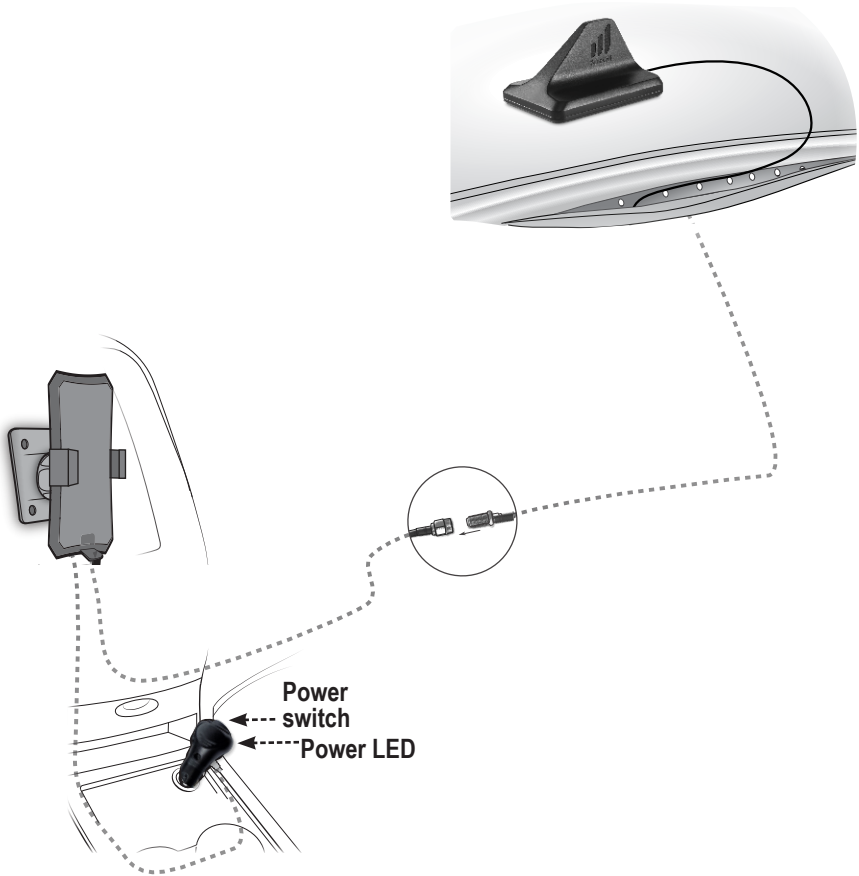
Dash Mount



Vent Clip Mount



Once your cradle antenna is securely in place, route the attached cable from the to the location of the N-Range cable connector. Join cables and hand tighten.



Step 3: Connect To Power

Plug the DC Power Adapter into the power port of your car, plug the power cable into the phone mount antenna and switch power to ON. You will see a red light on the power adapter and a green light on the phone mount antenna when the system is powered ON and boosting cellular signals.

* **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.

Once all components are in place and connected, place your phone in the cradle using the expandable spring arms. Only the phone on the phone mount antenna will receive the improved cellular signal. The optional flip tab at the bottom of the cradle can also help provide secure base support for your device.

For the best results, remember to provide maximum separation between the cradle and the outside antenna.

Troubleshooting

Problem	Resolution
Signal booster has no power	<ol style="list-style-type: none"> 1. Verify that Power LED is ON (look for illuminated light). 2. Verify that power source is operational and fuse is intact. 3. Try connecting power supply to an alternate 5-15V power source. 4. If power remains OFF, contact tech support at: <ul style="list-style-type: none"> » 1-888-365-6283 or support@surecall.com
After completing installation, signal has not Improved	<ol style="list-style-type: none"> 1. Verify that all cable connections are tightly fitted to the booster. 2. Power OFF and unplug power adapter. Then reinsert power adapter and switch Power to ON. <p>ⓘ 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.</p>
N-Range antenna magnet doesn't work	For non-magnetic vehicle surfaces, use the optional adhesive tape included in the N-Range packaging.

Specifications

Product	N-RANGE 2.0 (SC-NRANGE)
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:	23 dB
Gain Adjustment:	20 dB (Automatic)
Supported Standards:	CDMA, WCDMA, GSM, EDGE, HSPA+, EVDO, LTE and all cellular standards
Noise Figure:	≤ 7 dB
VWSR:	≤ 2.0
Maximum Output Power:	1 Watt EIRP
DC Power:	8-15VDC
Cable:	SC-174, 15 ft
RF Connectors:	SMA Female
Power Consumption:	< 12W
Operation Temperature:	14°F - 122°F
Dimensions:	5 x 3.5 x 3 in
Weight:	0.62 lbs (9.92 oz)
Certification:	FCC ID: RSNRANGE IC: 7784A-RANGE

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/Loss					Notes
		LTE-A	LTE-V	800 MHz	1900 MHz	1700 MHz / 2100 MHz	
N-Range Kit							
Outdoor Antenna	SC-326W	-1 dBi	-1 dBi	0 dBi	2.5 dBi	2 \ 3 dBi	Integrated antenna
Indoor Antenna	SC128W	-0.1 dBi	-0.1 dBi	-0.3 dBi	3 dBi	2.5 \ 3.2 dBi	
Indoor Cable	SC-174-6ft (6 Feet)	1.6 dB	1.6 dB	1.7 dB	2.8 dB	2.6 \ 2.9 dB	

*All equivalent antennas and cables are suitable for use with the N-Range As above information. Remark: Lower gain antenna can also be used.

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

15.105 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>

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.

Important: The antenna must be located at least 8 inches from all persons. The FCC requires to never use the cell phone in the cradle next to your ear.

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 à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. 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 interférence reçue, y compris l'interférence 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 porteurs 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

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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