

Product manual

For a Better Signal Booster



Catalogue

Chapter 1 Standard list and Optional list

Standard list

Optional list

Chapter 2 Before Getting Started

Chapter 3 Installation

Step 1: Find the Location with the Strongest Signal

Step 2: Mount the Outdoor Antenna

Step 3: Mount the Indoor Antenna

Step 4: Mount the Signal Booster

Step 5: Power Up

Step 6: Measuring Booster Performance

Chapter 4 Safety Guidelines

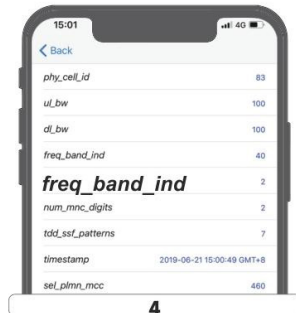
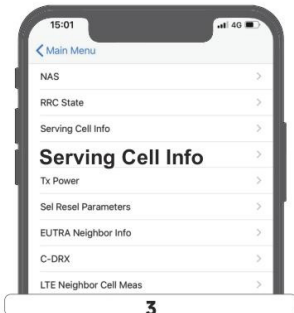
Chapter 5 Register Your Booster

Chapter 6 Warranty

Standard list and Optional list

Before you install the signal booster and antennas, please check which frequency band your cell phone uses firstly by the methods below:

1.For iPhone



Steps to check frequency band on iPhone

Note: The booster can work well only if your cell phone works on same frequency band as the booster

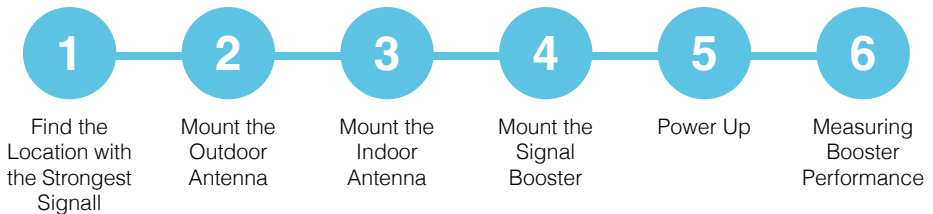
2.For Android Phone:

Download and install the app: LTE Discovery, tap 'SIGNALS' and check band number.



The result should be a one-digit or two-digit number, if not, please check it again.

Installation



Note: Note: Do not connect the booster to power until the system is fully installed.

Step 1 Find the Location with the Strongest Signal

Find the location with the strongest signal outside your building for placement of your outdoor antenna using your cell phone. Generally, it is found above the roof line on the side facing the nearest cell tower and as high as possible. To find the location of your carrier's closest cell tower, go to www.antennasearch.com. Check the bar indicator on your cell phone display from several locations outside your building, and note where the signal appears the strongest. Phones can take up to 30-60 seconds to reset to a new reading. Please be patient and repeat your signal check several times.

Note: Cell phone bars are only an approximation of signal strength and vary from phone to phone. Putting your phone in Field Test mode will indicate what level of decibels (dBm) your phone is currently receiving. This is more accurate than the bar indicator. Decibels are measured in the negatives, and a score closer to zero indicates you have a better signal.

Have your phone in field test mode using any of the following methods:

Note: Turn off your Wi-Fi before accessing the Field Test application.

iPhone 7 or other older models:

1. Key in *3001#12345#* (including the stars and pound signs), press the call button
2. Tap Serving Cell Measurements
3. Scroll down to Measured RSRP.

iPhone 8 or other later models:

1. Key in *3001#12345#* (including the stars and pound signs), press the call button
2. Choose LTE, and select Serving Cell Meas
3. Scroll down to rsrp0.

If you want to check 3G/1x but your iPhone is picking up 4G/LTE signal, go to Settings > Cellular > Cellular Data Options > Enable LTE > Select off

Android Phone:

Settings - About Phone - Status or Network - Signal Strength or Network Type and Strength, you can also download the app "Network Signal Info" in the Google Play store.

Note: The booster requires a minimum cellular signal reading of -119dBm for 4G/LTE signal or -109dBm for 3G/1x signal at the location of the outdoor antenna. Signal strength of -105dBm to -91dBm for 4G/LTE signal or -85dBm to -71dBm for 3G/1x is recommended for best performance. The coverage area that the booster provides is directly related to the strength of incoming signal received by the outdoor antenna. If signal is extremely weak where the outdoor antenna is installed, indoor coverage will be limited. Mounting the outdoor antenna where the signal is the strongest will provide the best results.

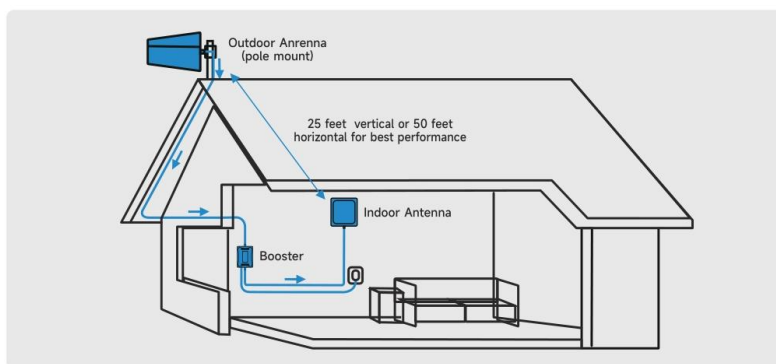
Warning: Signal stronger than -50dBm may cause the affected frequency bands to turn off.

Step 2 Mount the Outdoor Antenna

Before you begin, please note that you may require a mast on which to mount the outdoor antenna. One has not been provided and may be obtained by a 3rd party.

After identifying the location of the strongest signal, choose the surface where you will mount your outdoor antenna. The location should allow for sufficient separation between the outdoor antenna and the indoor antenna. Vertical separation is preferred as it is more effective than horizontal separation.

Note: Antenna for best performance. Make sure the Indoor Antenna and Outdoor Antenna are facing Note: The Outdoor Antenna must be at least 50 feet horizontal or 25 feet vertical from the Indoor away from each other.



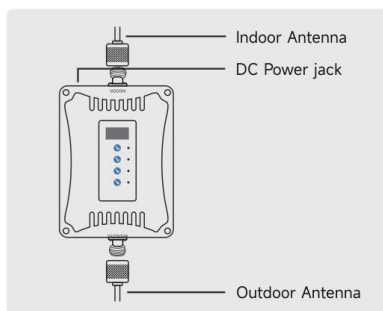
Step 3 Mount Indoor Antenna

Choose a location for the indoor antenna that is at least 25 feet from the outdoor antenna. Consider the below factors affecting signal coverage of the booster:

1. Signal strength at the location of the outside antenna.
2. Interior building materials between your cell phone and the inside antenna.
3. Distance between your cell phone and the inside antenna (the closer, the better).
4. Distance between the outside antenna and inside antenna (minimum 25 ft. separation).

Step 4 Mount the Signal Booster

Select a location for the Signal Booster that is away from excessive heat, direct sunlight, moisture and well ventilated. The enclosure must NOT be air tight. Also, be sure the location is near a power source.



Installation Steps:

1. Connect the cable of the inside antenna to the port on the side of the booster labeled "INDOOR".
2. Route the cable from the outside antenna inside and connect it to the port on the booster labeled "OUTDOOR".

Step 5 Power Up

Connect the power adapter cord to the signal booster and plug into the power outlet. The LED Indicators will light, indicating if the signal booster is functioning properly or not.

Note: 1. Do NOT connect the power adapter to the Signal Booster until you have connected both the Inside and Outside Antennas.

2. The booster case may become warm during operation, this is normal, please don't worry.

Step 6 Measuring Booster Performance

Compare the signal strength numbers below you took in the same part of the house. If the signal strength number with booster is higher (closer to zero) than the original reading without booster, your booster is working. If it is not, look at the lights on the booster and the section at the end of this manual “LED Indicators” and “Troubleshooting”.

Signal Strength without Booster

Note here: _____

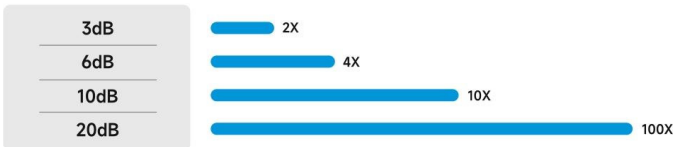
Signal Strength with Booster

Note here: _____

Note: Having an accurate measurement of signal strength in decibels (dBm) is crucial when measuring the performance of the booster. Decibels accurately measure the signal strength you are receiving, bars are not always a reliable measure of signal.

SIGNAL STRENGTH	EXCELLENT	GOOD	FAIR	POOR	DEAD ZONE
					
3G/1x	-70dBm	-71 to -85dBm	-86 to -100dBm	-101to -109dBm	-110dBm
4G/LTE	-90dBm	-91 to -105dBm	-106 to -110dBm	-111 to -119dBm	-120dBm

DID YOU KNOW a signal increase of just 3dB is 2 times the power and signal amplification?



GAIN IMPROVEMENT

SIGNAL IMPROVEMENT

Safety Guidelines

FCC Statement

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.

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 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device must operate with a minimum distance of 20 cm between the radiator and user body.

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.

This device may be operated **ONLY** in a fixed location for in-building use.

IC Certification:

The signal booster is compliance with the requirements of the standards ICES-003 applied.

CE Certification:

The cell booster has CE certification which prove it compliance with the international safety legislation.

Register Your Booster

Need register your booster with your wireless provider, just search your wireless provider and signal booster registration on Google, then fill in your address, the Model number and FCC ID, and done. See more details at the following websites:

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>

Warranty

30-day money-back guarantee, 3-month free replacement,

2-year manufacturer warranty

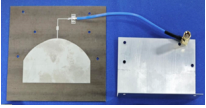
Our Signal Boosters are warranted for 2 years against defects in workmanship or materials. Warranty cases may be resolved by returning the product directly to the manufacturer at the consumer's expense, with a dated proof of purchase and an Order Number supplied. We shall either repair or replace the product at its option. This warranty does not apply to any Signal Boosters determined by us to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties. Replacement products may include refurbished products that have been re-certified to conform with product specifications.

You can enjoy an extra 1-year warranty and priority customer support after registering the booster on our website.

Note: 1. Only for customers that bought the product at FULL PRICE through our Official Seller on; Amazon.com

2. The 3-year Warranty is only for the MAIN BOOSTER, EXCLUDING antennas, cables and power supply. To register, go to our website to leave your order info: www.phonetonetech.com

List of authorized antennas, cables, and cable loss:

Name		Model	Gain/Loss	Photo
Indoor Antenna	Ceiling Antenna	BA-IC0627-5	4.0dBi@1930-1995MHz 5.0dBi@2110-2155MHz 3.0dBi@869-894MHz 2.0dBi@729-746MHz 2.0dBi@746-756MHz	
	Built-in Antenna	BA-IB0627-5	4.0dBi@1930-1995MHz 5.0dBi@2110-2155MHz 3.0dBi@869-894MHz 2.0dBi@729-746MHz 2.0dBi@746-756MHz	
Outdoor Antenna	Log Periodic Antenna	BA-OL0627-9	9.0dBi@1850-1915MHz 9.0dBi@1710-1755MHz 7.5dBi@824-849MHz 7.5dBi@699-716MHz 7.5dBi@777-787MHz	
Indoor cable	50-7HYWV Coaxial cable/F- male connector 5m	50-7HYWV	4.80dBi@1930-1995MHz 5.00dBi@2110-2155MHz 3.00dBi@869-894MHz 2.80dBi@729-746MHz 2.87dBi@746-756MHz	
Outdoor Cable	50-7HYWV Coaxial cable/F- male connector 5m	50-7HYWV	4.70dBi@1850-1915MHz 4.60dBi@1710-1755MHz 3.00dBi@824-849MHz 2.80dBi@699-716MHz 2.85dBi@777-787MHz	

1) Warning: The Inside Antennas for fixed installations must have 6 feet of separation distance from all active users.

2) Warning: The Outdoor Antennas/Indoor Antennas for fixed installations must be installed no higher than 10 meters above ground.

3) Warning: Unauthorized antennas, cables, and/or coupling devices are prohibited by FCC rules. Please contact FCC for Details: 1-888-CALL-FF.

4) Warning: The antenna, cable, and other accessories of the booster kits shall not be modified without the approval of the party responsible; otherwise, it shall be deemed invalid.



