



User Manual

User Manual

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About Cell Signal Booster

We are proud to offer our customers solutions that enhance cellular voice and data signal for any network in the world. Applications range from home/office installations to large-scale commercial projects.

Our booster is a repeater that cannot generate any signals; it only amplifies the signals it can receive. It is designed for a specific frequency band, and the amplifier will only function properly when your mobile phone and the repeater are operating on the same frequency band. If your phone uses a frequency band that does not match the working frequency band of the amplifier, please contact us and replace the correct booster.

Email: supports@tonve.com.cn

■ How to find the band your phone is receiving:

iPhone 7 and previous	1. Dial *3001#12345#* 2. Click Serving Cell Info 3. Click Freq Band Indicator Don't omit the * or # when you dial
iPhone 8 and latest	1. Dial *3001#12345#* 2. Click LTE 3. Click LTE Neighbor Info Don't omit the * or # when you dial
Android Phones	Steps: 1. Download the app "Network Cell Info Lite" 2. Click "GAUGE" 3. Check it from "Band" at the Top Right Slide
	Steps: 1. Download the app "LTE Discovery" 2. Click "SIGNALS" 3. Check it from "EARFCN"

Note:

Phone carriers use the different bands in different areas so please verify the band your phone is receiving from tower.

Installation Guide

■ Installation Steps:

Step 1: Find the strongest signal location outdoors or on the rooftop

Step 2: Mount the outdoor antenna.

Step 3: Mount the indoor antenna.

Step 4: Mount the signal booster.

Step 5: Connect the power adapter to signal booster.

Note:

Don't plug it in till the final step. In order to prevent self-oscillation caused by indoor antenna being too close to outdoor antenna, please adhere to the installation distance between the antennas

Step 1: Find the location with the strongest signal

Walk around outside your home or test signal strength on the rooftop until your mobile phone displays 2-5 bars of signal. Once you identify the location with the strongest signal, install the outdoor antenna.

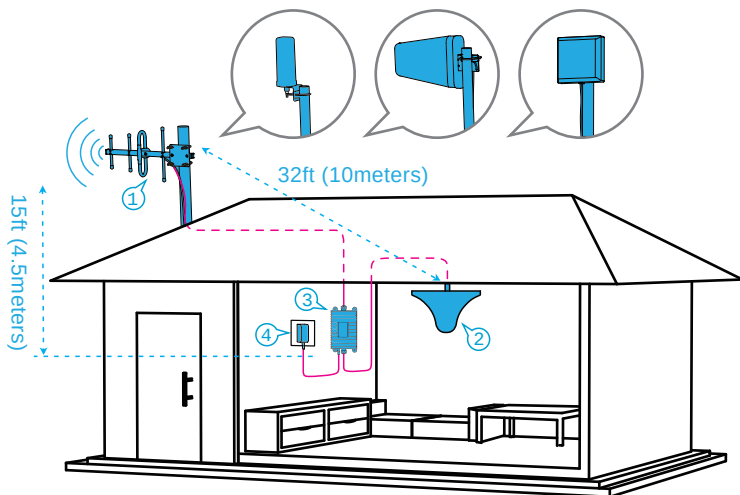
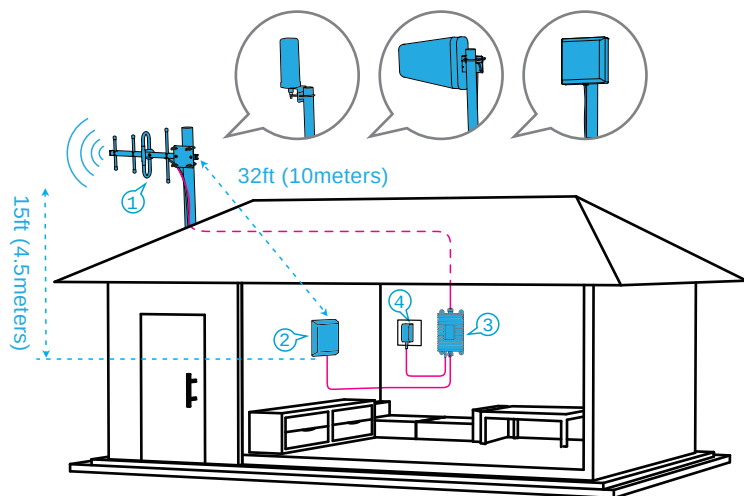
Step 2: Mount the Outdoor Antenna.

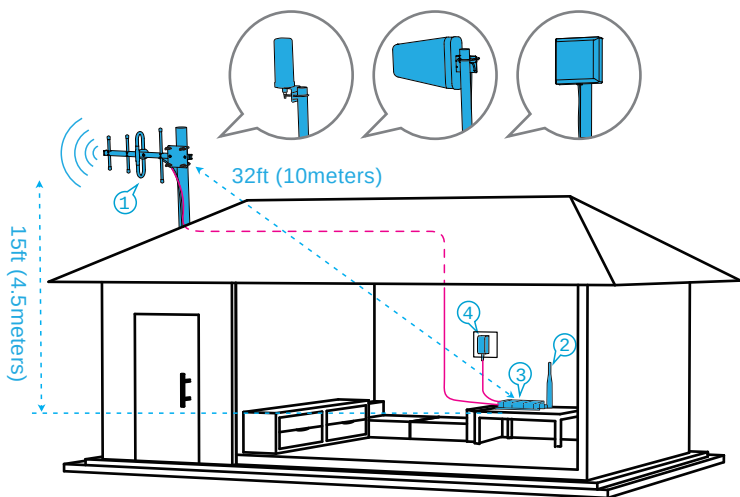
Before you begin, please note that you may need a mast or pole to install the outdoor antenna. It is not included in the kit and needs to be obtained from a third party.

Once you have determined the location with the strongest signal, choose a surface to install the outdoor antenna. This location should allow for sufficient separation between the outdoor and indoor antennas. Vertical separation is preferred as it is more effective than horizontal separation.

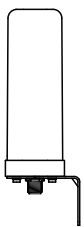
Please keep in mind:

1. The outdoor antenna should be at least 32 feet horizontally or 15 feet vertically away from the indoor antenna for optimal performance. If the building has a metal roof or wall panels, the outdoor antenna needs to be kept at least 6 feet away from the metal surface.
2. Ensure that the indoor and outdoor antennas are facing away from each other.

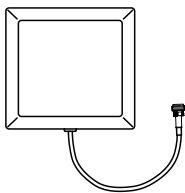




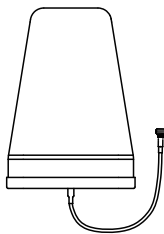
Outdoor Antenna Options:



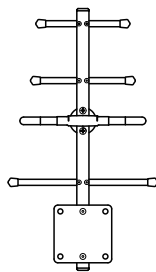
Omni-Directional
Tubular Antenna



Directional
Panel Antenna



Directional
LPDA Antenna



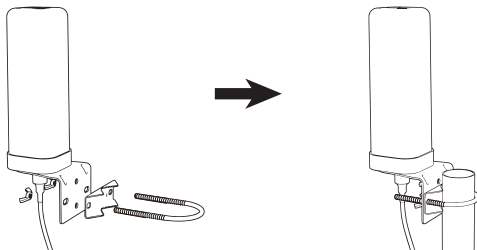
Directional
Yagi Antenna

1. The Outdoor Omni-Directional Antenna can pick up the cell signals from all directions
2. The Outdoor Yagi Antenna, Panel Antenna and LPDA Antenna are the directional antennas that needs to be pointed in the direction of the nearest cell tower of the carrier whose signals need to be boosted inside.

The outer casing of Tubular Antenna, Panel Antenna, and LPDA Antenna is made of ABS material, which provides corrosion resistance and high-temperature resistance. These outdoor antennas can be used for over 10 years within a temperature range of -40°C to 60°C.

Option 1: Mount the Omni-Directional Antenna.

The outdoor omni-directional antenna can receive signals from all directions (360 degrees) without the need to be pointed towards the cellphone signal tower. Install the antenna at the highest possible height in an upright position to capture the strongest signals.



Note:

Ensure that the entire outdoor antenna is positioned above the roofline of the building. If the building has a metal roof or is constructed with metal, keep the outdoor antenna at least 6 feet away from the metal roof. (The mounting pole is not included in the kit and needs to be purchased separately).

Option 2: Mount the Directional Antenna

Directional Yagi antennas, panel antennas, and LPDA antennas should be installed at the highest possible location on the roof, at least 15 feet higher than the indoor antenna. Since this is a directional antenna, it needs to be pointed towards the direction of the nearest mobile tower operated by your service provider during installation.

The following is the method to find nearby mobile signal towers:

Please download one of apps to find your phone carrier's nearest Cell Signal Tower

[LTE Discovery](#)

[OpenSignal](#)

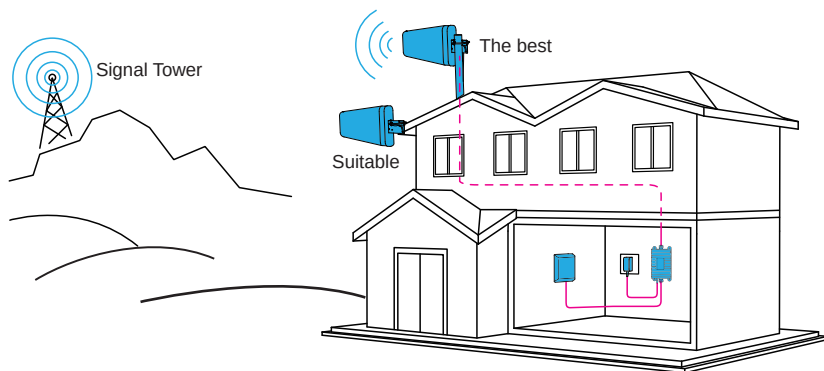
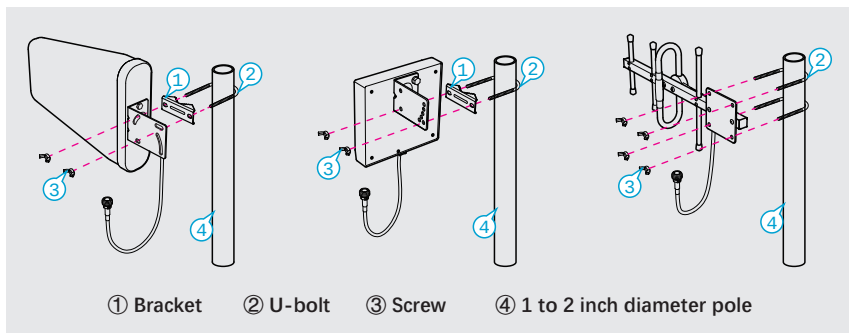
[Network Cell Info Lite](#)

[SignalCheck Lite](#)

It can also find the nearest Cell Signal Tower by the website :

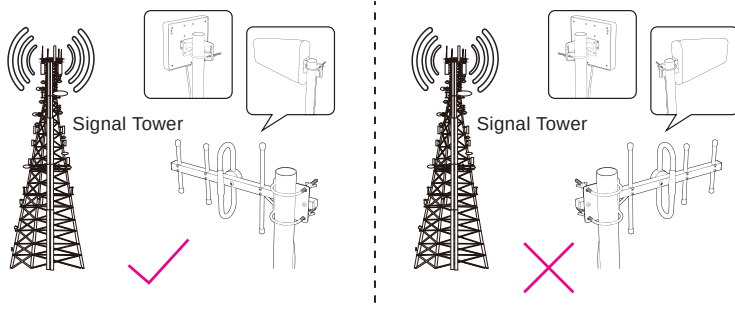
<https://www.antennasearch.com>

<https://www.cellmapper.net/map>



Note:

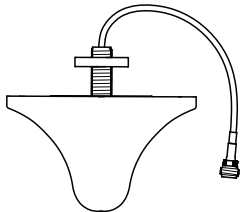
Ensure that the entire outdoor antenna is positioned above the roofline of the building. If the building has a metal roof or is constructed with metal, keep the outdoor antenna at least 6 feet away from the metal roof. (The mounting pole is not included in the kit and needs to be purchased separately).



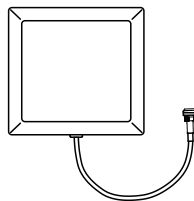
Step 3: Mount the indoor antenna.



Omni-Directional
Whip Antenna



Omni-Directional
Ceiling Antenna



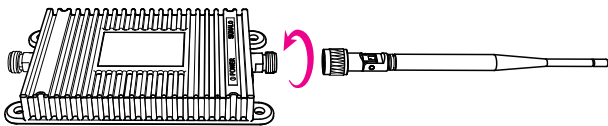
Directional
Panel Antenna

1. The Whip Antenna and Ceiling Antenna are Omni-Directional Antennas that will provide 360° signal coverage range in the house.
2. The Panel Antenna is the Directional Antennas that will allow for optimum reception to targeted areas.

Option 1: Mount the Whip Antenna

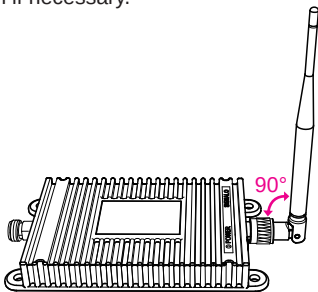
Install the Ceiling Antenna to the Wall

Step 1:



Clockwise screw the whip antenna to the INDOOR of the booster, tighten the connection with hand or wrench if necessary.

Step 2:



Keep the Whip Antenna bent at a 90 degree angle.

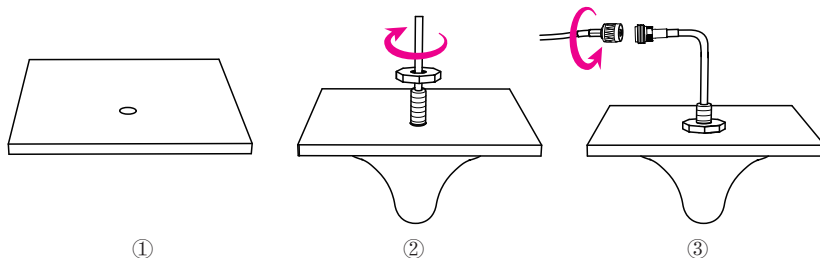
Option 2: Mount the Ceiling Antenna

Install the Ceiling Antenna to the Ceiling 1:

Step 1: Drill a 4/5 inch diameter hole in the ceiling.

Step 2: Unscrew the fixing nut from the antenna, pass the antenna cable through the hole, and then screw the fixing nut back onto the ceiling antenna.

Step 3: Connect the indoor cable to the ceiling antenna, and tighten the connection by hand or with a wrench if necessary.

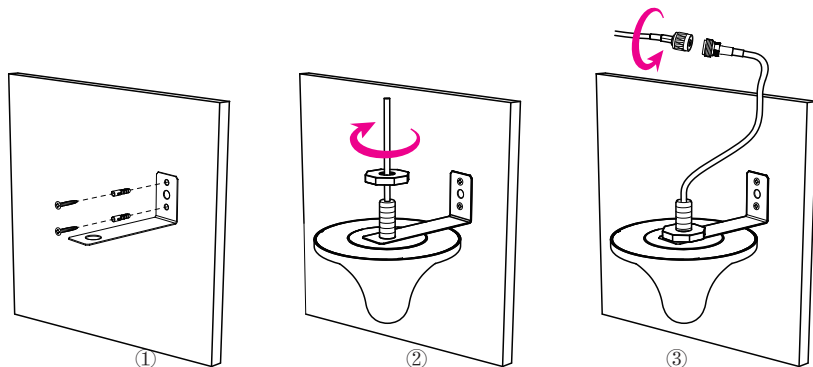


Install the Ceiling Antenna to the Ceiling 2:

Step 1: Mount the bracket on the wall by drilling the screw into the wall.

Step 2: Unscrew the fixing nut from the antenna, pass the antenna cable through the hole of the bracket, and then screw the fixing nut back onto the ceiling antenna.

Step 3: Connect the indoor cable to the ceiling antenna, and tighten the connection by hand or with a wrench if necessary.



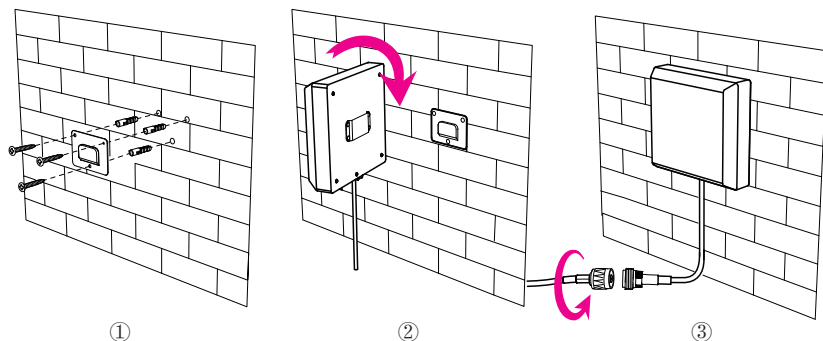
Option 3: Mount the Panel Antenna

Step 1: Install the bracket on the wall using screws.

Step 2: Place the panel antenna on the installed bracket.

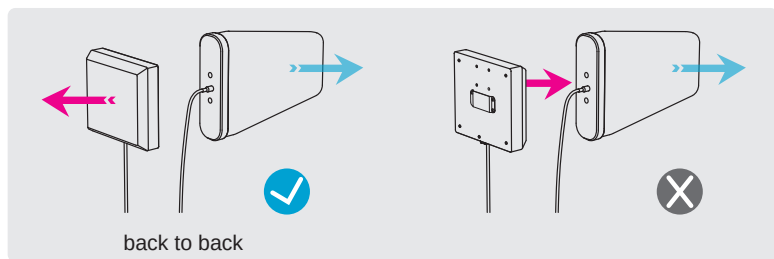
Step 3: Connect the coaxial cable to the panel antenna.

Step 4: Then, connect the other end of the coaxial cable to the INDOOR port of the amplifier.



Note:

Please make sure the indoor antenna is above 32ft away from outdoor antenna and make sure a proper amount of physical separation (walls or obstructions) between them. Don't make the indoor and outdoor antennas aim at each others.

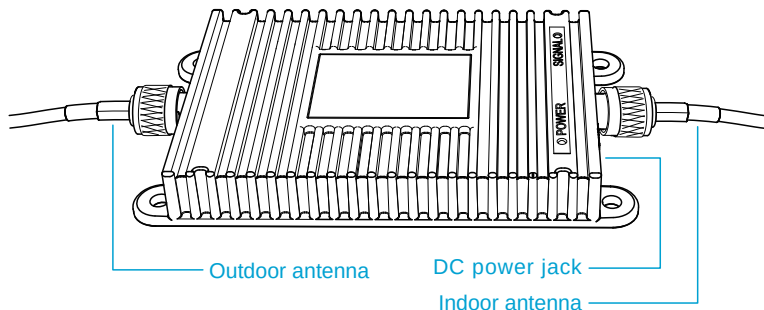


Step 4: Mount the Signal Booster.

For the signal booster, choose a location away from excessive heat, direct sunlight, humidity, and ensure good ventilation. The casing must not be airtight. Additionally, make sure the location is close to a power source.

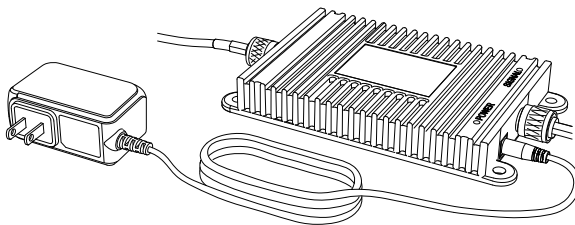
Installation Steps:

1. Connect the cable from the indoor antenna to the amplifier's port labeled "INDOOR."
2. Route the cable from the outdoor antenna and connect it to the port on the amplifier labeled "OUTDOOR."



Step 5: Connect the power adapter.

Insert the plug into the power outlet, and then connect the AC power cord to the signal booster.

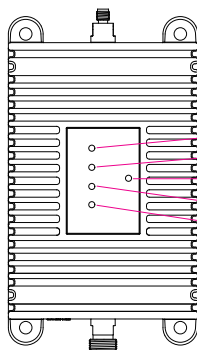


Note:

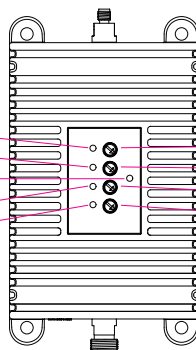
1. Do not connect the power adapter to the signal booster before connecting the indoor and outdoor antennas and following the antenna installation distance requirements.
2. The amplifier's casing may become warm during operation, which is a normal phenomenon, so there's no need to worry.

Troubleshooting

1. Multi-bands Booster



(The model without knobs)



(The model with knobs)

LED Indicator
LED Indicator
Power Light
LED Indicator
LED Indicator

Knob
Knob
Knob
Knob

Turn up/down
gain by the knobs

Light	Condition	Resolution
Green	Solid	This is normal; the outside signal strength is in the best condition. If it doesn't work: 1. Try lifting the external antenna and adjusting its direction. 2. Increase the distance between the indoor and outdoor antennas, keeping them in opposite directions, and ensure there is proper physical isolation between them (such as walls or obstacles). 3. Please verify that the frequency band used by your mobile phone matches the operating frequency band of the signal booster.
Green	Blinking	This is normal; the Automatic Gain Control (AGC) is adjusting the gain. If it doesn't work: 1. Try lifting the external antenna and adjusting its direction. 2. Increase the distance between the indoor and outdoor antennas, keeping them in opposite directions, and ensure there is proper physical isolation between them (such as walls or obstacles). 3. Please verify that the frequency band used by your mobile phone matches the operating frequency band of the signal booster.

Light	Condition	Resolution
Red	Solid	1. The external signal is too strong, resulting in the red light blinking for an extended period. When the blinking red light changes to a solid red light, that frequency band will be deactivated. 2. Due to self-oscillation, external signals and internal signals "collide" with each other, causing interference and leading to the deactivation of that frequency band. 3. For a model of an booster with a knob, when the arrow on the knob is set to "OFF," the red light will also remain solid.
Red	Blinking	The booster is receiving so strong signal that this band is shut off automatically. 1. Try lifting the outside antenna and adjusting its direction. 2. Increase the distance between the indoor and outdoor antennas, keeping them in opposite directions, and ensure there is proper physical isolation between them (such as walls or obstacles). 3. For a model of an booster with a knob, you can decrease the gain until the red light goes off.
Green and red lights are blinking alternately		It's causing self-oscillation and automatically start self-protection mode. 1. Try lifting the outside antenna and adjusting its direction. 2. Increase the distance between the indoor and outdoor antennas, keeping them in opposite directions, and ensure there is proper physical isolation between them (such as walls or obstacles). 3. For a model of an booster with a knob, you can decrease the gain until the red light goes off.
Light doesn't illuminate		1. The outside antenna is too weak to function properly. Try lifting the outside antenna and adjusting outside antenna direction. 2. Loose connector. Please check the connector and tighten it. 3. Working properly. The external signal is too weak to illuminate the lights.

Warning

1. Keep the indoor antenna is about 32ft away from outdoor antenna and make sure a proper amount of physical separation (walls or obstructions) between them.
2. Keep the power is off during installing/adjusting antennas

2. One Band & Dual Bands Booster

Problem	Resolution
POWER light is green SIGNAL light is green	That is OK
Works well. POWER light is green SIGNAL light is blinking	The outdoor antenna is receiving an unstable signal from the tower, and the Automatic Gain Control (AGC) is adjusting the gain based on the outdoor signal strength. If it is effectively boosting the signal for you, no adjustment is necessary.
Works well. POWER light is green SIGNAL light is not on	The outdoor antenna receives a weak signal from the signal tower, and the signal booster amplifies the weak signal to make it sufficiently strong. It can be left unadjusted.
Doesn't work. POWER light is green SIGNAL light is blinking or not on	1. Verify all cable connections are tightly fitted. 2. Ensure adequate separation between the outdoor antenna and indoor antenna. 3. Verify the outdoor antenna could receive 2-5 bars of stable signal from the signal tower. 4. Please verify that the frequency band used by your mobile phone matches the operating frequency band of the signal booster. If you have purchased a signal booster with an incorrect frequency band, please contact the seller (our service) through your order.
Doesn't work. POWER light is green SIGNAL light is green	1. It's caused by oscillation. Disconnect power, adjust the distance between the outdoor antenna and indoor antenna should be above 32ft and make sure a separation between them (walls or obstructions), then connect the power. 2. Please verify that the frequency band used by your mobile phone matches the operating frequency band of the signal booster. If you have purchased a signal booster with an incorrect frequency band, please contact the seller (our service) through your order.

Warning

1. Keep the distance between the outdoor antenna and indoor antenna should be about 32 ft and make sure a proper amount of physical separation (walls or obstructions) between them.
2. Keep the power is off during installing/adjusting antennas.

Customer Services

If you encounter any issues during the installation process, please send us your order number, installation photos, or videos. You can contact us through the order or by sending an email to **supports@tonve.com.cn**. We will make every effort to resolve the problem as soon as possible.

Common Faults & Solution

■ Question 1

Doesn't work, the POWER light is green, the SIGNAL light is blinking or not on.

Please raise the outdoor antenna to obtain a better signal from the signal tower. Maintain a distance of at least 32 feet between the outdoor and indoor antennas, ensuring there is appropriate physical separation (such as indoor walls or obstacles) between them.

If the signal booster still doesn't function properly after adjusting the antenna, it is possible that you have ordered an incorrect frequency band signal booster. Carriers in different regions across the United States use multiple frequency bands, and even if there is service in your area, your phone might not be using the same frequency band. If you have purchased a signal booster with the wrong frequency band, please contact our customer service team, and we will provide you with a solution.

■ Question 2

My signal is weak, but my LEDs are green.

This is usually caused by a weak signal transmitted from the outdoor signal tower. If the outdoor antenna is not positioned to receive a good signal, it can result in limited amplification of the indoor signal.

If the outdoor antenna is positioned to receive a strong signal, try adjusting the direction of the outdoor antenna. Make sure the outdoor antenna is installed correctly, with an adequate distance between antennas, secure connections, and check for any signs of damage to the coaxial cable.

If the outdoor signal is extremely weak, you may need a higher-gain outdoor antenna to help boost the signal. This can be a common issue in areas with dense forests or tall trees. If the outdoor signal level is below three bars, we recommend selecting a high-gain outdoor Yagi antenna.

To compensate for the lower outdoor signal, you can install the outdoor antenna on a tall mast, raising it to the tree line or roofline. Alternatively, you can relocate the outdoor antenna to an area where trees won't obstruct the signal. This issue is more likely to occur when trees or other obstacles are directly within the line of sight between the outdoor antenna and the signal tower.

■ Question 3

Calls are dropping and/or I can't make calls.

Please check for cable loops and twists, as well as any oscillation issues when separating the cellular indoor antenna from the outdoor antenna. If these steps do not resolve the problem, please contact us immediately.

■ Question 4

My signal goes up and down and calls drop.

If you are experiencing intermittent signal issues, it is usually caused by oscillation. In simple terms, this means that the signals from the outdoor antenna and the indoor antenna are "colliding" with each other and causing interference.

To resolve this issue, separate the two antennas from each other. They should always maintain a distance of at least 32 feet (10 meters). In rare cases, other cellphone signals may be too strong and interfering with your signal. To diagnose this problem, have someone inside the building check the signal on their phone while you move the outdoor antenna. Find a spot on the rooftop where the signal quality is stable, and then install your outdoor antenna there.

■ Question 5

My phone doesn't show increased bars.

The bar signal you see on your phone doesn't always accurately indicate whether you are receiving a good signal. The signal bars on a phone are determined by decibels (dB), which represent the signal strength. However, the quality of the signal itself is far more important than its strength.

In a four-bar signal on a phone, each bar represents approximately 10 dB of signal strength. Often, with newly installed mobile repeaters by the company, you will experience significant improvements in call quality without necessarily seeing an increase in bars.

Note that as you move closer to the indoor antenna, it is more likely that you will see higher signal bars on your phone.

■ Question 6

I can't get signal in some rooms.

This typically indicates that the building materials in the partition walls are obstructing the signal from reaching the room, or your indoor antenna is too far away from the room. You have a few options to address this issue.

- 1) Try moving your indoor antenna to obtain a strong signal without creating another weak spot in other areas of the house.
- 2) Purchase higher-gain outdoor and indoor antennas.
- 3) Increase the installation of indoor antennas. You can install an indoor antenna in the area with weak signal and another indoor antenna in other parts of the house.

FCC Statement

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

This equipment has been tested and found to comply with the limits for 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

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.

This device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction

Warning

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 cable as specified by the manufacturer. Antennas MUST be installed at least 20cm (8 inches) from 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 be operated ONLY in a fixed location for in-building use.

Please search for your phone carrier and signal booster registration on Google, then fill some information as required. There are some websites for your reference:

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>

Guarantee & Warranty Details

30-Day Money-Back Guarantee and 1-Year Limited Manufacturer's Warranty.
Our signal booster comes with a 30-day refund guarantee and a one-year limited manufacturer's warranty. During the warranty period, your product is guaranteed against any manufacturing or material defects.

Registered members for free, you will be entitled to an additional 1-year warranty and priority customer support. To become our member, simply send your order information to **supports@tonve.com.cn**

Note:

1. Only applicable to customers who have purchased the product at full price through our official seller on Amazon.com.
2. The 2-year warranty covers only the MAIN BOOSTER and EXCLUDING antennas, cables, and power supplies.

Details on the Warranty

During the warranty period, if your mobile signal booster malfunctions during normal usage, we will provide you with a replacement or repair service. If an identical product is not available, we can offer a replacement with a similar product.

We will cover all labor, materials, and parts expenses for repairs and replacements, as well as the shipping cost for sending the new replacement item.

The warranty on the replacement product will expire at the same time as the warranty on your original product would have ended. Receiving a replacement product does not extend or renew the warranty.

What Does the Warranty Cover?

- Cell Signal Booster
- Power Adapter
- Coaxial cable
- Outdoor/Indoor Signal Antenna
- Components

Technical Assistance

Email: supports@tonve.com.cn

WhatsApp:



FCC Statement

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

ISED Statement

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES - 3 (B)/NMB - 3 (B).

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

- (1) Cet appareil ne doit pas provoquer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 6.3 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 6.3 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

The FCC certification of this device refers to RF exposure testing performed in typical operating conditions, where a person is no closer than 20 centimeters from the device surface at all times, except for non-repetitive patterns with transient time intervals in the order of a second. Only in the stated conditions, the device is shown to fully comply with the FCC RF

Exposure requirements of KDB 447498.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

