



USER MANUAL

SMART MOBILE SIGNAL BOOSTER

Boosting 2G/3G/4G

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Mobile Signal Booster Introduction

Mobile signal boosters are aimed to strengthen and improve weak mobile signal reception. The primary functions of signal boosters are the enhancement of cell phone communication quality and maximization of wireless internet speed. The intelligence of boosters lies upon their capacity of revealing the real signal strength around the area as well as the correct output power.

Repeaters detect signal faults automatically and provide with corresponding solutions at the moment of installation. The device automatically goes into an inactive mode once no incoming or outgoing calls are made around the area.

Where To Use?

The list of places applicable for using mobile signal boosters includes, but is not limited to, your house, apartment, office, basement, parking lot, shopping mall, etc..

Functions and Characteristics

- Disclose of all signal reception parameters.
- Automatic detection of signal faults and speedy response to them.
- Automatic shut down of power supply in case of no active operations and immediate device activation once there is an incoming / outgoing call.
- Automatic detection of the distance between indoor and outdoor antenna.
- Avoidance of device self-oscillation.
- Regulation of the system gain up to 55db.
- High speed of digital ALC system.
- Display of correct input/output signal strength on LCD screen.
- Shut off of the uplink gain in the state of self-oscillation.
- Absolute elimination of uplink noise and any possible interference on base station.
- Small-sized, light-weighted and neat.
- Generation of high gain and low power loss.
- Accessible, effortless and intelligent installation guide on LCD screen.

Product Appearance



Front Side



Back Side



Connection Side

Technical Parameters

Gain: $\leq 70\text{dB}$

Output power: 20dBm

Work voltage: DC 5V

Work current: $\leq 2\text{A}$

Environment temperature: $-25^{\circ}\text{C} - +55^{\circ}\text{C}$

Interface: N-Female

Dimension: 193x116x27mm

Weight: $\leq 1\text{kg}$

Product Pictures

Mobile Signal Repeater



Outdoor Antenna



Indoor Antenna



Coaxial cable



Power Supply



Operations Notice

Before proceeding with mobile signal booster installation, please read carefully the points mentioned below and make sure to follow the safety matters.

Mobile Signal Boosters are used for wireless retransmission of a signal, bi-directional amplification of uplink and downlink signals, and extension of the signal coverage for better mobile communication. In case of correct device installation and management, signal boosters will not cause any damage to the base station. Additionally, as mobile signal repeaters enlarge the signal coverage of the base station, the uplink output noise level may affect the sensitivity of base station.

In order for the device to be in a perfect working state, it MUST be connected to the BS and MS ports through a cable FIRST, before being powered on. Otherwise, the occurrence of technical problems are unavoidable. When it comes to supply power, adapter power adopts AC 220v, hence, make sure that AC power range is ac100v - 240v, while rated frequency range must be 50/60hz.

Antenna should be grounded properly in order to prevent the signal booster from the potential damage caused by lightning strike. The latter can conceivably strike the antenna while traveling through the coaxial cable to your device, which will not only damage the equipment but can cause a fire or shock people in the vicinity. To protect the booster completely, the donor antenna located outdoors must be equipped with a lightning protection device, while antenna bracket must be protected with a lightning rod. Before attempting to readjust the outdoor and/or indoor antennas, ensure that the power supply is disconnected first.

Additionally, always keep the identifier and indicator light on the back of the device clean.

Screen Display Status Description

Welcome to use the smart mobile signal boosters, the system is starting.....

The screen display will keep around 10s to the work page.

Outdoor   - 49 dBm
Indoor   + 21 dBm
Device Gain: 70 / 70 dB
DC5V  AGC 

The workable screen display, outdoor should be -40 ~ -60 dBm, indoor should be 10~21 dBm, device gain should be 50-70/70 dB.

Outdoor   — — — dBm
Indoor   — — — dBm
Device Gain: 70 / 70 dB
DC5V  AGC  ↓

If the right bottom shows an arrow ↓, there is something wrong with the setup/installation, please press the right bottom below on the booster for instructions on how to fix the issue. One of the following options will be displayed.

Too close between antennas
Solution: Pls let them far away from each other at least 15 meters , and restart the device.

Antennas too close to each other:

Solution: Please separate from each other with at least 15 meters gap and restart the device.

Problem: Input signal too weak
Sol 1: Towards to the base station
Sol 2: Raise up the antenna
Sol 3: Avoid the barriers

Input Signal Weak

Sol 1: Point Antenna towards base station

Sol 2: Raise up the antenna

Sol 3: Remove barriers

Problem: Isolation not enough
Sol 1: Pull away the antenna
Sol 2: Raise up the antenna
sol 3: Isolate with the wall

Isolation not enough

Sol1: Separate the indoor and outdoor antennas

Sol2: Raising up outdoor antenna

Sol3: Isolated with the wall

Please adjust the installation as per the screen instruction. If you still follow these instructions and can't resolve the issue, please contact your sales representative / distributor for support.

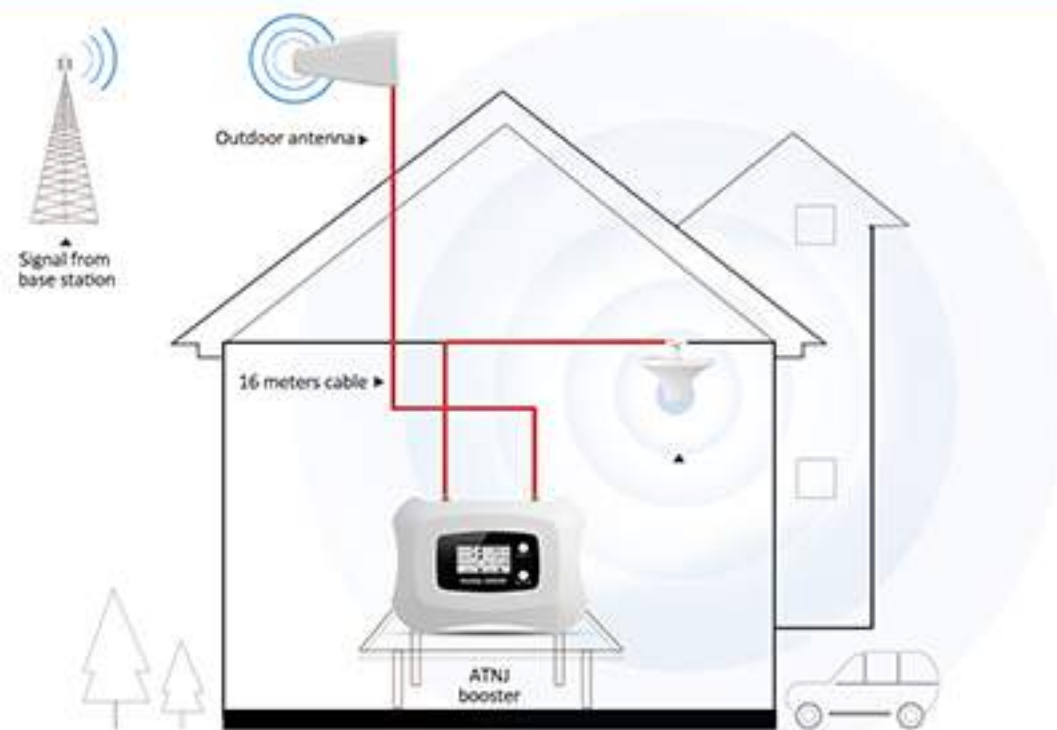
Setup Instruction

IMPORTANT NOTE: DO NOT POWER ON THE DEVICE UNTIL YOU HAVE COMPLETED THIS SETUP.

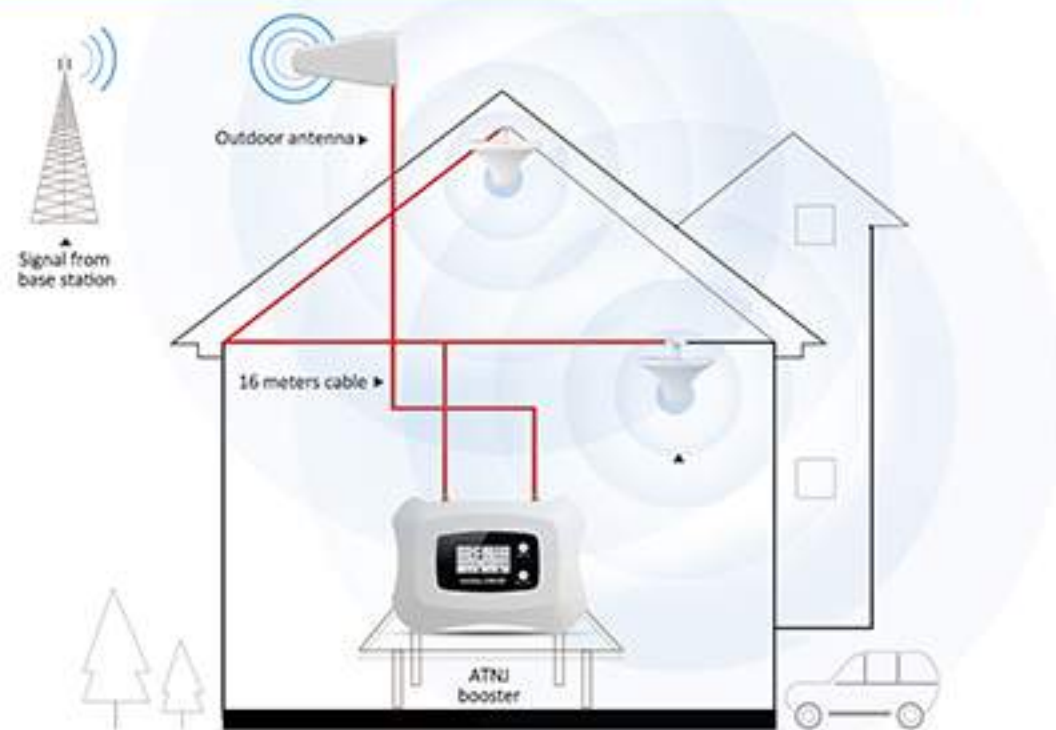
1. Connect the indoor antenna to the MS port
2. Connect the outdoor antenna to the BS Port on the device
3. Attach the outdoor antenna to a stick or PVC pipe and keep a minimum vertical distance of 15 meters from the indoor antenna. (Please make sure the outdoor and indoor antenna are isolated from each other with a wall)
4. Point the outdoor antenna to the direction where you know there is possibly a higher signal strength from the base station.
5. Power on the booster and check the signal strength – Check the BS Signal and confirm if you are getting a minimum of -60dBm (Note: A signal strength of -60dBm is better than – 70dBm – See below figure.
6. Adjust outdoor antenna until you get the best signal strength.



Installation Steps



One indoor antenna



Two indoor antennas

Signal Strength Test

For iPhone users: Dial *3001#12345#*

The signal strength will be shown at the top left corner of your phone screen immediately.

For Android phone users: Dial *##*#4636#*##*

The signal strength will be shown at the top left corner of your phone screen immediately.

The Accessory list

Item	Specifications	Quantity	Unit
Booster	Single band mobile signal booster	1	piece
Power	Adapter AC100-240V input, DC 5V output	1	piece
Outdoor antenna	800-2500mHz	1	piece
Indoor antenna	800-2500mHz	1	piece
Outdoor antenna Cable	20/15 meters	1	piece
Indoor antenna Cable	5 meters (Except penholder antenna)	1	piece
User Manual	Color Brochure	1	piece
Fixes installation accessories	VELCRO	1	piece

Important Notes

- There must be a wall separating the indoor and outdoor antennas. It is advisable to keep the antennas as far away from each other as possible, otherwise, the short distance will hinder the booster from its working properly.
- The repeater is equipped with an AC 100V - 240V adapter . Take into consideration the voltage range for power supply input.
- This device is designed for indoor use, thus, keep track of the mentioned temperature range as well as keep the booster away from water and wet areas. Favorable temperature range is -25 °C — 55 °C.

Trouble shooting

Description of the problem	The Cause	The Solution
The light of the device is not on	Mobile phone signal amplifier is not powered on	Power on the device
The light is on but the mobile signal strength is not boosted	The retransmission antenna damage. The retransmission antenna is not connected properly/correctly to the MS port of the device	Replace the retransmission antenna Fix the cable connection



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