

Phonetone
Tech
USER MANUAL

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#### Introduction

This guide will give you a general overview of mobile signal boosters to help you use it right away. It provides you with all necessary information and instructions for mobile signal booster effective installation and use.

This guide includes written and visual information (such as illustrations and diagrams) to assist the user in completing the installation.

Please, read carefully the precautions with symbols, to ensure that the device is used in best condition and in complete safety.

Mobile signal boosters aim to strengthen and improve weak mobile signal reception. The primary functions of signal boosters are:

- Enhancement of cell phone communication quality
- 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.



The device is designed for indoor use only with a temperature range of -250C to+550C.

# Package Includes



Booster



Outside LPDA Antenna

If upon receiving your order, there are any missed components, please, contact us right away and we will take care of the issue.



Inside Antenna



50 feet RG58 Outside Cable Cable



20 feet RG58 Outside Cable



**Power Supply** 



This device may be operatedONLY in a fixed location for use in an indoor, temperature controlled enviroment (<100 degrees Fahrenheit)

# Step 1: Preparation

# Getting Started to Install

In order to complete an effective installation by yourself, you may need the following tools:



- Ladder
- Screwdriver
- Drill
- Adjustable wrench
- Power Strip (if there is no electrical socket where you want to install the booster unit).
- Also note that you will need at least one hour for installation. Depending on your location and your apartment/home layout installation, it may take up to 4 hours.





Before installation, make sure that you are allowed to install an outside antenna on the roof of your building.





Make sure that you are allowed to make holes on your inside and outside walls forcables.





Make sure that you are able to have optimal distance of 10-15 meters and wall isolation between inside and outside antennas.



# Step 2: Phone Signal Measurement

#### **iPhone**®

Dial \*3001#12345#\* then press Call.

Hold down power button until you see "Slide to Power Off" then release the power button

Hold the Home button until your main screen appears. 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™

Settings > About Phone > Status or Network > Signal Strength or Network Type and Strength (exact options/wording depends on phone model). iPhone is a registered trademark of Apple Inc. Android is a trademark of Google Inc.

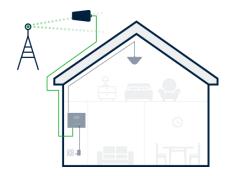
# For all Other Phones

- Keep track of the network (2G, 3G or 4G) your phone is connected to.
- Togetreadings from other carriers you will need phones from each carrier, or you will need to contact them directly.

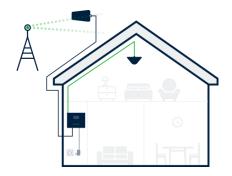
## Step 3: Finding the Best Place for Inside Antenna



• Walk around your home/office taking signal strength readings until you find the area that has the weakest reception, or number farthest away from zero. For example -100 is a weaker signal than -80.



- Place your Inside Antenna in this poor signal area on the floor where you will mount it. For best results, keep the inside antenna more than 10-15 meters from the booster.
- Mount the inside antenna as shown on the picture below according to option 1, if you have 1 internal antenna and option 2 – in case you have kit with 2 (or more) internal antennas.



Having an accurate measurement of signal strength in decibels (dBm) is crucial when installing your system. Decibels accurately measure the signal strength that you are receiving.



Test both 3G and 4G signal for best results by turning off the LTE in the carrier settings of your device. An approximate signal strength table is given bellow.

2G/3G (typically voice)	-70dBm	-71 to -85dBm	-86 to -100dBm	-101 to -109dBm	-110dBm
<b>4G/LTE</b> (typically data)	-90dBm	-91 to -105dBm	-106 to -110dBm	-111 to -119dBm	-120dBm

However, the signal strength indicators may be different depending on your location and network speed that is provided in your area.

# User Manual

Need help?

phonetonetech.com

wecare@phonetonetech.com

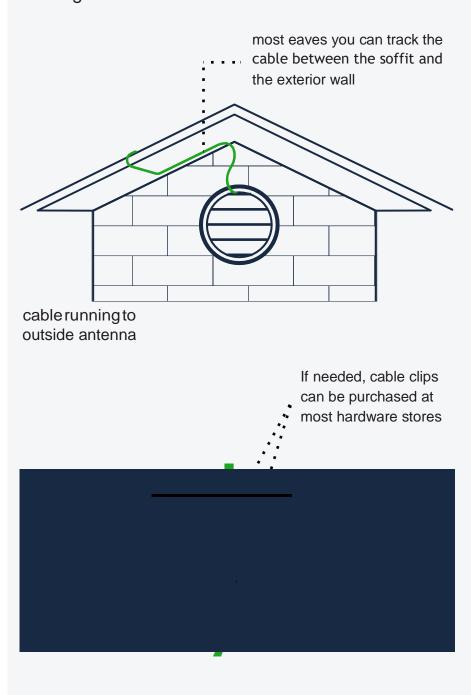
# Step 4: Finding the best place for outside antenna

This is the most critical step of the installation process because it will determine the overall performance of the booster system.

Find the place with the strongest signal (number closest to zero) on the outside of your home.

For outside antenna installation, it may be required to climb up on the roof of your building/house.

Make sure you are equipped with safety shoes while working on the roof.



To determine the best location for your Outside Antenna, note the dBm reading in a variety of locations.

- Attach the outdoor antenna to a stick or a pipe. Make sure that location of outside antenna is isolated from inside antenna with a wall.
- 2 Pointthe outdoor antennato the direction where you know there is possibly the higher signal strength from the base station.



**Note:** The Outside Antenna must be at least 10-15 meters away from the Inside Antenna for its best performance. For kits with Panel antenna it is important to make sure the Inside and outside antennas are facing away from each other

#### **Connections**



Connectthe 15m (longer one) coax cable to end of the booster labeled BS Port and then to outdoor antenna



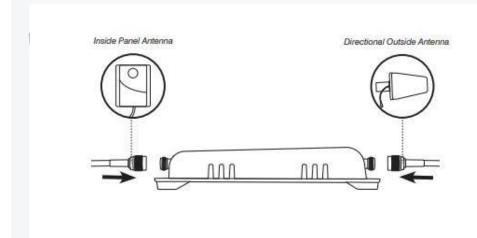
Make sure all the cables are connected before you power on the booster.



Connect the 5/10 m (shorter one) Coax
Cable to end of the booster named MS port then to indoor antenna.
If you have 2 or more internal antennas in the kit, first connect a splitter to MS port with 5/10m cable, then connect each internal antenna to splitter



Power on the booster and proceed with the setup instructions



## Setup **Instructions**

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

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

-49dBm Outdoor

| -49dBm Indoor

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 50-70/70dB.

Outdoor  $| \mathbf{T}_{i,j} | |$  ---dBm Indoor  $| \mathbf{T}_{i,j} | |$  ---dBm

Device Gain: 70 / 70 dB

DC5V ☑ AGC ☑ ↓

If the right bottom, shows an arrow,  $\downarrow$  there is an issue with the installation, please, press the right bottom below for instructions on fixing the issue. One of the following options will be displayed.

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

Antennas are too close to each other:

Solution: Please, separate from each other with

at least 15 meters 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 is too weak

**Solution 1:** Point the outside antenna towards

the tower

Solution 2: Raise the outside antenna

Solution 3: Remove any barriers

Problem: Isolation not

enough

Sol: Pull away the antenna Sol: Raise up the antenna Sol: Isolate with the wall

Isolation is not enough

Solution 1: Separate the inside and

outside antennas

Solution 2: Raise the outside antenna

Solution 3: Isolate with wall

In case of any inquiries, please do not he sitate to contact us.

### Safety Guidelines

- In order for the device to be in a perfect working state, it MUST be connected to the BS and MSportsthroughacableFIRST, before being powered on.
- Use 100-240v AC with a frequency of 50/60HZ.
- 3 Anyantenna used with this device must be located at least 0.5 meter from all persons.

# In case of malfunction

- Immediately stop using the device.
- Try to identify or eliminate the cause using the description in this document (section Setup Instructions).
- If it is not possible to identify or eliminate the cause using this document, switch off the device and contact us immediately.