



Installation Guide

Mini Series—————

Sidekick



Package Contents



Signal Booster



Outside Antenna



1X32.8ft SMAM-NM Outdoor Cable
1X16.4ft SMAF-SMAM Outdoor Cable



Indoor Whip Antenna



Power Supply



Accessories for main parts
are all provided

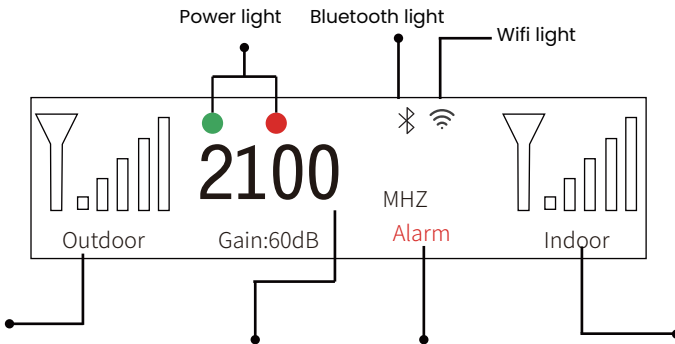


waterproof tape
to protect connections



Through-Window-Cable
SMA-Male to SMA-Female
No drilled hole

Notes for LCD Display



The number of bars indicates the performance of the device. If it shows zero bar, you can change the installation position and direction of the outdoor antenna to gain better signal.

It shows the frequency bands' real-time working performance.

When it flashes, it indicates that the device is not working correctly due to loopback or overload. You can refer to "4 regular problems and 1 normal status" in the latter part of this guide to solve corresponding problems.

It shows the boosted signal strength. The number of bars indicates the performance of the device.

Booster Light Patterns

LED Type	LED condition	Remark
Bluetooth	On	Successfully connected to Bluetooth
	OFF	Bluetooth is not connected
Wi-Fi	On	Successfully connected to Wi-Fi
	OFF	Wi-Fi is not connected
Power	Solid Green	Normal operating condition
	Solid Red	Booster is working abnormally
	OFF	Booster is not receiving power from DC power supply
Alarm	OFF	Booster is working normally
	Flashing	Booster is working abnormally

Bands contained in the Gauges

Gauge	Band	Uplink	Downlink
LTE700	12/17	698-716MHz	728-746MHz
	13	776-787MHz	746-757MHz
CELL800	5	824-849MHz	869-894MHz
PCS1900	25/2	1850-1915MHz	1930-1995MHz
AWS2100	4	1710-1755MHz	2110-2155MHz

Please focus on the gauge that contains the band you are using.



Getting Started


Power Supply


Signal Booster

Step 1 Connect the Power Supply to the Booster





Step 2 Connect the Booster with the App

Register an ID first and log in.
Add the booster to the device list

Step 3 Find the cell tower & Determine the outdoor antenna's position

3.1 Find the band you are using

For Android

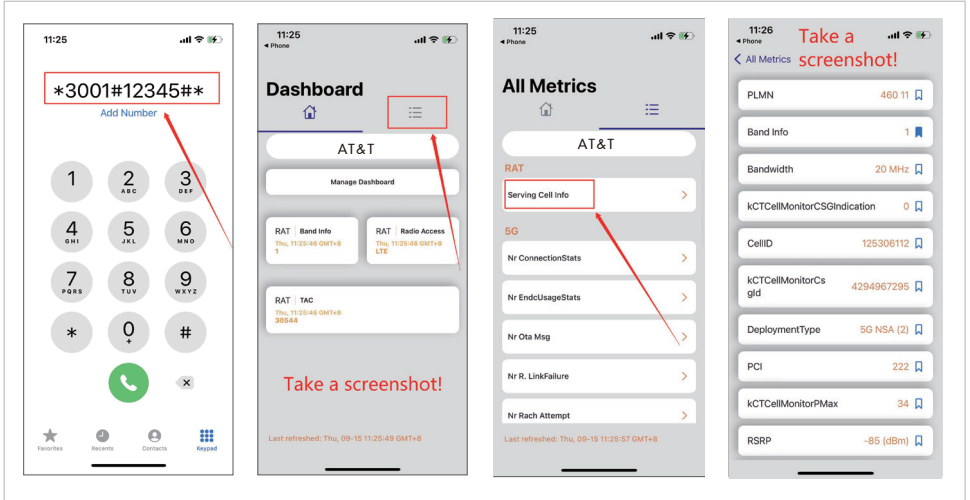
Download NetWork Cell Info Lite in the Google store and open it.

It can be seen from the example picture that the frequency band is band 13.
(According to the form before, you need to pay attention to Gauge LTE700)

Then click MAP. You can see your phone connecting to a tower, and you can try aiming your outdoor antenna at it. But sometimes this is not accurate. You could also move to Step 3.2 to find the tower

Note: Please take screenshots at this stage.

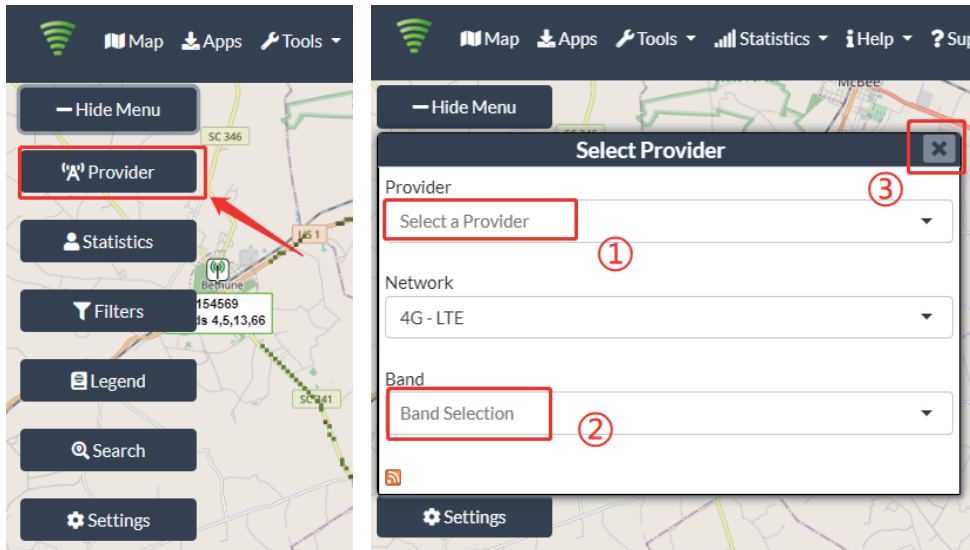




- (1) Dial *3001#12345#*
- (2) Follow the instructions, take the screenshots as required.

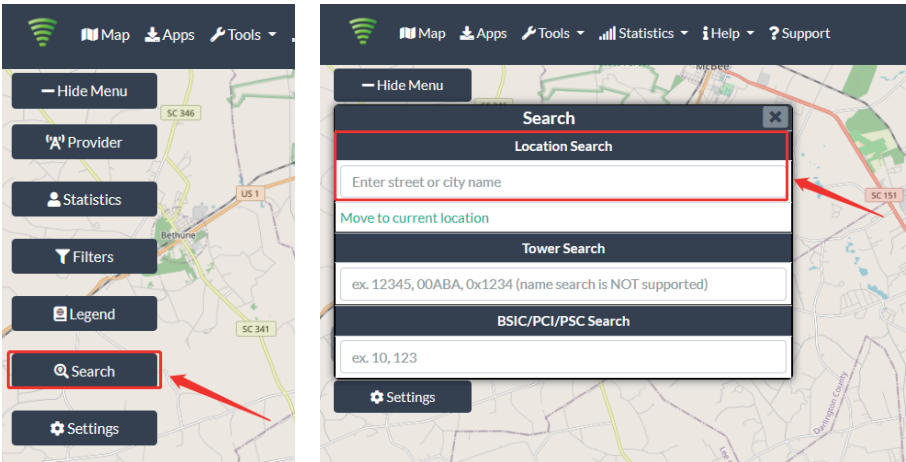
3.2 Find the cell tower

- (1) Enter cellmapper.net
- (2) Choose your own carrier and band here.



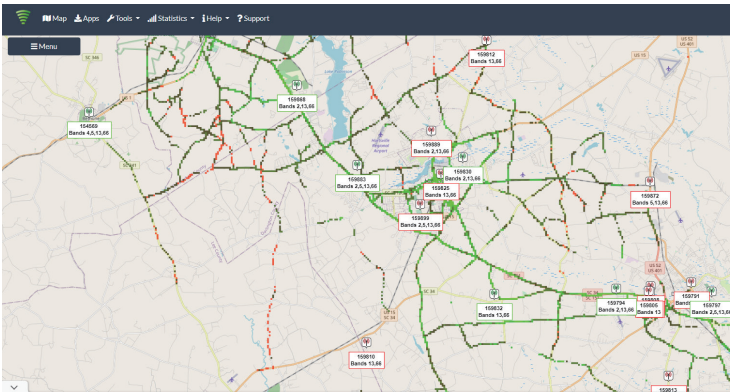
(3) Then enter the coordinate of where you are trying to install the signal booster, and press Enter key.

(In fact when you open Cellmapper, the map on the right will automatically locate your area if you've given the site permission to access your location. If you found tower sites not even displayed on the map, it might because the app intercepts the locations for security reasons.)



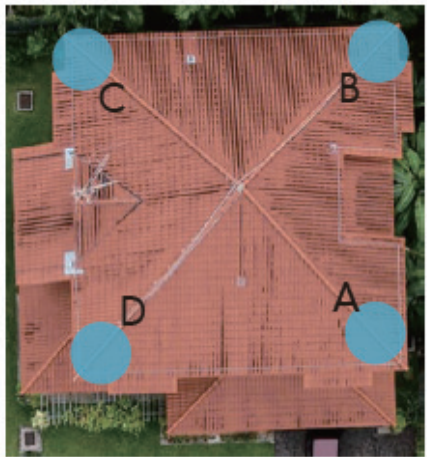
(4) After the map jumps to the location, you can scroll the mouse pulley and zoom it out, then you will see the tower near the location. It would be better to take a screenshot of this page to guide the following installing steps. Should you have any questions, please contact our tech support.

Note: If you need help finding the tower, please contact our tech support and provide your carrier, band and screenshots taken in the last steps.

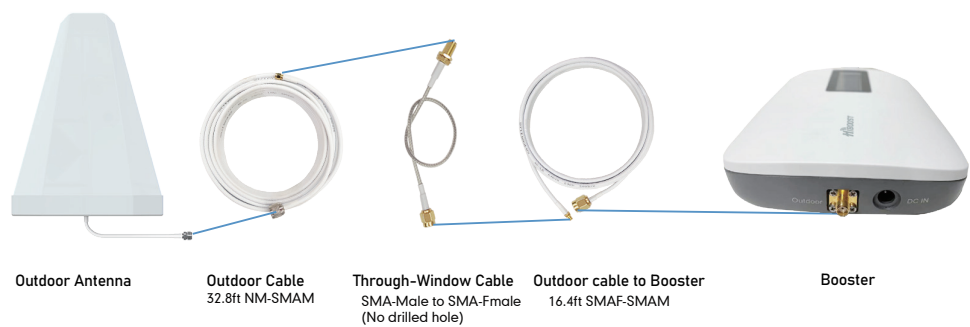


3.3 Determine the outdoor antenna’ s position

The outdoor antenna is usually placed at one of the 4 ends of the roof.
Please choose the position according to the tower’ s location. Make sure there are no barriers between the antenna and the tower.

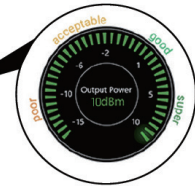
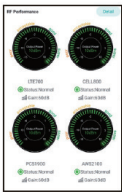


Step 4 *Connect the outdoor antenna with the booster*



Note: At this stage, don’ t connect the indoor antenna to the booster.

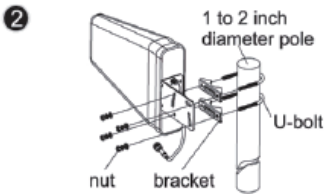
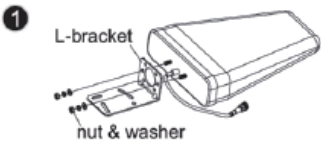
Step 5 Adjust and fix the Outdoor Antenna



Have your outdoor antenna pointed to the cell tower you found before and observe the reading on the app. Adjust the outdoor antenna accordingly.

Notes:

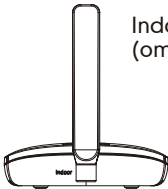
- (1) The output power should be the higher the better.
- (2) The full output power for Sidekick is 10dBm. And the full gain is 62dB.



Step 6 Connect the indoor antenna with the booster



Indoor port



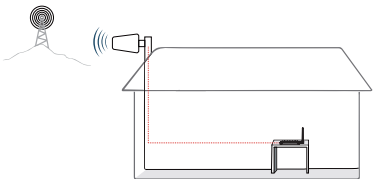
Indoor Whip Antenna
(omnidirectional)

Step 7 Adjust the indoor antenna

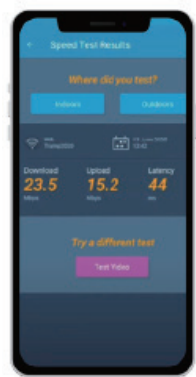


Place the signal booster on a table and make sure the booster is within the coverage area.

Make sure that the gain reaches about 60dB. If not, please increase the vertical and horizontal distance between the two antennas or add some barriers.



Step 8 Signal quality test



You could do the following:

- (1)First make sure the signal gauge value is unchanged from that during the outdoor antenna installation.
- (2)Do speed tests with the booster on and off, and make a comparison.
- (3)Check if the number of signal bars increases.
- (4)Make a phone call or send messages and check if the voice and streaming are better.

4 Regular Problems and 1 normal status

If the booster is working normally, no further adjustment is required

OVERLOAD					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION
LTE700	<60dB	>=8dBm	Alarm light flashing and Power light solid red	Outdoor signal is too strong	Have your outdoor antenna pointed slightly away from the cell tower
CELL800	<60dB	>=8dBm			
PCS1900	<60dB	>=8dBm			
AWS2100	<60dB	>=8dBm			

LOOP BACK					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION
LTE700	<60dB	<8dBm	Alarm light flashing and Power light solid red(strong loop back) or green(slight loop back)	Inadequate separation of the indoor and outdoor antennas	1、 Increase vertical and horizontal distance. 2、 Add barriers(e.g. walls) Please try these solutions until the gain reaches or is over 60dB.
CELL800	<60dB	<8dBm			
PCS1900	<60dB	<8dBm			
AWS2100	<60dB	<8dBm			

POOR SIGNAL					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION
LTE700	>=60dB	--/NEGATIVE	Alarm light OFF and power light solid green	Input signal is too weak	1、 Try adjusting the outdoor antenna to the best direction 2、 Try adjusting the outdoor antenna to another cell tower 3、 Try increasing the height of the outdoor antenna and make sure there are no barriers between the tower and the outdoor antenna Please try these solutions until the output power reaches or is over -5dBm.
CELL800	>=60dB	--/NEGATIVE			
PCS1900	>=60dB	--/NEGATIVE			
AWS2100	>=60dB	--/NEGATIVE			

Normal but No Boosted Signal					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION
LTE700	>=60dB	>=-5dBm	Alarm light OFF and power light solid green	1、 The band is not supported 2、 The Signal is from other Carriers	Check the band you are using again. If it stays at band66, get into the 'detail/ 'Setting' of gagues on Signal Supervisor and switch off RF switch of AWS2100, then adjust the outdoor antenna again. It would be better if there are two persons and one can stay near the indoor antenna to check if the signal is boosted.
CELL800	>=60dB	>=-5dBm			
PCS1900	>=60dB	>=-5dBm			
AWS2100	>=60dB	>=-5dBm			

NORMAL					
	DL GAIN	OUTPUT POWER	LED LIGHT PATTERN	REASON	SOLUTION
LTE700	>=60dB	>=-5dBm	Alarm light OFF and power light solid green		
CELL800	>=60dB	>=-5dBm			
PCS1900	>=60dB	>=-5dBm			
AWS2100	>=60dB	>=-5dBm			

Note:
 Some customers have some misunderstandings about boosters, and we would like to clarify it here:
 If you can't even get a stable 1 bar outside the house or on the roof, then we suggest you return it as it won't work in areas with very weak signal, the same is true of all boosters on the market.

Technical Specifications

Model No.	Sidekick	Hero
Working Band	Band 12-17 / Band 13 / Band 5 / Band 25-2 / Band 4	
UL Frequency Range(MHz)	698-716 / 776 – 787 / 824-849 / 1850-1915 / 1710-1755	
DL Frequency Range(MHz)	728-746 / 746 – 757 / 869-894 / 1930-1995 / 2110-2155	
Supported Standards	CDMA, WCDMA, GSM, EDGE, HSPA, EVDO, LTE, 5G and all cellular standards	
Max. Gain	62 dB	65 dB
Max. output power	DL 10 dBm	DL 12 dBm
MGC (Step Attenuation)	≥ 25 dB / 1 dB step	
I/O Port	SMA-Female	
Impedance	50 ohm	
Environment Conditions	IP40	
Dimensions	7.6*5*1.3 in / 192*126*33mm	
Weight	≤ 1.68 lbs / 0.76 kg	
Power Supply	Input AC100~240 V, 50/60 Hz, Output DC 12 V / 3 A	



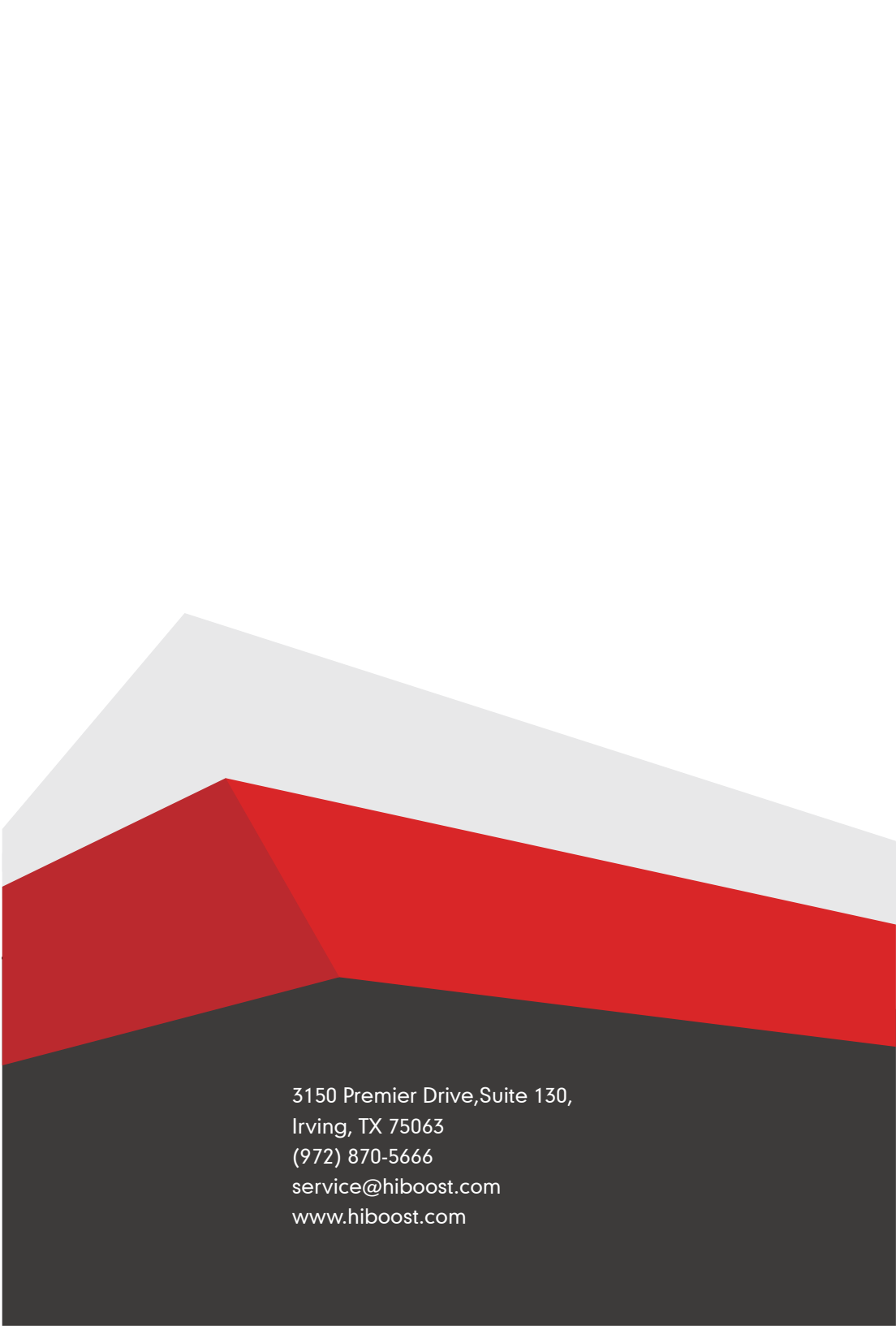
For more information

Download Signal Supervisor or enter our website.



www.hiboost.com.

- a. You can download the specific user manual.
- b. You can reach our technical support for help.



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