GOBOOST®

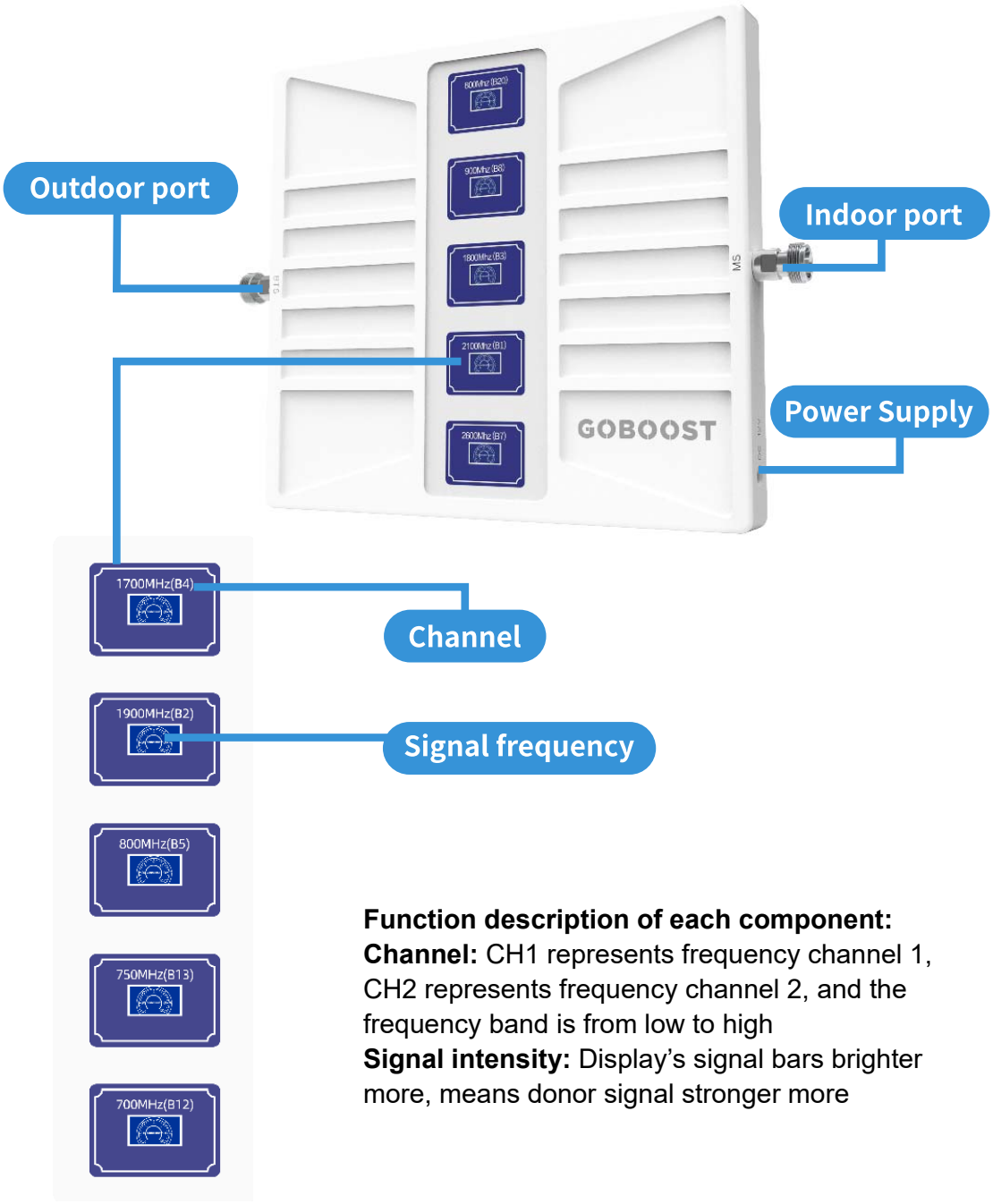
Manual

GB20 FIVE-BAND FAMILY

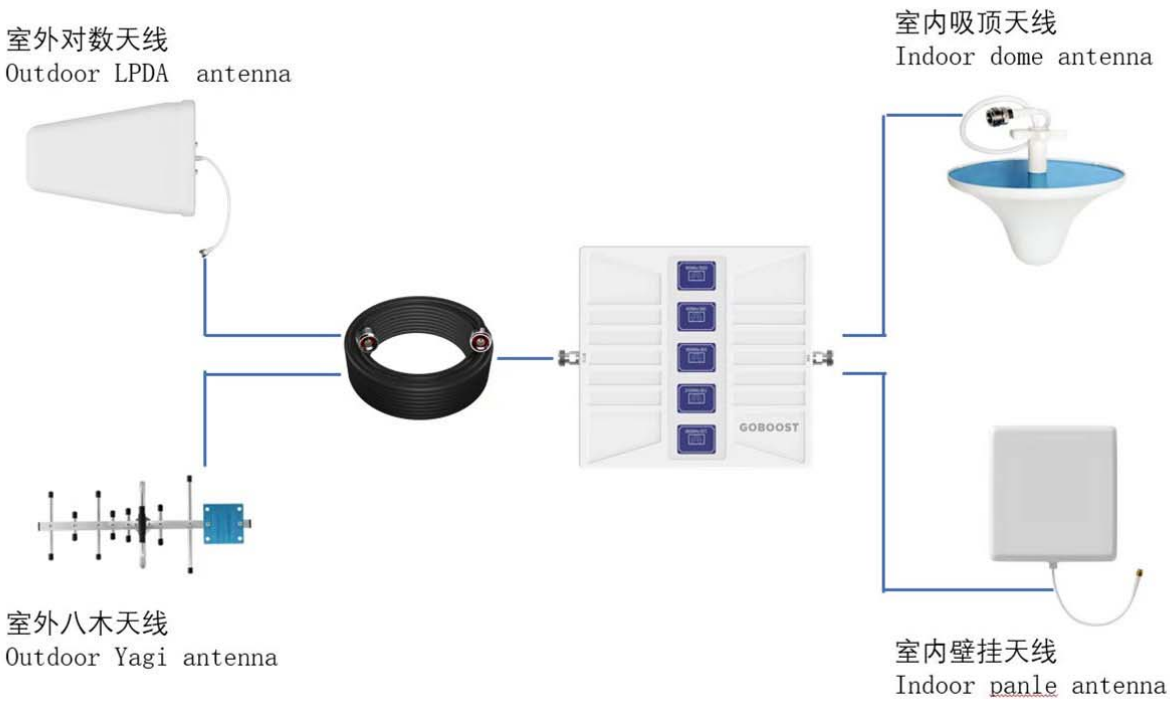
Make the world free of blind spots and

communication barriers

Instruction



Function description of each component:
Channel: CH1 represents frequency channel 1, CH2 represents frequency channel 2, and the frequency band is from low to high
Signal intensity: Display's signal bars brighter more, means donor signal stronger more



Antenna Kitting Information

Component	Type specification	Type	Gain/Loss					Manufacturer
			LTE-B12	LTE-B13	CDMA	PCS	AWS	
Outside Cable	Low-loss Cable 10M	/	2.3dB	2.3dB	2.3dB	2.3dB	2.3dB	Hangzhou Aoda
Outside Antenna	LPDA antenna	ODS-10NK-80/270	7.6dBi	7.6dBi	7.6dBi	8.1dBi	7.9dBi	Foshan Dilong
Outside Antenna	Yagi antenna	OBM-8NK-698/2700	8dBi	8dBi	8dBi	8dBi	8dBi	Mengdingjinshu
Indoor Antenna	Dome antenna	IXD-3NJ-80/270-2	2.7dBi	2.7dBi	2.7dBi	5.7dBi	6.4dBi	Foshan Dilong
Indoor Antenna	Panle antenna	IBG-9NJ-70/270-2	6.2dBi	6.2dBi	6.2dBi	7.8dBi	8.7dBi	Foshan Dilong

Product specification

Parameter data

Frequency Range	Frequency	Uplink	Downlink
	Lower 700	698~716	728~746
	Upper 700	776~787	746~757
	CDMA	824~849	869~894
	PCS	1850~1915	1930~1995
	AWS	1710~1755	2110~2155
Max. EIRP		27.66 dBm	14.46 dBm
Gain		63.69dB	64.3dB

Bandwidth		17M+10M+25M+60M+45M
Ripple in Band		LTE B12/17≤6dB;LTE-B13≤6dB;CDMA≤6dB;PCS ≤6dB; AWS≤6dB
Spurious Emission	9KHz~1GHz	≤ -36 dBm
	1GHz~12.75GHz	≤ -30 dBm
Intermodulation Products	9KHz~1GHz	≤ -36 dBm
	1GHz~12.75GHz	≤ -30 dBm
VSWR		≤3
MTBF		> 50000 hours
Power Supply		AC：100~240V, 50/ 60Hz；DC：5V 3A
Power Comsumption		< 10W
Impedance		50 ohm

Mechanical Specification

RF Connector	N-Female
Dimensions (D*W*H)	256*199*20mm
Packing size (D*W*H)	335*220*50mm
Net weight	<1.24KG
Gross weight	<1.53KG
Installation Type	Wall Installation
Environment Conditions	IP40
Humidity	< 90%
Operating Temperature	-10℃ ~ 55℃

Connection diagram

1.Find a place where has good outdoor signal to installoutdoor antenna

The outdoor antenna shall be installed at a position where cell phone signal hasat least 3 signal bars, mostly a higher position and make the antenna towardsbase station.

2.Connect outdoor antenna to booster by cable

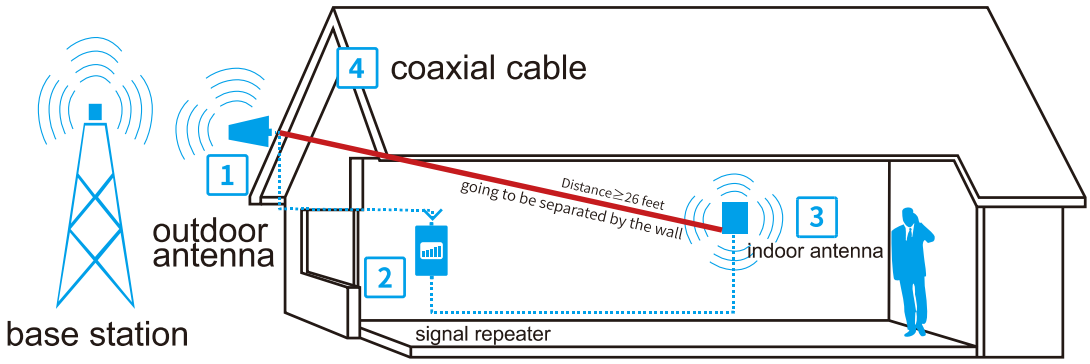
Connecting the cable between the outdoor antenna and the BTS port of booster,and tightening the connectors at both ends.

3.Install the indoor antenna in building

Screwing the indoor antenna into the MS port of the booster, and try to put theindoor antenna on one point as higher as it could be, in order to increase theinterior coverage. The indoor antenna and outdoor antenna shall be separated bya brick wall there shouldn't be a window or door was opening when installation (Internal & External Antennas) with a distance of at least 8 meters.

4.Check whether the joints are tightened, and theinstallation is completed

Please turn on the power, checking the performance.



List	
Product	Quantity
Cell Phone Signal Booster	1
Outdoor antenna	1
Indoor antenna	1
Cable	1

Q&A (English version)

Q1. Signal does not be better after installation

(1)Test the signal strength whether has been enhanced through the mobile phoneapp.
(2)Check out if the ports connecting the outdoor and indoor antennas arereversed, the indoor antenna is connected to the MS port of the repeater, and theoutdoor antenna is connected to the BTS port of the repeater.
(3)Test the band by phone app, contact after-sales to change the repeater if itdoes not fit the band.

*Phone Software:

Android

you can download an app named "Cellular-Z","Network signal Info" to checkyour frequency;

Ios

you can dial"*3001#12345#*", and then click "Serving Cell Info", next click "FreqBand Indicator", that you can find your band.

Q2. Full bars in the mobile phone but it can't makea call or the signalis worse than before, or the signalhas been improved.Lcan hear the other side, butthe other side can'thearme.

(1)The distance between the outdoor antenna and the indoor antenna should bemore than 8 meters, or there must be a solid wall between the two antennas, try toavoid doors and windows to prevent self-excitation.
(2)Adjust the direction of the outdoor antenna to point at the base station. If thereis an outdoor antenna nearby, its direction should be staggered with the directionof another antenna.
(3)Change a high-power repeater or high-gain indoor or outdoor antenna.Signal self-interference: The signal transmitted by the indoor antenna is receivedby the outdoor antenna.

Q3. The signal light flashes all the time, and thephone signalis not enhanced.

(1) Install the outdoor antenna at one place where the signal is good, check thecable connect the repeater and the antenna whether is tight or not, and adjust theangle of the outdoor antenna until the signal light on the screen no longer flashes
(2) Check out if the ports connecting the outdoor and indoor antennas arereversed, and please remember to wrap the connection between outdoorantenna and cable with waterproof tape to prevent water from entering*if the above answers still can not solve your problem, please contact ourcustomer service.

Warning

Unauthorized antennas, cables and / or coupling devices are prohibited by FCC rules. Please contact FCC fordetails:1-888-CALL-FF
The antenna, cable, and other accessories of the booster kits shall not be modified without the approval of the Shenzhen Gaobo company others it shall be deemed invalid.

Shenzhen Gaobo will allow consumers to register their signal boosters by calling their toll-free number. They have already trained their calling center and have designated an engineer to handle inquires They may eventually allow consumers to register on the website but they want to gauge how the process works via phone first
Online registration link: (http://www.goboost.cn)

High level summary and/or brief description of safeguard features
Anti-oscillation mechanism: There is the module to detect the oscillation signal when power on. If there is the oscillationdetected, the device will shut down the links (uplink within 300ms, downlink within ls) : 1 minute later repeater will restart and detect the oscillation signal again, this process will repeat 5 time till the repeater is totally shut down. Please refer to the testing report in the FCC
AGC: If the input signal is detected to be too large, the MCU automatically control the transmission to reduce the gain ofoutput signal to ensure that the output signal power level compliance with the factory setting. If the output signal of theamplifier is detected to be too large. the MCU automatically controls the input signal to ensure compliance with thefactory setting
Noise-power limiting circuit: When there is no mobile phone signal in 5 minutes at the covering area, the device will shutdown the uplink, so as to not to affect the BTS.

This is a CONSUMER device
BEFORE USE, you **MUST REGISTER THIS DEVICE** with your wireless provider and you're your provider's consent. Most wireless providers consent to the use of signal boosters. Someproviders may not consent to the use of this device on their network.If you are unsure, contactyour provider. In Canada, **BEFORE USE**, you must meet all requirements set out in ISED CPC-2-1-05. You **MUST** operate this device with approved antennas and cables as specified by themanufacturer. Antennas **MUST** be installed least 20 cm(8 inches)from(i. e..MUST NOT beinstalled within 20 cm of)any person. You **MUST** cease operating this device immediately if requested by the FCC(or ISED inCanada)or a licensed wireless service provider. **WARNING**. E911 location information may not be provided or may be inaccurate for callsserved by using this device. This device may be operated **ONLY** in a fixed location(i.e.,mayoperae in a fixed location only) for in-building use.

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

For a complete list of antennas and cables approved for use with these boosters see Authorized Kitting Options

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 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.

FCC RF EXPOSURE STATEMENT
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instruction for satisfying RF exposure compliance. This transmitter must not be colocated or operating in conjunction with any other antenna or trans-mitte.This equipment should be installed andoperated with minimum distance 20cm between the radiator& your body.

FCC 27.50(d)(4) Statement: Fixed, mobile, and portable (handheld) stations operating in the 1710-1755 MHz band are limited to 1-watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground.

Inside server antenna types	Minimum separation distances D (m)
All inside Antennas	1