








C20W Series Signal Repeater

User Manual



PLEASE KEEP APPROPRIATELY AND CAREFULLY READ THIS USER MANUAL BEFORE INSTALLATION

	<p>The power supply voltage of repeater should meet the standards of security requirements</p>		<p>Ensure of grounding, waterproof and lightning protection when installing the repeater</p>
	<p>The repeater should be installed and started by professionals</p>		<p>Do not open the repeater, maintain or replace the components</p>
	<p>Keep the repeater away from heat source, do not install in a narrow space</p>		

Content

PACKAGE CONTENT	2
RECOMMEND ACCESSORIES (OPTIONAL)	2
PRODUCT DESCRIPTION	2
PRODUCT FEATURES	2
CONNECTOR DESCRIPTION	3
MODEL LIST	4
TECHNICAL SPECIFICATION	4
INSTALLATION GUIDES	4
MAINTENANCE	7

Package Content



C20W Signal repeater 1pc



5V3A Power Adapter

Recommend Accessories (Optional)



5D Coaxial Cable 13meters



9dBi Log Periodic Antenna 1pc



3dBi Spring Antenna 1pc

Product Description

C20W series signal repeater, with the fashion and elegant shape design, delicate and exquisite appearance craftsmanship, while improving the quality of indoor mobile phone signals, it also adds a touch of fashion to the home, this positive attitude is exactly the beautiful pursuit of every happy family.

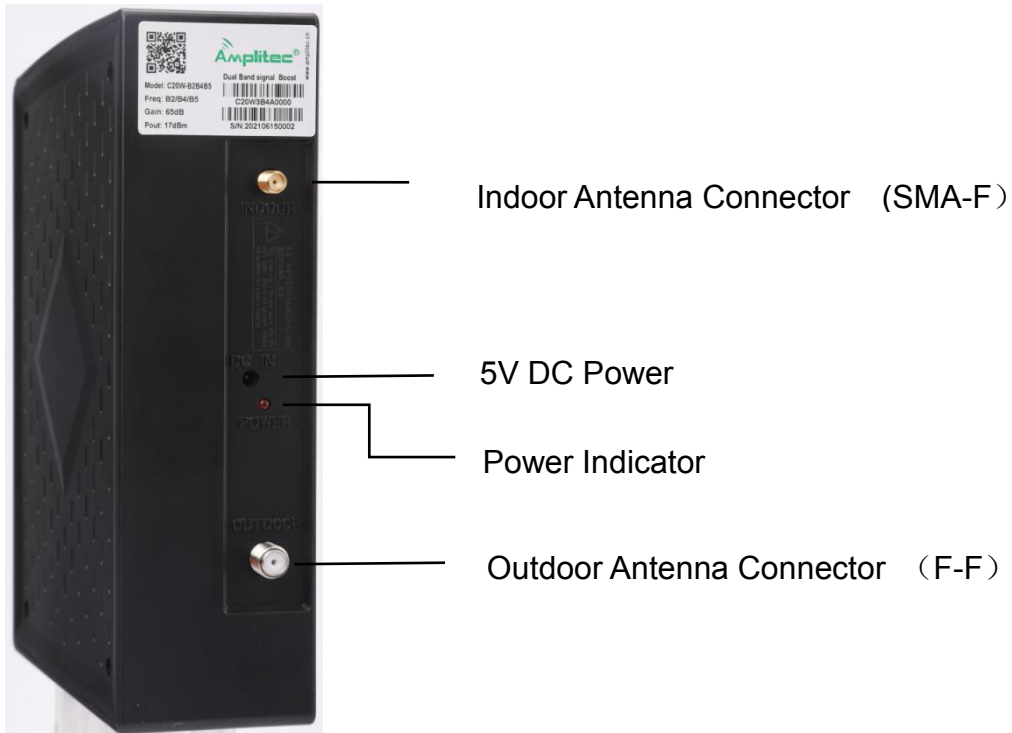
It is very simple to install the C20W signal repeater. You don't need to spend a lot of time to fix the device on the wall, just place it on the desktop against the wall. The feeder connecting the outdoor antenna is connected to the OUTDOOR port of the C20W along the wall, and the indoor spring antenna is connected INDOOR port of C20W, then place it directly on the desktop, and you can use the phone easily after power on.

Product Features

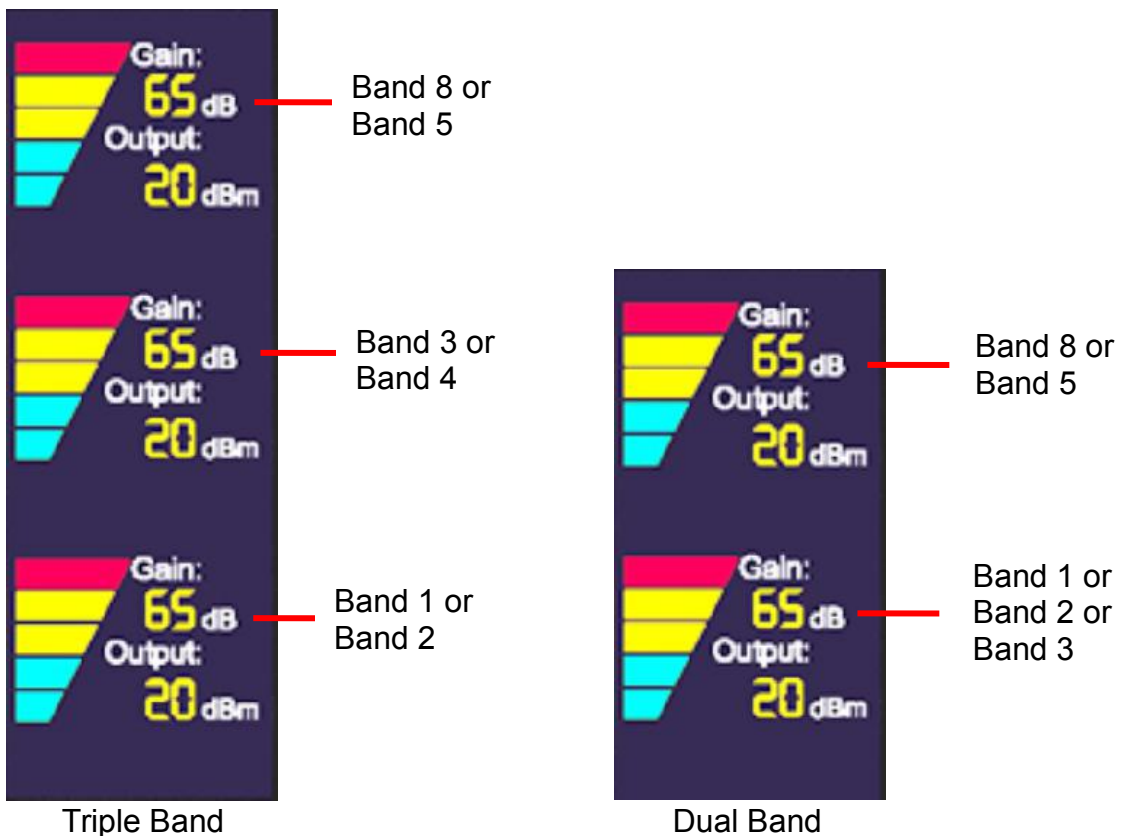
- LCD display the working status.
- Automatic level control, reasonable control of signal amplification.
- Light weight and easy to install.

- The structure is simple, easy to use and maintain.
- Low power consumption, low interference, stable performance.

Connector Description



Display Description



Model List

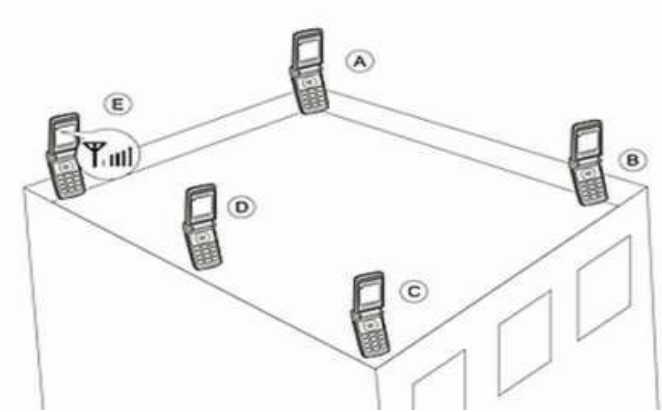
Model	Uplink	Downlink
C20W-B1B3B8	890~915/1710~1785/1920~ 1980MHz	935~960/1805~1880/2110~2170 MHz
C20W-B2B4B5	824~849 /1710~1755/1850~1910MHz	869~894/2110~2155/1930~1990 MHz
C20W-B1B8	890 ~ 915 / 1920 ~ 1980 MHz	935 ~ 960 / 2110 ~ 2170 MHz
C20W-B3B8	890 ~ 915 / 1710 ~ 1785 MHz	935 ~ 960 / 1805 ~ 1880 MHz
C20W-B2B5	824 ~ 849 / 1850 ~ 1910 MHz	869 ~ 894 / 1930 ~ 1990 MHz
C20W-B3B5	824 ~ 849 / 1710 ~ 1785 MHz	869 ~ 894 / 1805 ~ 1880 MHz

Technical Specification

Item	Uplink	Downlink
Output Power	≥ 15 dBm	≥ 18 dBm
Gain	60 dB	65 dB
Max. Input Power without Damage	-10 dBm	-10 dBm
Spurious Emission	9KHz~1GHz	≤-36 dBm
	1GHz~12.75GHz	≤-30 dBm
Time Delay	≤1.5 μs	≤1.5 μs
Power Supply	DC: 5 V / 3 A	
Signal Display	One Bar	0~3 dBm
	Two Bars	4~7 dBm
	Three Bars	8~11 dBm
	Four Bars	12~14 dBm
	Five Bars	15~20 dBm
RF Connector	N-Female	
Protection Grade	IP40	
Operating Humidity	< 90%	
Operating Temperature	-10°C ~ +55°C	
Dimension	196*140*55mm	
Weight	<0.7kg	

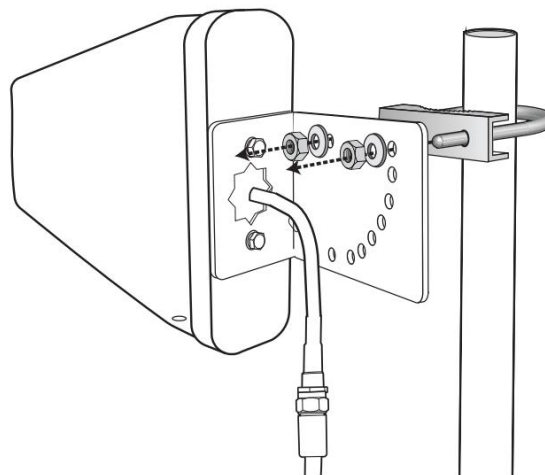
Installation Guides

1) Use a mobile phone to test the signal strength on the roof of the building. Choose a location with a strong signal to install the outdoor antenna. The outdoor antenna installation point should maintain a height difference of more than 8 meters from the indoor antenna.



2) Install the antenna pole at the position where the signal is strongest, and fix the outdoor antenna. Pay attention that the antenna towards to base station as much as possible.

3) Connect the feeder, and wrap the joints tightly with waterproof tape to prevent water from entering. The length of the feeder should not exceed 20 meters.



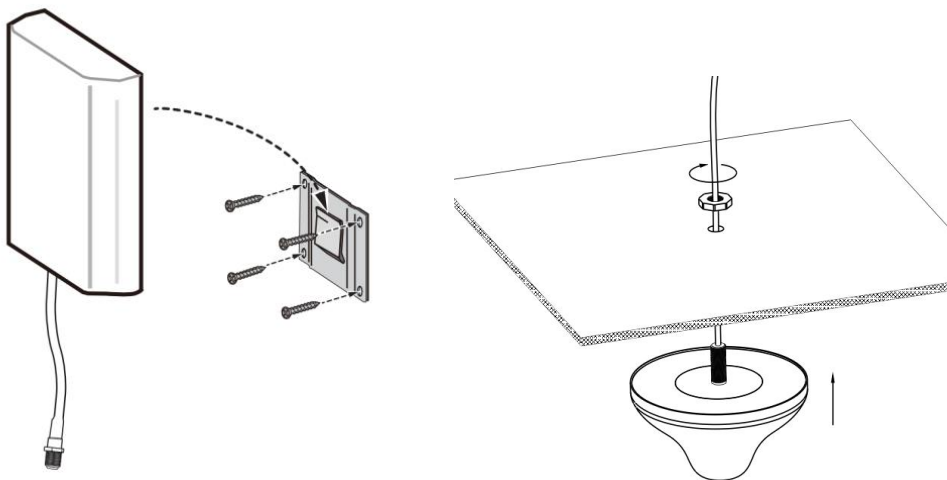
4) Connect the outdoor antenna cable to the "OUTDOOR" port of the repeater and tighten it tightly.



5) Connect the feeder of the spring antenna to the "INDOOR" port of the repeater.



Note: If you want to increase the coverage, you can choose a wall-mounted antenna or a omni antenna to install on the wall above the repeater.



6) Check whether the antenna and the feeder connection of the repeater are connected firmly.

7) Use the 5V/2A power adapter that comes with the repeater to turn on the power.

8) Check the repeater screen if the repeater is working properly.

9) Use the mobile phone to test the signal strength and call quality in the coverage area.

Maintenance

Common Problems and Solutions

Problems	Reasonable Causes	Solutions
Screen and indicator lights are off	Disconnect to power source	Check the power adapter and power outlet and reconnect
After power on, the display is normal, but the coverage area signal has not improved	The network of sim card is not comply with that of signal booster	Replace sim card or booster
	The inside antenna is not successfully connected	Fasten the connection of inside cable and connectors
	The inside antenna is broken	Replace the inside antenna
Working effectiveness get worse after working for a while	The outside antenna is broken	Replace the outside antenna
	The outside antenna get loose and not towards BTS	Change the direction of outside antenna and fasten it
	Feeder is broken	Replace the feeder

Notes

Please disconnect the power supply in the following situations:

- The power supply is in an abnormal state
- Water enters the equipment. Near the fire source
- Equipment overheating, odor or foreign matter
- Performance degradation

Manufacturer: Guangdong Amplitec Tech Development Co.,Ltd

Address: 4th Floor, 4th Building, No. 60 of Langbao West Rd,
Chancheng Foshan, Guangdong China, 528000

Tel: 0757-83308238, **Fax:** 0757-83123923

Email: info@amplitec.cn

Website: www.amplitec.net