CD15NMT-MiNi User Manual

SUNTOR ELECTRONICS CO., LIMITED

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Ⅰ、Product Appearance

Ⅱ、Product Intro

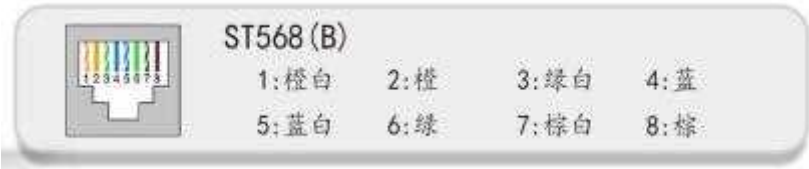
The CD15NMT-MiNi UAV wireless transmission link is an Ad-hoc network device, it's good performance in NLOS transmission. The device wireless module adopt Qualcomm chip and three-frequency design, it support 2.4G(2401.5-2481.5MHz),1.4G (1427.9-1447.9MHz) and 800M (806-826MHz) . When it's in 1.4G frequency, it can realize a high throughput Ad-hoc network transmission in a long LOS distance. When it's in 800M frequency, it can realize fast mobile Ad-hoc network transmission in a NLOS complex environment. In our testing, the NLOS distance is 1-3KM, the LOS distance is 10-20KM.

The CD15NMT-MiNi RF power is 300mW, its features of low power consumption, small in size, quick to install, strong penetration transmission and long range advantages, is very suitable application for manpack video transmission, UAV,

Unmanned ship, Unmanned car, Airship, Target drone, Powered parachute, Robot and other fields for video signal transmission, police video forensics, emergency monitor and rescue sites.

Ⅲ、Cautions

The device data interface is designed by air plug. If it needs to be extended during use, please use the direct network cable. The direct network cable sequence is defined as follows:



Special attention: before the equipment is powered on, please carefully confirm whether the antenna is correctly connected, so as to avoid unnecessary trouble and economic loss caused by damage to the equipment.

Ⅳ、Equipment Debug

4.1 Prepare of Debug

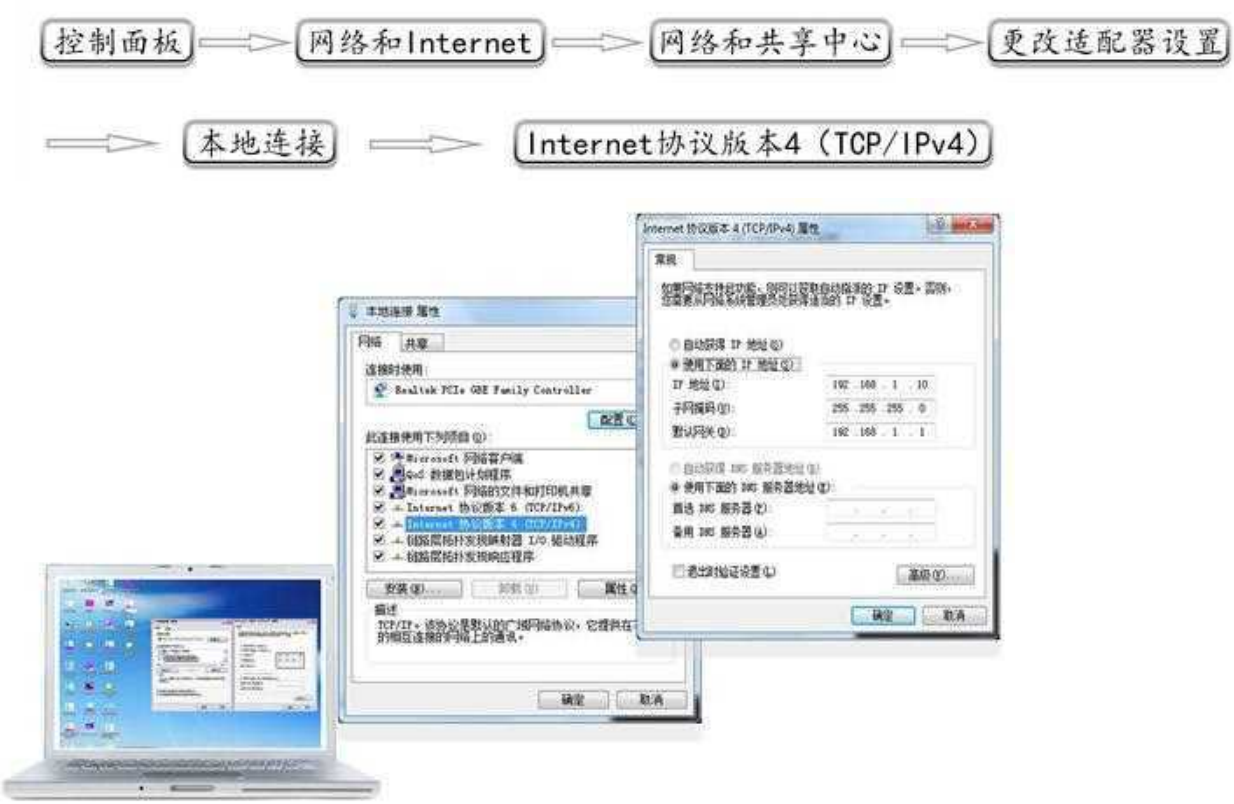
Before debugging, ensure that PC and device IP in the same network segment.

Factory default parameters: IPv4 address: 192.168.1.1; Subnet mask: 255.255.255.0;

The IP of the computer should be set to 192.168.1.x (X= any number between 2 and 253, which does not conflict with the device address).

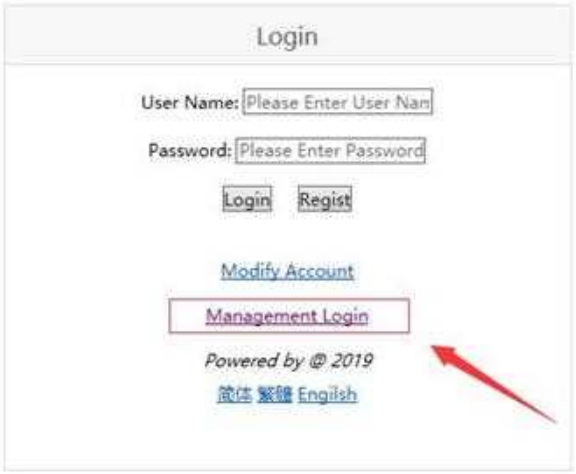
The subnet mask：255.255.255.0。

The steps to modify computer IP:



4.2 Equipment Login

1. Open IE browser, input the IP of the device in the address bar: 192.168.1.12, log in the device and select "Management Login", the default IP of the device is: 192.168.1.12, username and password is: admin123.



choose "Management Login"

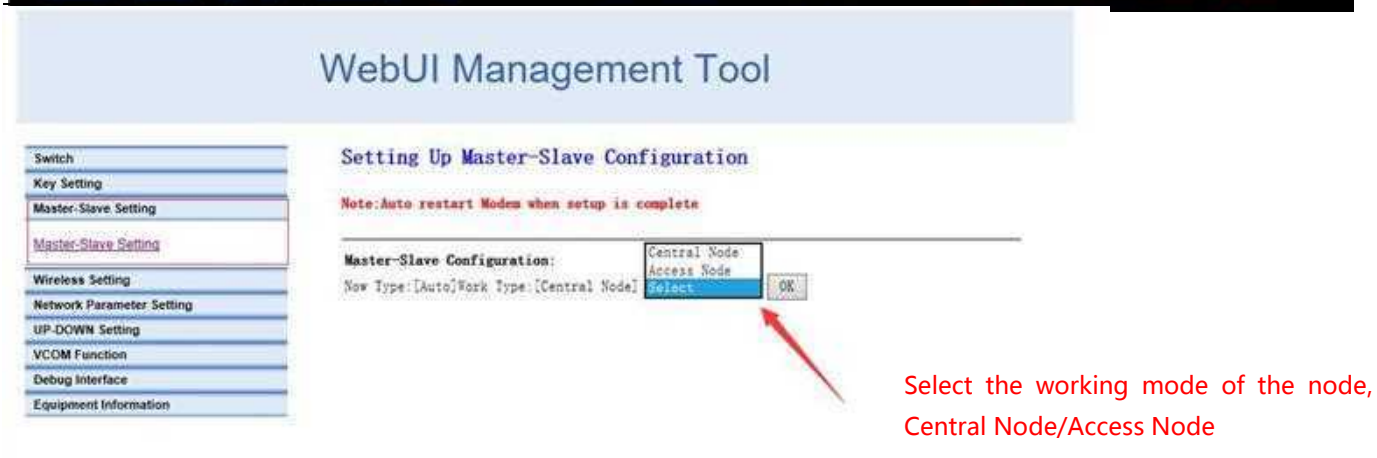
2. User name: admin123 password : admin123 click login

User name : admin123
password : admin123

click login

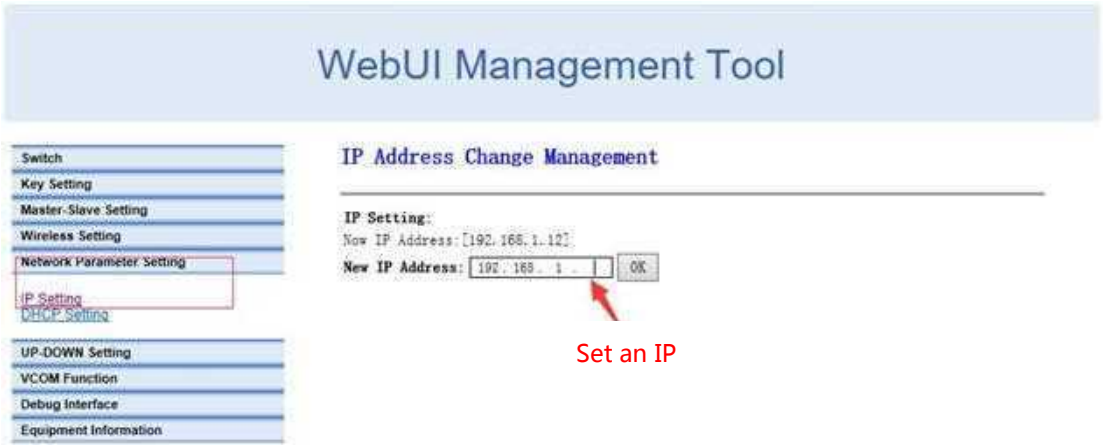
4.3 Set Central Node/ Access Node

The device has two working modes: Central Node/ Access Node. After logging into the device through the browser, the following actions are required to change the device's working mode. After entering the page, click "Master and Slave Setting", select "Master and Slave Setting" to set the device's working mode, and click "OK" to complete the configuration. As shown in figure:



4.4 Modify IP Address

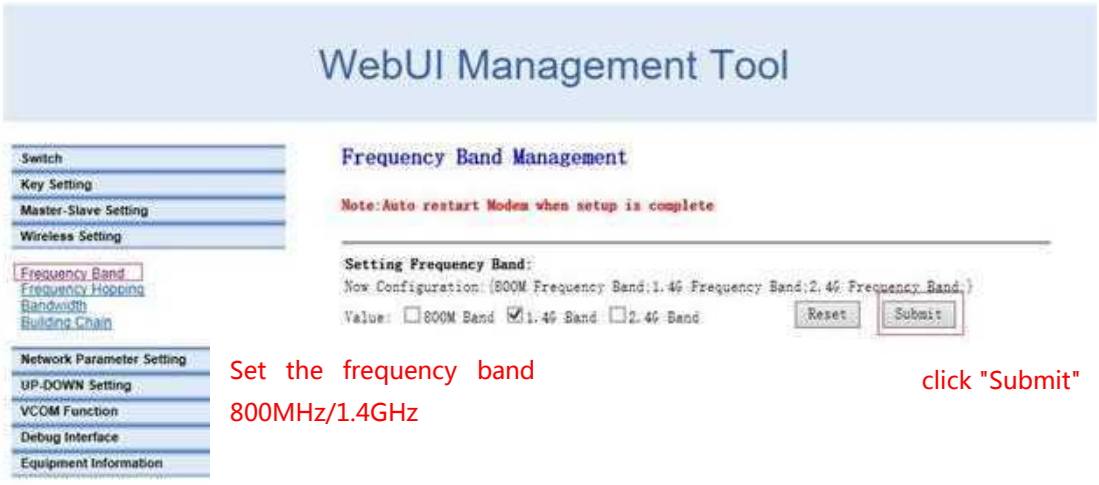
Enter the device IP address in the browser and enter the device management p age. Click "Network Parameter Setting" and select "IP setting" to modify the de vice IP address. Click "OK" to complete IP modification , as shown in figure:



4.5 Set WLAN

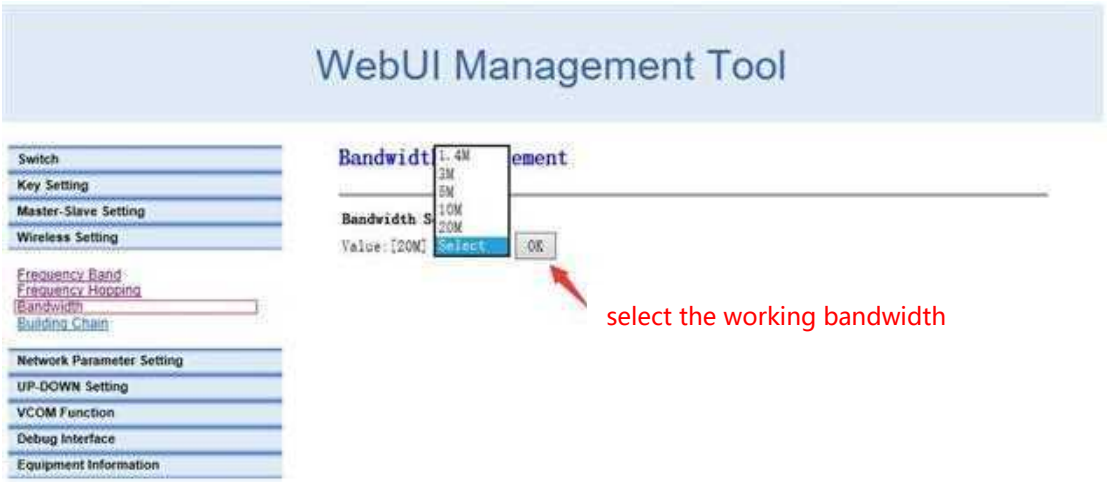
When setting the working frequency of the device, click the "Wireless Setting" button and select the "Frequency Band" option to enter the operation interface. The device

supports the RF 800M frequency band and 1.4G frequency band. The 2.4G frequency band is not open yet. After confirming the frequency, click "Submit" to complete the configuration. The operation is as follows:



4.6 Set Bandwidth

According to the link throughput demand, users can choose channel bandwidth 1.4, 3, 5, 10, 20 MHz. The narrower the bandwidth, the farther the transmission distance, the lower the bandwidth, the closer the transmission distance, and the higher the transmission rate. Different electromagnetic environments exist in different environments. The frequency can be adjusted to avoid channel interference and achieve better transmission effect. Click "Wireless Setting", select "Bandwidth", select the bandwidth and click "OK" to complete the configuration. Operation as shown below:



V、Use Notes

●When we adjust and test equipment, make sure that the Tx and Rx are in the same channel.

●The first time to connect the power supply, please check the power supply voltage "+ -" is correct.

●Avoid high voltage towers around.

●Avoid military airfield radar around.

●Choose different channels to avoid electromagnetic interference.

● Do not twine the network wire with the power wire, or there will be magnetic interference.

●Network wire and power wire shall not exceed 20m.

●Set the distance in software as 110%~120% of the actual distance.

●Use caution in thunderstorm weather, people should stay away from the antenna to avoid lightning accidents.

● The transmitter and the receiver should not to power on before connect the

antennas.

VI、Normal Faults and Treatment

◆Faults cases: if the video (data) suddenly lost, interrupted, can be as follows suggested

troubleshooting.

Hardware failure:

1. At this point, the first step is to make sure the power supply is normal, according to the indicator.

2. In case of network failure, the computer needs to be connected to the system switch to access the equipment, and CMD input Ping 192.168.1.xx (the default IP of the equipment is 192.168.1.1; xx stands for specific IP), so as to determine whether the device is online or not. The same method is used to troubleshooting other devices. If the device returns the request timeout or cannot access the target host, the device is not online, need to check the power and hardware.

◆Faults cases: if the video (data)lag, lost packet, can be as follows suggested troubleshooting.

3. The weather and physical vibration may causes the equipment antennas connected loosely, which leads to poor signal and low throughput, affect image normal viewing

and data loss packet.

4. In a complex environment, the same frequency interference may occur, the problem can be solved by changing the working frequency through the software GUI.

5. If the equipment parameters are changed and the equipment does not communicate, the parameters can be adjusted according to the above debugging instructions, also you can restore factory setting, according to the Quick Use Manual to set.

Ⅶ、Accessories

Item	Quantity	Specification	Remark
1.4GHz mini Rubber Antenna	2	SMA Internal thread with needle	3dBi gain
Warranty Card	1	Suntor Standard	After-sale guarantee
Specification	1	User manual	Detail describe the parameters and how to use

(End)

Focus on wireless make transmission easier