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CD15NMT-MiNi User Manual



SUNTOR ELECTRONICS CO., LIMITED



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Contents

I.	Product Appearance	3		
Π.	Product Intro	• 3		
	Equipment Install	·4		
	3.1 Interfaces Describe	4		
	3.2 Basic Parameters	5		
	3.3 Cautions	5		
IV.	Equipment Debug	·6		
	4.1 Prepare of Debug	•6		
	4.2 Equipment Login	7		
	4.3 Set Central Node/ Access Node	7		
	4.4 Modify IP Address	.8		
	4.5 Set WLAN	9		
	4.6 Set Bandwidth	9		
V.	Use Notes	L O		
VI.	Normal Faults and Treatment	1		
VII.	Accessories	12		
Foc	ocus on wireless make transmission easier (End)13			



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.

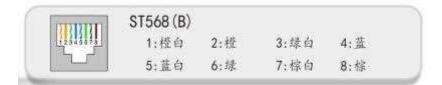
The CD15NMT-MiNi RF power is 300mW, its features of low power consumption, small in size, quick to install, strong penetration transmission and long range advantages, is very suitable application for manpack video transmission, UAV,



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

4

253, which does not conflict with the device address).

The subnet mask : 255.255.255.0。

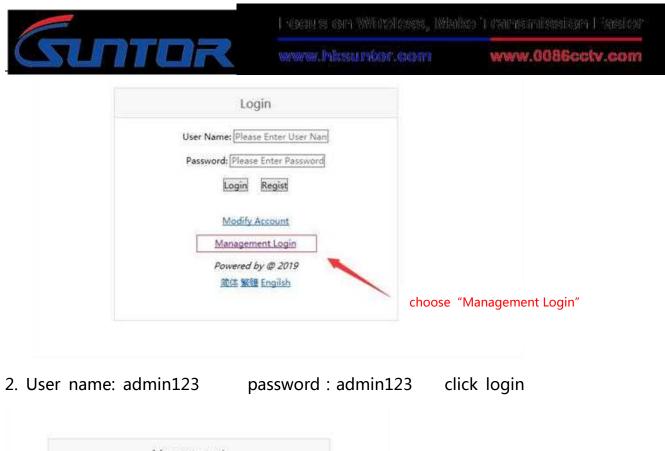


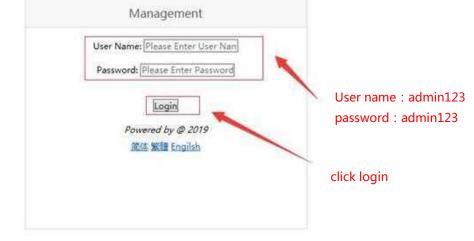
The steps to modify computer IP:

	Internet MiQIE # 4 (TCP/ID+4) Eft
U 1849 81	業務 (1) (1) (1) (1) (1) (1) (1) (1)
PHE 共産 法推封使用 董権対抗使用 董権対抗使用 董権が対応用 ● Salisk FELs GBE Facily Controller 化注册使用 下均活動 (0) ※ 予加での支付 約時間等戶編 ※ 書加での支付 約時間等戶編 ※ 書加での支付 約時間等戶編 ※ 書加での支付 約時間等戶編 ※ 書加での支付 約時間第二回 通信 ※ 本 時期間時期時期 正の 通信期度 ※ 本 時期間時期時期 正の 通信期度 ※ 本 時期間時期時期間 ※ 本 時期間時期時期間 ※ 本 時期間時期時期間 ※ 本 時期間時期時期時間 ※ 本 時期間時期時期時間	武山谷永 (Q) 192 108 1 1 会共有 第四 第六語 25位 (Q) 会 共有 第四 第六語 (Q) 会 共有 第四 第六語 (Q) 会 共有 第四 第六語 (Q)

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.





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:

Switch Setting Up Master-Slave Configuration New Setting Nete: Auto restart Modes when setup is complete Master-Slave Setting Nete: Slave Configuration: Network Parameter Setting Nor Type: Lautol Work Type: [Central Node] UP DOWN Setting Nor Type: Lautol Work Type: [Central Node]	Gen s on Witteless, Wake Transmission Fasies		
Switch Setting Up Master-Slave Configuration Key Setting Note: Auto restart Modes when setup is complete Master-Slave Setting Note: Auto restart Modes when setup is complete Wireless Setting Note: Slave Configuration: Now Type: [Auto]Tork Type: [Central Node] Vicous Parameter Setting OK UP-DOWN Setting OK	.0086cctv.com		
Key Setting Master-Slave Setting Master-Slave Setting Wireless Setting Network Parameter Setting UP-DOWN Setting VCOM Function			
Master-Slave Setting Note:Auto restart Modes when setup is complete Master-Slave Setting Master-Slave Configuration: Now Type:[Auto]Work Type:[Central Node] Network Parameter Setting OK UP-DOWN Setting OK			
Master-Slave Setting Wireless Setting Network Parameter Setting UP-DOWN Setting VCOM Function			
Wireless Setting Master-Slave Configuration: Access Node Now Type:[Auto]Work Type:[Central Node] Access Node UP-DOWN Setting VCOM Function			
Wireless Setting Now Type: [Auto]Fork Type: [Central Node] Access Node OK Network Parameter Setting UP-DOWN Setting OK OK OK OK VCOM Function VCOM Function OK OK OK OK OK			
Network Parameter Setting UP-DOWN Setting VCOM Function			
VCOM Function			
Debug Interface Soloct the v			
	vorking mode of the node,		
Equipment Information	e/Access Node		

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:

	WebUI Management Tool	
	IP Address Change Management	
Switch	IP Address Change Management	
Key Setting		
Master-Slave Setting	IP Setting:	
Wireless Setting	Now IP Address: [192, 168, 1. 12]	
Network Parameter Setting	New IP Address: 197.165.1.00	
P Setting DHCP Setting		
UP-DOWN Setting	Set an IP	
VCOM Function		
Debug Interface		
Equipment Information		

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:

	١	WebUI Management To	ol	
Switch	_	Frequency Band Management		
Key Setting				
Master-Slave Setting		Note: Auto restart Modem when setup is complete		
Wireless Setting		2-		
Frequency Band Frequency Hopping Bandwidth Building Chain		Setting Frequency Band: Now Configuration: (800M Frequency Band:1.40 Frequency Value: 2800M Band 21.40 Band 2.40 Band	Reset Submit	
Network Parameter Setting	Set the	frequency band	click "Submit"	
UP-DOWN Setting	0000.411	(1.4CU)	CICK Subilit	
VCOM Function 800MHz		1.4GHz		
Debug Interface				
Equipment Information				

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:

		Locus on Windoss, Make'r mesnission Faster		
	TOR	www.hksuntor.com	www.0086cctv.com	
	WebUI M	anagement Tool		
Switch Key Setting	Bandwidt 1.4M	ement		
Master-Slave Setting				
Wireless Setting	Bandwidth S 20M Value: [20N] Shinct	30		
Erequency Band Enequency Hopping Bandwidth Building Chain		select the working bandwid	dth	
Network Parameter Sotting	_			
UP-DOWN Setting				
VCOM Function				
Debug Interface				
Equipment Information				

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



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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

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

(End)

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