UHF RFID Robot Reader AT Command

Model: WS-RFIDBY



Version History

Version	Date	Changes		
V1.01	11, April, 2017	1 st Edition		
V1.02	21, August, 2018	2 st Edition		

Installation Direction (When Install on the Wall)



The distance between both screws are 47.5mm.



The minimum space room for WS-RFIDBY each side must be 100mm.

In order to keep the antenna efficiency well.

WS-RFIDBY-TCP (Network Cable Insertion, Power Insertion)



RS-232 and RS-485 Wiring Mode (WS-RFIDBY-RS232 and WS-RFIDBY-RS485)



Signal Indicating Instruction

Connection Indicator: Constant light when connected to network

Status indicator : Standby Mode = Green light bright permanency Reading Tag = Blue light bright permanency 2seconds Equipment Malfunction = Red Light bright permanency Update Mode = Green light shine



Setting of the Internet (WS-RFIDBY-TCP Only)

- 1. Please insert the WS-RFIDBY-TCP network line and power line. (connect to computer or LAN)
- 2. Execute "Wenshing All in one NET tools", the screen is as follows.

ameters:				Setup via COM	
vork mode:	MOD-SERVER-RTU 🔻	Enable DHCP		Read via COM	Setup via COM
Default Gateway:	192.168.001.001	Get Device IP		Read Factory	Set Factory
ubnet mask:	255.255.255.000	Get Gateway IP	V	Restore Factory	Factory Setting
Device IP:	192.168.001.002	Get DNS Server		Setup via NET	
Device port:	10006			Search in LAN	Setup via NET
Mac Address:	00-A5-89-C2-61-63	Enable DNS		Read Factory	Set Factory
Destination IP:	192.168.001.003	First DNS server		Restore Factory	Factory Setting
estination Port:	10006	202.096.123.223			
Baud Rate(bps):	115200 👻 💟	Second DNS server		Device IP Mac Addre	ss Version Type
Data/Parity/stop:	8 • NONI • 1 •	202.096.123.223			
Delay Send(ms):	50 🔻 ms (毫秒) 💟	DNS Website			
ID: 01 🕅 🖾 🛛	onnect 🔲 data 🔲 reset 🔲	sha.iejy.net			
Version : V42	Type NN7N				
VCI3011. V42					

3. Search the equipment in the LAN, click "Search in LAN" button.

rameters:			Setup via COM	
vork mode:	MOD-SERVER-RTU 🔻 💟	Enable DHCP	Read via COM	Setup via COM
efault Gateway:	192.168.001.001	Get Device IP	Read Factory	Set Factory
ubnet mask:	255.255.255.000	Get Gateway IP	Restore Factory	Factory Setting
evice IP:	192.168.001.002	Get DNS Server	Setup via NET	
evice port:	10006		Search in LAN	Setup via NET
1ac Address:	00-A5-89-C2-61-63	Enable DNS	Read Factory	Set Factory
estination IP:	192.168.001.003	First DNS server	Restore Factory	Factory Setting
estination Port:	10006	202.096.123.223	Opline Device	
aud Rate(bps):	115200 👻 💟	Second DNS server	Device IP Mac Add	ress Version Type
ata/Parity/stop:	8 🕶 NONI 🕶 🔳 🗹	202.096.123.223	192.168.003.080 00-A6-9	C-A0-0B-08 V20 NNZN-TCP232
elay Send(ms):	50 🔻 ms (毫秒) 💟	DNS Website		
D: 01 🗖 🕬	onnect 🔲 data 🔲 reset 🕅	sha.iejy.net		
ersion: V42	Type NNZN			
Updata All Oplin	Device	Save Default	17	

4. After the equipment was being found, the IP address will show up:

0	nline Device				
	Device IP	Mac Address	Version	n Type	
F	192.168.003.080	00-A6-9C-A0-0B-08	V20	NNZN-TCP232	

5. Read the network setting parameters. After clicked the searched device IP twice, the current settings will be automatically read and displayed on the left side of "Parameters".

arameters:					Setup via COM	
work mode:	TCP-CLIENT -		Enable DHCP		Read via COM	Setup via COM
Default Gateway:	192.168.003.250	$\overline{\vee}$	Get Device IP		Read Factory	Set Factory
Subnet mask:	255.255.255.000		Get Gateway IP	$\overline{\checkmark}$	Restore Factory	Factory Setting
Device IP:	192.168.003.080	$\overline{\vee}$	Get DNS Server		Setup via NET	
Device port:	08080	$\overline{\mathbf{v}}$			Search in LAN	Setup via NET
Mac Address:	00-A6-9C-A0-0B-08		Enable DNS		Read Factory	Set Factory
Destination IP:	192.168.003.100	$\overline{\mathcal{A}}$	First DNS server		Restore Factory	Factory Setting
Destination Port:	08080	$[\mathbf{V}]$	000.000.000.000		Online Device	
Baud Rate(bps):	115200 -	1	Second DNS server		Device IP Mac Addre	ss Version Type
Data/Parity/stop:	8 • NONI • 1 •		000.000.000	$[{ { \hspace{025cm} / \hspace{025cm} } \hspace{.025cm} }]$	192.168.003.080 00-A6-9C-	A0-0B-08 V20 NNZN-TCP23
Delay Send(ms):	50 v ms (毫秒)	$\overline{\checkmark}$	DNS Website			
ID: 1 🗖 🔿	onnect 🔲 data 🕅 rese	t 🔳	eer			
		i.				

6. Modify the setting parameter on internet. Find the suitable setting on the left and correct it. Click "Setup via NET" to modify it. (cannot use Port 5978).

arameters:					Setup via COM
work mode:	TCP-CLIENT		Enable DHCP		Read via COM Setup via COM
Default Gateway:	192.168.003.250		Get Device IP		Read Factory Set Factory
Subnet mask:	255.255.255.000		Get Gateway IP	$\overline{\mathscr{A}}$	Restore Factory Factory Setting
Device IP:	192.168.003.099		Get Subnet Mask		Setup via NET
Device port:	5678	$\overline{\vee}$			Search in LAN Setup via NET
Mac Address:	00-A6-9C-A0-0B-08		Enable DNS		Read Factory Set Factory
Destination IP:	192, 168,003, 100	\checkmark	First DNS server		Restore Factory Factory Setting
Destination Port:	5678	7	000.000.000.000		Online Device
Baud Rate(bps):	115200	•	Second DNS server		Device IP Mac Address Version Type
Data/Parity/stop:	8 🔻 NONI 👻 🚺		000.000.000.000	\bigtriangledown	192,168.003.080 00-A6-9C-A0-0B-08 V20 NNZN-TCP23
Delay Send(ms):	50 ▼ ms (毫秒)	$\overline{\checkmark}$	DNS Website		
ID: 1 00	onnect 🔲 data 🔲 res	et 🕅	eer		
Version : V20	Type NNZN-TCP232	1			
		<u> </u>			

7. If the modification is successful, the following prompt will be displayed.

All in one net to	pols 🛛 🕅
192.168.3.99	Set up complete and automatic restart
	ОК

8. Restarted, put off the power line and plug in again. Click the "Search in LAN" button twice and you can find the IP of the equipment. Ensure the internet setting is correct or not.

arameters:					Setup	via COM	
work mode:	TCP-CLIENT 👻		Enable DHCP			Read via COM	Setup via COM
Default Gateway:	192.168.003.250		Get Device IP			Read Factory	Set Factory
Subnet mask:	255.255.255.000		Get Gateway IP	$\overline{\checkmark}$		Restore Factory	Factory Setting
Device IP:	192.168.003.099		Get Subnet Mask		Setu	via NET	
Device port:	05678	$\overline{\mathbf{v}}$				Search in LAN	Setup via NET
Mac Address:	00-A6-9C-A0-0B-08		Enable DNS			Read Factory	Set Factory
Destination IP:	192.168.003.100	$\overline{\mathbf{v}}$	First DNS server			Restore Factory	Factory Setting
Destination Port:	05678		000.000.000.000				
Baud Rate(bps):	115200 👻	$\overline{\checkmark}$	Second DNS server		De	Device vice IP Mac Addre	ss Version Type
Data/Parity/stop:	8 🔻 NONI 🔻 1 🔻] 🔽	000.000.000.000	\checkmark	192.1	168.003.099 00-A6-9C-	A0-08-08 V20 NNZN-TCP2
Delay Send(ms):	50 🔻 ms (毫秒)	\checkmark	DNS Website				
ID: 1	onne <mark>ct 🔲</mark> data 🔲 reset	t 🗐	eer				
Version: V20	Type NNZN-TCP232	ĩ					
	-						

PC Wired Network Setting Method (WS-RFIDBY-TCP Only)

1. Setting the PC internet parameter. Modify the settings corresponding to the PC according to the set parameters.

🎒 Wenshing All in	one NET tools			Internet Protocol (TCP/IP) 內容	<u>? ×</u>
Parameters:			Setup via O	一般	
work mode:	TCP-CLIENT 🗾 🔽	Enable DHCP		如果您的網路支援這項功能,您可以取得自動指派的	9IP設定∘否
Default Gateway:	192.168.003.250	Get Device IP	Ri	則,您必須詢問網路系統管理員正確的 IP 設定。	
Subnet mask:	255.255.255.000	Get Gateway IP	Re ^r	○ 自動取得 IP 位址(0)	
Device IP:	192.168.003.099	Get Subnet Mask	Setup via NI	● 使用下列的 IP 位址 ②:	
Device port:	05678		Se	IP 位址(I): 192.168.3	. 100
Mac Address:	00-A6-9C-A0-0B-08	Enable DN5	R	子網路遮罩(凹): 255.255.25	5.0
Destination IP:	192.168.003.100	First DNS server	Por	預設閘道(D): 192.168.3	. 250
Destination Port:	05678	000.000.000.000		€ 自動取得 DNS 伺服器位址(B)	
Baud Rate(bps):	115200 🔻 🔽	Second DNS server	Online Device Device IF	● 使用下列的 DNS 伺服器位址(E):	
Data/Parity/stop:		000.000.000	7 192.168.00	慣用 DNS 伺服器(P): 192.168.3	. 250
Delay Send(ms):	「」」」」 「」」 「」」」 「」」」	PAIG UL LA DA		其他 DNS 伺服器 (A):	
		DNS WEDSILE			進階(V) 1
Version : V20	Type NNZN-TCP232			確定	取消
📕 Updata All Onlin	Load Default	Save Default			

2. Test on the communication, PC execute "TCP Server" software and set the appropriate port. Send the AT command to test the communication is correct or not. (cannot use Port 5978).

Settings Data Receive P 1 ≠ Protocol ♥ Receive from 192.168.3.99 : 5678♥↓ Parameters: P 2 ≠ Local host IP 192.168.3.100 192.168.3.100	
Wenshing All in one NET tools P 1 # Protocol TCP Server TCP Server	
Wenshing All in one NET tools ICP Server +WenShing RFIDMini Host Reader 1.00 Parameters: 7 24 Local host IP + 192.168.3.100 1	
Parameters: 7 24 Local host IP 192.168. 3 .100	
Parameters: 192.168. 3 .100	
work mode:	
Default Gateway: 192.168.003.250	
Subnet mask: 255,255,255,000	
Device IP: 192.168.003.099	
Device port: 05678	
Receive to file	
Mac Address: 00-A6-9C-A0-0B-08	
Destination IP: 192.168.003.100 🔽 🔽 Receive As HEX	
Destination Port: 05678	
Baud Rate(bps): 115200	
Data/Parity/stop: 8 V NONE 1 V Send Options	
Data from file	
Delay Send(ms): 50 🗾 ms (毫秒) 🔽 🔽 Auto Checksum	
ID: 1 Connect C data C reset C Clear Input	
Send As Hex	
Version: V20 Type NNZN-TCP232	
Updata All Online Device Load Default Interval 1000 ms AT+VER	
Load Clear	bend
[€ Ready! Send : 8 Recv : 37 Re	set

Output Data Format

Byte1 = 0x53 Suggesting output data is TAG TID; Data format reference as below:

Byte 0	Byte 1	Byte 2	Byte 3~N	Byte N+1
0x02	0x53	Length of data being read	Tag TID	0x03

Byte1 =0x54 Suggesting output data is TAG EPC ; Data format reference as below :

Byte 0	Byte 1	Byte 2	Byte 3	Byte 4~6	Byte 7	Byte 8~9	Byte 10~N	Byte N+1
0x02	0x54	Length of data being read	RSSI value being received	Frequency being received and Antenna port	PC+EPC Length	PC (Tag assortment)	Tag EPC	0x03

Byte 4 is frequency low byte

Byte 5 is frequency middle byte

Byte 6 is frequency high byte and antenna port

When bit 7=1 the frequency value is 0E, bit 7=0 the frequency value is 0D

Bit 0~5 is received antenna port, antenna 1=0 0000 · antenna 2=0 0001 · antenna 3=0 0010 · antenna 4=0 0011

AT Command

"Newline" for each command (Attention: You must stop the scan before sending all instructions.)

In the command, 0001 represents the ID address of the device. The ID can be used to set the data of the specified device or specify the device to return the data. The parameters range from 0001 to 9999.

	AT COMMAND	RFID Reader Return	Function Explanation
1	AT+0000-FindDeviceID		Search all of the device's ID address in LAN.
Т		+0000-FindDeviceID:0001	0001 represents the ID address.
2	AT+0001-DeviceID:0002		Modify the ID address of device.
Z		+0001-DeviceID:0002	Command successful.
3	AT+0001-Scan:0		Setting the model status: 1 =scan, 0= stop scanning. Default = 1
		+0001-Scan:0	Instruction successful.
4	AT+0001-VER		Read the version of device.
		+WenShing RFIDBY4 Reader 0.01	Device name and firmware version
5	AT+0001-BuzzTime:3		Buzz sound number control. Buzz sounds 3 times when this command is given. If it is to be sounded twice, the command is "AT+0001-BuzzTime: 2". Parameter 1 range is 1~9
		+0001-BuzzTime:3	Command successful. Buzzer will ring for three times.
6	AT+0001-BuzzONOFF:0		Set the buzzer switch when Buzz reads the tag. =0 – turn off the notification of sound. =1 – turn on the notification of sound.
		+0001-BuzzONOFF:0	Command successful.

7	AT+0001-Reset		Reset the system.		
/		+0001-Reset	Command successful.		
0	AT+0001-SetPower:30dBm		Set the output power, range is from 19dbm to 30dbm.		
8		+0001-SetPower:30dBm	Command successful.		
9	AT+0001-Mode:S0		 S0: Scan multiple Tags, as long as the RFID scans to the Tag and it will respond. (Usually, it be used on test environment.) S1: Scan multiple Tags, after scanning the TAG, the Tag will take about 1 second to respond again. Usually, it be used a lot in inventory, lane, and logistics. S2: Scan multiple Tags, after the Tags are scanned. The Tags need to leave the receiving range for a period of time and return within the range then Tags will be responding. Usually, it be used a lot in racing and logistics. S3: Scan multiple Tags, after the Tags are scanned. The Tags need to leave the receiving range for a period of time and return within the range then Tags will be responding. Usually, it be used a lot in racing and logistics. S3: Scan multiple Tags, after the Tags are scanned. The Tags need to leave the receiving range for a period of time and return within the range then Tags will be responding. Usually, it be used a lot in racing and logistics. 		
		+0001-Mode:S0	Command successful.		
10	AT+0001- SetQuery:SL=0,SS=0,TG=0,Q4		 Parameter SL: 0 Parameter SS: 0=S0 1=S1 2=S2 3=S3 S0: Scan multiple Tags, as long as the RFID scans to the Tag and it will respond. (Usually, it be used on test environment.) S1: Scan multiple Tags, after scanning the TAG, the Tag will take about 1 second to respond again. Usually, it be used a lot in inventory, lane, and logistics. S2: Scan multiple Tags, after the Tags are scanned. The Tags need to leave the receiving range for a period of time and return within the range then Tags will be responding. Usually, it be used a lot in racing and logistics. S3: Scan multiple Tags, after the Tags are scanned. The Tags need to leave the receiving range for a period of time and return within the range then Tags will be responding. Usually, it be used a lot in racing and logistics. 		

		+0001-SetQuery:SL=0,SS=0,TG=0,Q4	Tags will be responding. Usually, it be used a lot in racing and logistics. Default = S1. Parameter TG: 0. Parameter Q: Range is from Q0~Q7, you need to set it bigger. When scan multiple Tags simultaneously. Command successful.	
	AT+0001-ReadDeviceMessage		Read the setting of parameter.	
		+0001-ReadDeviceMessage	Command successful.	
		+Sel=0	Default = 0	
11		+Session=1	Default = 1	
		+Target=A	Default = A	
		+Qbegin=4	Default = 4	
		+WorkingArea=2	working frequency=2	
12	AT+0001- Read:1,00,0000000,08,201309248 726030001020022		Read the information of specific Tags. parameter1: =0 – Read Tag's coding area. =1 – Read Tag's EPC area. (Parameter 2 needs to use 02). =2 – Read Tag's TID area (Read Only) =3 – Read Tag's user area. Parameter 2: Reads the number of characters filled in Parameter 4 starting at address 00(1Word=2byte). Range is form 00~FF. parameter 3: 0000000: Access password parameter. parameter 4: 08 for reading how many words (unit is Hex). parameter 5: EPC number.	

		+0001- Read:1,00,0000000,08,2013092487 26030001020022<00> →2DF135172013092487260300010 20022 or +0001- Read:1,00,0000000,08,2013092487 26030001020022<09>	<00>: Tag is correct. <09>: Tag is no longer exist. <a3>: Parameter 4 is out of storage zone.</a3>
13	AT+0001- Write:3,00,0000000,20130924872 6030001020022,098765432109876 54321		Write in the information of specific Tags. Parameter 1: 3– Write in the user's area of Tag. =0 – Write in password's area of Tag. =1 – Write in EPC area of Tag. (Parameter 2 needs to use 02 when the EPC length is not changed.) =2 – TID area is read-only. Written is unavailable. =3 – write access to Tag area from the user part. To modify the length of the EPC, parameter 2 must be written from 01. When modified to 12 bits, location of 01 will be filled into 3400. When modified to 14 bits, location of 01 will be filled into 3800. When modified to 16 bits, location of 01 will be filled into 4000. The following example are modified from 12 bits to 16 bits. AT+0001- Write:1,01,0000000,20131124872501000102000A,4000AA13112487250 1000102BBBB01020304 +0001- Write:1,01,0000000,20131124872501000102000A,4000AA13112487250 1000102BBBB01020304<00> The following example are modified from 16 bits to 12 bits. AT+0001- Write:1,01,0000000,AA131124872501000102000A,4000AA13112487250 1000102BBBB01020304<00> The following example are modified from 16 bits to 12 bits. AT+0001- Write:1,01,0000000,AA131124872501000102BBBB01020304,300020131 124872501000102000A +0001-

Write:1,01,0000000,AA131124872501000102BBBB01020304,300020131
124872501000102000A<00>
Parameter 2: 00- Writes from address 00 and all data is in words.
Parameter 3: 0000000: Access password.
Parameter 4: EPC number.
Parameter 5: The data to be written must be the multiple of 2 Bytes.AT+0001-
Write:3,00,0000000,201309248726
030001020022,09876543210987654
321<00><0>: Represent the writing is correct.
<10: Represent the Tag is no longer exist or EPC number is not corrected.</td>

Internet Update

1. Execute "Wenshing All in one NET tools", the screen is as follows.

arameters:				Setup via COM	
work mode:	MOD-SERVER-RTU 🔻	Enable DHCP		Read via COM	Setup via COM
Default Gateway:	192.168.001.001	Get Device IP		Read Factory	Set Factory
ubnet mask:	255.255.255.000	Get Gateway IP		Restore Factory	Factory Setting
Device IP:	192.168.001.002	Get DNS Server		Setup via NET	
Device port:	10006			Search in LAN	Setup via NET
Mac Address:	00-A5-89-C2-61-63	Enable DNS		Read Factory	Set Factory
estination IP:	192.168.001.003	First DNS server		Restore Factory	Factory Setting
estination Port:	10006	202.096.123.223		Online Device	
aud Rate(bps):	115200 👻 [Second DNS server		Device IP Mac Add	ess Version Type
Data/Parity/stop:	8 • NONI • 1 •	202.096.123.223			
elay Send(ms):	50 ▼ ms (毫秒)	DNS Website			
D: 01 🗖 🖾 🛛	onnect 🔲 data 🔲 reset 🛽	sha.iejy.net			
/ersion: V42	Type NNZN				
Updata All Oplin	Device	It Save Default		-	

2. Search for devices in the LAN and click the button of "Search in LAN."

rameters:					Setup via COM
work mode:	MOD-SERVER-RTU] 🗸	Enable DHCP		Read via COM Setup via COM
Default Gateway:	192.168.001.001		Get Device IP		Read Factory Set Factory
Subnet mask:	255.255.255.000		Get Gateway IP	V	Restore Factory Factory Setting
Device IP:	192.168.001.002	V	Get Subnet Mask		Setup via NET
Device port:	10006	\square			Search in LAN Setup via NET
Mac Address:	00-A5-89-C2-61-63		Enable DNS		Read Factory Set Factory
Destination IP:	192.168.001.003	$\overline{\vee}$	First DNS server		Restore Factory Factory Setting
Destination Port:	10006	V	202.096.123.223		Online Device
Baud Rate(bps):	115200 -		Second DNS server		Device IP Mac Address Version Type
Data/Parity/stop:	8 • NONI • 1 •		202.096.123.223		192.168.003.080 00-A5-89-C2-61-65 V20 NNZN-TCP232
Delay Send(ms):	50 🔻 ms (毫秒)	\checkmark	DNS Website		
D: 01 🗖 co	onnect 🔲 data 🔲 rese	et 🕅	sha.iejy.net		
Version: V42	Type NNZN	1			
Undata All Online	Device Load De	fault	Save Default		

3. After searching for the device and the IP address of the device will be displayed below.

Online Device

 Device IP
 Mac Address
 Version
 Type

 192.168.003.080
 00-A5-89-C2-61-65
 V20
 NNZN-TCP232

4. Read the network setting parameters and click on the searched device IP twice to automatically read the current settings. Then it will display the "Parameters" on the left side.

Parameters:					Setup v	via COM	
work mode:	TCP-CLIENT	• 🗸	Enable DHCP			Read via COM	Setup via COM
Default Gateway:	192.168.003.250	$\overline{\checkmark}$	Get Device IP			Read Factory	Set Factory
Subnet mask:	255.255.255.000		Get Gateway IP	$\overline{\checkmark}$	ſ	Restore Factory	Factory Setting
Device IP:	192.168.003.080		Get DNS Server		Setup v	via NET	
Device port:	08080	$\overline{\checkmark}$				Search in LAN	Setup via NET
Mac Address:	00-A5-89-C2-61-65		Enable DNS		ſ	Read Factory	Set Factory
Destination IP:	192.168.003.100		First DNS server		ſ	Restore Factory	Factory Setting
Destination Port:	08080		000.000.000.000		Opline De	avice	
Baud Rate(bps):	115200	-	Second DNS server		Devi	ice IP Mac Addres	ss Version Type
Data/Parity/stop:	8 - NONI - 1		000.000.000.000	\square	192.16	8.003.080 00-A5-89-0	2-61-65 V20 NNZN-TCP2
Delay Send(ms):	50 v ms (毫秒)	$\overline{\checkmark}$	DNS Website				
ID: 1 🗖 🖾 🕫	onne <mark>c</mark> t 🔲 data 🔲 res	et 🔳	eer				
Version : V20	Type NNZN-TCP232						
_		<u> </u>					

MENICHING

arameters:			Setup via COM	
work mode:	UDP-CLIENT V	Enable DHCP	Read via COM	Setup via COM
Default Gateway:	192.168.003.250	Get Device IP	Read Factory	Set Factory
Subnet mask:	255.255.255.000	Get Gateway IP	Restore Factory	Factory Setting
Device IP:	192.168.003.080	Get Subnet Mask	Setup via NET	
Device port:	5978	Ger DNS Server	Search in LAN	Setup via NET
Mac Address:	00-AC-FB-16-71-55	Enable DNS	Read Factory	Set Factory
Destination IP:	60.251.71.55	First DNS server	Restore Factory	Factory Setting
Destination Port:	5978	000.000.000.000	Opline Device	
Baud Rate(bps):	115200 🗸 🗹	Second DNS server	Device IP Mac Addres	s Version Type
Data/Parity/stop:	8 ~ NONI ~ 1 ~ 🗹	000.000.000	192,168,003,080 00-AC-FB-1	6-71-55 V22 NNZN-TC
Delay Send(ms):	50 🗸 ms (毫秒) 🗹	DNS Website		
	onnect I data I reset I	eer		

If the modification is successful, the following prompt will be displayed. 6.



- 7. Restart, remove the WS-RFIDBY device and plug it in again. When the update begins, the lights are alternately changed by green, red and blue, and there is an audible prompt. After the update is successful, it will restart and enter the standby state.
- 8. Use "Wenshing All in one NET tools" to modify the appropriate network settings, refer to PC wired network settings.

Table 1 : Read/Write Error Code

#	Туре	Code	Description
1	Command Error	0x17	Command code error in command frame.
2	FHSS Fail	0x20	The frequency-hopping searches the channel overtime, all channels all are taken during this period of time.
3	Inventory Fail	0x15	Polling operation failed. Tag does not return data or return CRC checking error.
4	Access Fail	0x16	Access Tag failed. It is possible that the Access password is incorrect.
5	Read Fail	0x09	Failed to read Tag data storage area. Tag does not return data or return CRC checking error.
6	Read Error	0xA0 Error Code	Read Tag data storage error. The returned code is obtained by 0xA0 and Table 3 Error Code. The Error Code information is shown in the table below.
7	Write Fail	0x10	Failed to write Tag data storage area. Tag does not return data or return CRC checking error.
8	Write Error	0xB0 Error Code	Read Tag data storage error. The returned code is obtained by 0xA0 and Table 3 Error Code. The Error Code information is shown in the table below.
9	Lock Fail	0x13	Locking the Tag data storage area failed. Tag does not return data or return CRC checking error.

10	Lock Error	0xC0 Error Code	Lock Tag data storage error. The returned code is obtained by 0xA0 and Table 3 Error Code. The Error Code information is shown in the table below.
11	Kill Fail	0x12	Kill Tag failed. Tag does not return data or return CRC checking error.
12	Kill Error	0xD0 Error Code	Kill Tag failed. The returned code is obtained by 0xA0 and Table 3 Error Code. The Error Code information is shown in the table below.

For example: Error Code Return<B3>, representatives' item 8 of Table 1 and item 2 of Table 3. Write Error writing Tag data storage error. The specified Tag data storage area does not exist or the Tag does not support EPC of the specified length, such as XPC.

Table 2 : NXP G2X Specific-Instruction of Tag Error Code

#	Туре	Code	Description
1	ReadProtect Fail	0x2A	ReadProtect command failed. Tag does not return data or return CRC checking error.
2	Reset ReadProtect Fail	0x2B	Reset ReadProtect command failed. Tag does not return data or return CRC checking error.
3	Change EAS Fail	Ox1B	Change EAS command failed. Tag does not return data or return CRC checking error.
4	NXP Error Code returned by the unique instruction Tag	0xE0 Error Code	NXP Error Code returned by the unique instruction Tag. The Error Code is obtained by 0xE0 and Table 3 Error Code.

Table 3 : EPC Gen2 Tag In Agreement Returns an Error Code

#	Туре	Code	Description
1		0	All other errors.
2	Francisco de la constitución de la constitu	3	The specified Tag data storage area does not exist or the Tag does not support EPC of the specified length, such as XPC.
3	Error-specific	4	The specified Tag data storage is locked and/or for permanently. And also, the lock status is not writable or unreadable.
4		В	Tag does not receive enough power to write.
5	Non-specific	F	Tag does not support Error Code return.