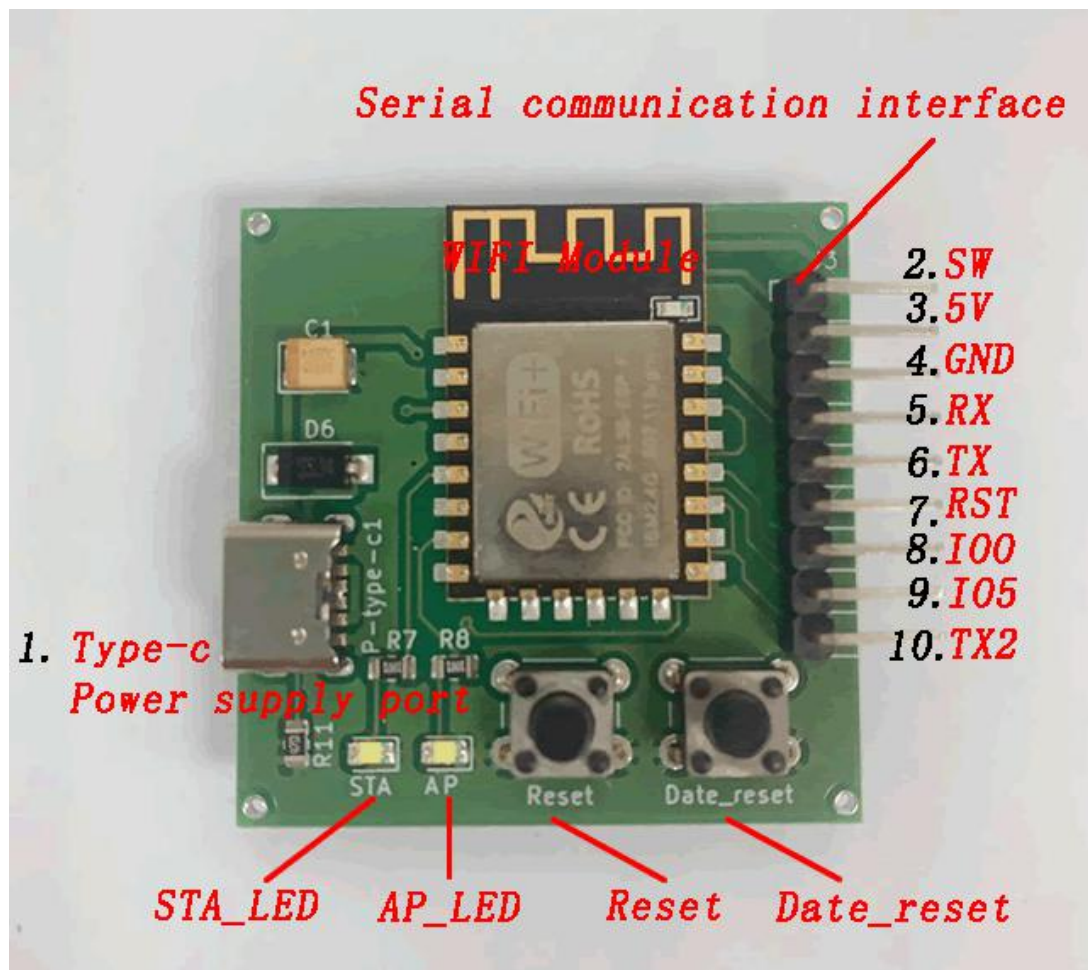


Wireless serial - Manual v1.7

[Wireless serial, referred as 'the device']

Product



Networking Setup

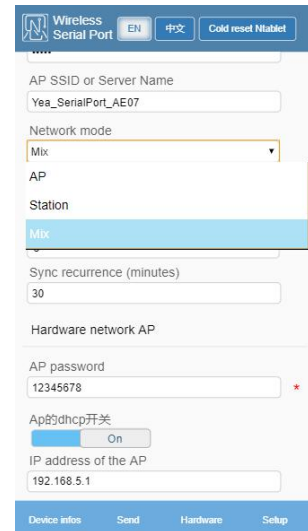
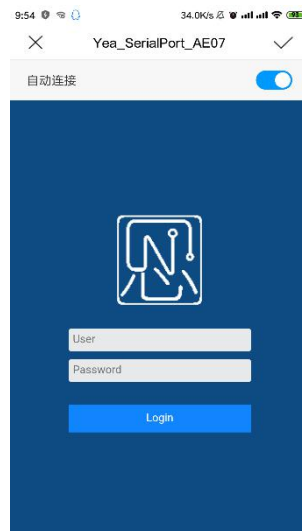
AP mode networking setup

[The device will boot to this mode by default when first power on in unconfigured state. AP_LED is always on in this mode]

Connecting to the SSID of this device with mobile phone , PC, or tablet.

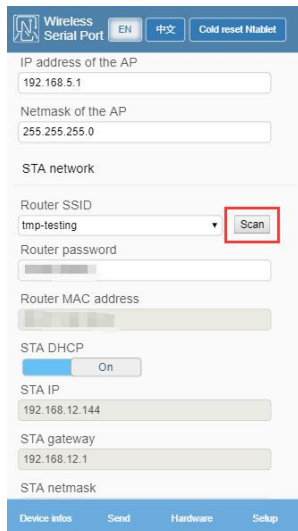
Note: This method does not support IOS and MAC systems currently.

- 1: Connect the SSID of this device (the SSID is begin with Yea_SerialPort)
- 2: Enter the username and password (default:admin) and click the 'Login' button
- 3: Network mode (would be explained later) Choose "mix" mode





4: Click Scan to get the name of announcing wifi SSID. Then choose (your router) to be connected. Enter the password of this router. Then click 'Submit' button at the top of the page.



5: STA_LED and AP_LED will be always on together. If the networking is successful in setup, you can see the IP address of the device in the management interface from the router, or you can see it after repeating step 1 and step 2, then you can access the IP by browser with a computer connected to the same wifi.



WeChat Networking Setup

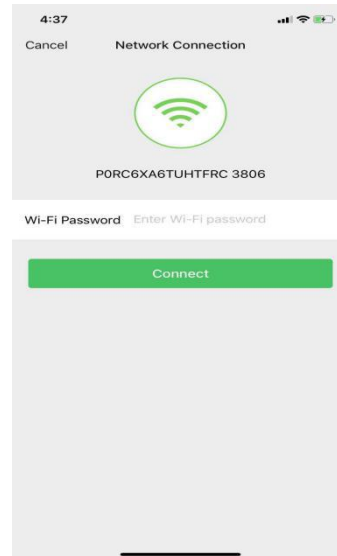
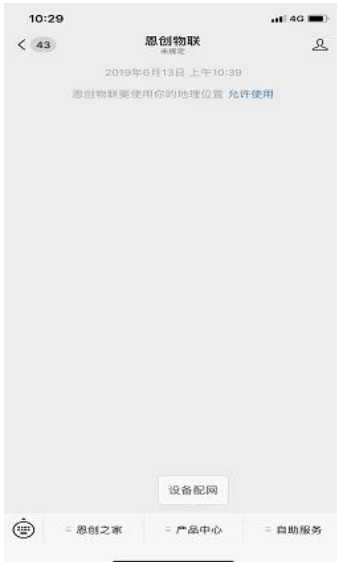
[Please press and hold the DATA_RESET button till the STA_LED flashes, then the device would enter the WeChat "Airkiss" networking setup mode]

1: Please subscribe Yea Create Official Accounts in WeChat

Scan the official QR code or search '恩创物联' on WeChat to subscribe.



- 2: Click the 'Device Network Distribution' button to access to this interface and select the current WiFi name (please confirm that the phone is connected to the same wifi, The device will access the same wifi hotspot as the mobile phone), enter the wifi password, and click 'Connect'



3: When you see that both LEDs are on, it means networking setup is successful. The interface will show 'Connected successfully'. And you can go to the management interface of your router. Or you can repeat step 1 and step2 in the AP mode networking setup to enter a built-in web page. Then you can see the IP address on 'Hardware Parameters' page. You can access this page by accessing the IP address by a browser with a computer which connected to the same wifi.

Note:

1. Due to the effects to networking or environmental, the two LEDs of this device will always be on sometimes, but the WeChat interface always shows that it's on connecting or prompts that connection timeout fails. Please refer to the device LED light display.

2. If it continues to fail, please try the AP mode networking setup.

The device does not support the router with AES encryption mode currently, please log in the router configuration page as shown in the figure and modify the encryption mode to TKIP for connecting.

| | |
|------------------|---|
| Security Options | <input type="text" value="WPA / WPA2 Personal"/> |
| Encryption | <input type="text" value="TKIP"/> |
| Shared key | <input type="text" value="....."/> Randomly generated |
| Group key update | <input type="text" value="3600"/> (Unit: second) |

Web interface description



● EN:

Display interface's content in English.



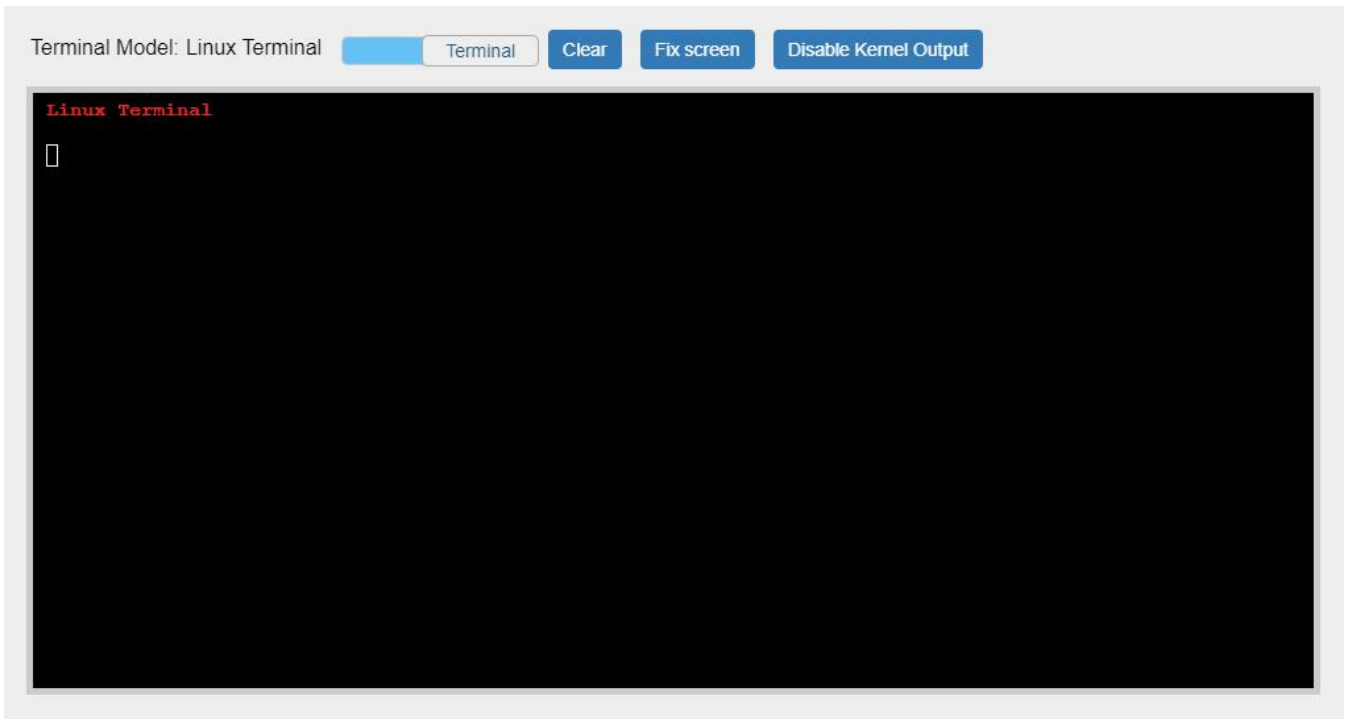
- 中文:
Display the content of the interface in Chinese.
- Cold reset Ntablet:
Used to restart the tablet [only charger base version].

| Device infos | | | |
|--------------|---------------------|-----------|---------|
| CPU ID | 3C8BF6 | CPU speed | 160 MHz |
| Up time | 0 days 00:50:20 | RAM usage | 54.7% |
| Local time | 2019-11-05 09:57:11 | | |

- Device parameters:
 - 1) CPU ID: The CPU ID of this device.
 - 2) CPU speed: The operating frequency of this device.
 - 3) Online time: The running time of this device after power-on, power off or restart will be reseted.
 - 4) RAM usage: memory usage of this device.
 - 5) Device time: The network time obtained after the device is normally connected to the networking, Setting by the 'Hardware Parameters' menu.
Time zone (for example, China: +8 in East 8 District),
Time server address:The NTP server address (recommended default).

| Serial setup | |
|--------------|------------|
| Baud rate | 115200 |
| Serial setup | SERIAL_8N1 |

- Serial port settings:
 - 1) Set the baud rate: This device needs to be consistent when communicating with other devices' serial ports.
 - 2) Serial port setting: This device needs to be consistent when communicating with other devices' serial ports.



- Send Message:
 - 1) Terminal button: Terminal mode (default), can interact with Linux devices through the serial port with command data. It will become the serial port debugging mode for Linux.
 - 2) Clear button: Clean up the data received/issued on the screen.
 - 3) Fix screen: Calibrate the terminal line number sequence so that the page data is neatly arranged. [disabled in serial debugging mode]
 - 4) Disabled Kernel Output: Turn off the output of the Ntablet kernel.
[unique to the built-in version, disabled in serial debugging mode]
 - 5) Serial port mode:
 - a) Send button: Send data after clicking.
 - b) HEX (show): Displays the received serial port data with HEX format.
 - c) HEX (send): Send serial port data with HEX format.

- Hardware information:

| Hardware information | | Submit | |
|----------------------|-------------------|-----------------|-------------------|
| AP MAC address | CE:50:E3:3C:8B:F6 | STA MAC address | CC:50:E3:3C:8B:F6 |
| Firmware version | 2.3.3.A | | |



- 1) Submit button: Submit the data of the page to this device. **[Device will restart]**
- 2) hardware information:
 - a) AP's Mac address: The MAC address used in the AP mode.
 - b) STA's Mac address: The MAC address used in the SAT mode.
 - c) Firmware version: current version of this device

| Hardware setup | | | |
|---------------------------|--|-------------------|--|
| Hardware Username | <input type="text" value="admin"/> | Hardware Password | <input type="password" value="....."/> |
| AP SSID or Server Name | <input type="text" value="Yea_SerialPort_8BF6"/> | Network mode | <input type="text" value="Mix"/> |
| NTP server address | <input type="text" value="cn.pool.ntp.org"/> | Time Zone | <input type="text" value="8"/> |
| Sync recurrence (minutes) | <input type="text" value="30"/> | | |

- 3) Hardware setup:

Hardware local user name: used to log in this device combined with password. If the device supports MQTT, then it is also part of the verification.

Hardware local password: the same as the local user name.

Ap_ssid and host name: The SSID of the AP mode, which can be accessed the built-in web interface.

Network mode:

AP mode:
This device can be a access point.It can be accessed or operate by the built-in web interface.

Station mode:
Connecting to WiFi. You can use your PC, mobile phone and etc to access with browser under the same networking after connection success.(IOS, MAC system are not supported temporarily). You can access IP address to the built-in web interface.

Hybrid (STA+AP):
Support the above two

Time server address: Recommended default.

Time zone: Combine the time server to display the current time.

Synchronization frequency (minutes): Synchronize with network time.

| Hardware network AP | | | |
|----------------------|--|-------------------|--|
| AP password | <input type="text" value="12345678"/> * | Ap的dhcp开关 | <input checked="" type="checkbox"/> On |
| IP address of the AP | <input type="text" value="192.168.5.1"/> | Netmask of the AP | <input type="text" value="255.255.255.0"/> |

- 4) Hardware Network AP:

User and password of AP: The password of SSID (hostname) of this device.

DHCP of AP: DHCP service switch in AP mode.



IP address of AP: AP address. **[No special requirements, recommended default]**

Sub mask of the AP: AP mask. **[No special requirements, recommended default]**

| STA network | | | |
|--------------------|--|-----------------|---|
| Router SSID | <input type="text" value="tmp-testing"/> <input type="button" value="Scan"/> | Router password | <input type="password"/> |
| Router MAC address | <input type="text"/> | STA DHCP | <input checked="" type="checkbox"/> On |
| STA IP | <input type="text" value="192.168.12.144"/> | STA gateway | <input type="text" value="192.168.12.1"/> |
| STA netmask | <input type="text" value="255.255.255.0"/> | STA DNS | <input type="text" value="192.168.12.1"/> |

5) Hardware network STA:

Router SSID: The name of the WiFi SSID to connect.

Scan button: Click to scan all SSID which are announcing.

Router password: The password of the WiFi router.

Router MAC address: The MAC address of this device to be used to connected to the WiFi router.

STA's DHCP:

DHCP switch in STA mode (use static IP after shutdown, you can set STA_IP, STA_Gateway, STA_Subnet Mask, STA_DNSIP).

STA's IP address:

The assigned IP address after the WiFi router is connected. You can use the PC or mobile phone which in the same networking to access this address. And then you can enter the web interface to operate.

STA's gateway: **[No special requirements Recommended default]**

Subnet mask of STA: **[No special requirements Recommended default]**

STA's DNS address: Setting this DNS IP requires STA_DHCP to be turned off.



- Setting
 - 1) Factory Restore:

The data is cleared immediately after clicking, it would be restarted in AP mode.
[This operation is irreversible and please be prudent]
 - 2) System settings backup:

The current configuration data is backed up locally.
[Device will restart]
 - 3) System Settings Restore:

Use the backup configuration to apply to the current device.
[Device will restart]
 - 4) Online upgrade:

Get the new version of firmware, you can use this button to upgrade.
[Device will restart]

Product Details

- Power supply:

Device USB type-c interface,5V dc power supply.
- Button:

RESET:Restart this device.
DATA_RESET:



1.WeChat network distribution

If the device is not configured, then after long press, you can see that only the STA_LED is blinking.If you enter the WeChat networking setup mode (see the network setup tutorial for details).

2.reset to factory settings

After pressing and holding for about 5 seconds, seeing that the STA_LED AP_LED flash at the same time, then you can let go. If the flash ends, and only AP_LED is still on , then it is successfully executed.

● Interface

1. USB type-c: the power interface is connected to 5v dc.
2. SW: reserved.
3. 5V:5V input.
4. The GND: GND.
5. RX: UART_RX (3.3V in TTL).
6. TX: UART_TX (3.3V in TTL).
7. RST: reserved.
8. IO0: reserved.
9. IO5: reserved.
10. TX2:debug reserved.

● WiFi Module

1. WiFi Module
2. External antenna of the module .

● LED light status description [After this device is powered on]

1. Only AP_LED is always on: 1. The AP mode; 2. The device is not connected to any router and in non-ap mode.
2. Only STA_LED is always on: The device is connected to a router and in STA mode.
3. Only STA_LED flashes: current WeChat networking setup mode.
4. STA_LED and AP_LED is always on: Mixed mode and connected to WiFi router.
- 5.STA_LED and AP_LED flashes at the same time: Press and hold the DATA_RESET button to reset the device to factory settings.