### I . MESH serial port tool test instructions



Device 1 parameter configuration

- 1. The default baud rate of JDY-25M is 9600, so the baud rate selected on the serial port tool is: 9600
- 2. Tick the send return option
- 3. Configure as network mode: AT+ROLE5
- 4. Configure the networking ID number as 1122, send **AT+NETID1122** (the default factory parameters can be used for general testing, which can not be configured). For actual product applications, factory configuration parameters are generally not recommended.
- 5. Configure the short address of the device as 0004, send AT+MADDR0004 (the default factory parameters can be used for general testing, which can not be configured). The short address of the factory is the last two digits of the MAC address. For the same batch of goods, the MAC address of the last two digits is generally unique. For actual product applications, it is generally recommended that the user configure the short address himself.
- 6. Send **AT+RESET** to reset and restart. After the restart, the module will take effect the above configuration of parameter.

Device 2 parameter configuration

- 1. The default band rate of JDY-25M is 9600, so the band rate selected on the serial port tool is: 9600
- 2. Tick the **send return** option
- 3. Configure as network mode: **AT+ROLE5**
- 4. Configure the networking ID number as 1122, send **AT+NETID1122** (the default factory parameters can be used for general testing, which can not be configured). For actual product applications, factory configuration parameters are generally not recommended.
- 5. Configure the short address of the device as 0005, send AT+MADDR0005 (the default factory parameters can be used for general testing, which can not be configured). The short address of the factory is the last two digits of the MAC address. For the same batch of goods, the MAC address of the last two digits is generally unique. For actual product applications, it is generally recommended that the user configure the short address himself.
- 6. Send **AT+RESET** to reset and restart. After the restart, the module will take effect the above configuration of parameter.

After the configuration of the above steps, it indicates that the network has been established between the two modules. If the user needs to judge whether the current device has been successfully networked through IO, he can place a central machine in the network. To configure the central machine, he only needs to configure the short address of the module as 0001, and then restart it. In this way, the STAT pin of the network device in the network will output the network status level. If the network is successful, the STAT pin will output high level, if not successful, the STAT pin will output low level.

The central machine supports all router functions. The central machine can also automatically distribute short addresses to devices. As this method is too complex, it is generally recommended that users send AT+MADDR instructions for configuration.

# II. The serial port sends instruction MESH communication between devices



Device 1 receives data, device 2 sends data

The data content sent by device 2 is: 11223344

Data received by device 1: f1 dd 0a 00 05 ff ff 11 22 33 44 0d 0a Description of received data format: f1dd means data head

0a means the length of data after

0005 means this data is sent from 0005 device

Ffff means this packet of data is sent through broadcast mode

11223344 means data content

0d0a means end mark

Example of setting Chinese broadcast name with serial port tool



Example of setting English broadcast name with serial port tool



After the setting is completed, send AT+RESET to restart to take effect

### III. Example of APP transparent transmission test

1. Transparent transmission test of slave and APP

The module sends AT+ROLE0 instruction to configure into slave transparent transmission mode, and send AT+RESET to restart.

IOS test tool interface

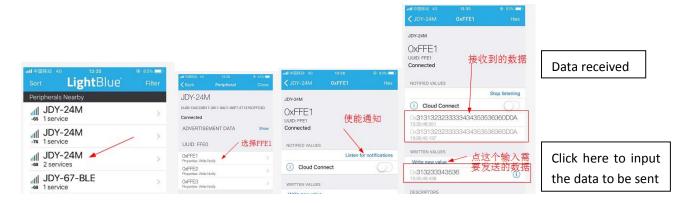


#### ANDROID test app interface



It supports 4 channels of IO high and low level on the APP direct control module, and the transparent transmission speed with APP can reach 8K Byte/s

#### Operation instruction of LIGHTBLUE test APP to test JDY-25M



## IV. APP sends data to MESH and APP receives data from MESH

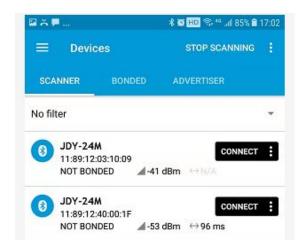
#### IOS test APP interface



APP receives broadcast data sent from 0004 device, the content is: 11223344

APP sends broadcast data to all the devices in the network, the content is: 1122334455

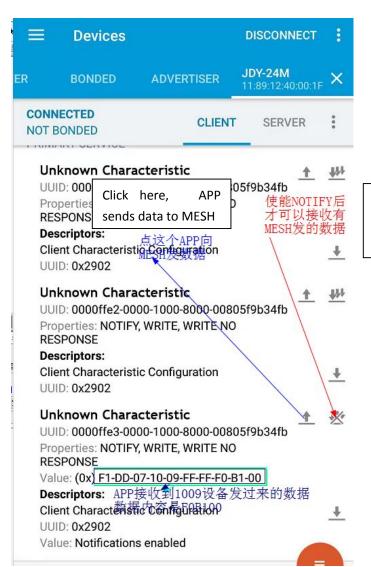
ANDROID test interface Search device, click CONNECT



#### Select FFE0 service



Select enable NOTIFY to receive MESH data, and then click send button to send data to MESH



The data sent by MESH can be received only after notify is enabled

APP receives data sent from 1009 device, the content is: F0B100

#### APP sends data to MESH interface



APP sends broadcast data to all the devices in the network, the content is: 11223344

After inputting the above instruction, click SEND to send