DX-SMART

DX-CP26

Bluetooth to 232/RJ45 Wireless Adapter

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Update Records

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1. Introduction

1.1. Overview

DX-CP26 is a multi-function Bluetooth wireless adapter developed by Shenzhen DX-SMART Technology Co. Ltd. It supports converting Bluetooth into 232、RJ45 dual interface serial device and replacing traditional cables. Multifunctional, flexible, and stable.Customers can connect to mobile phones, computers, devices, etc. according to their needs for data exchange.

2. Product Diagram

1. TX：transmit data indicator(red)
2. RX：Receiving data indicator (green)
3. WORK: Work status light (blue)
4. POWER: chargingindicator (red)
5. KEY：Disconnect and baud rate switching button
6. USB：USB powersupply port, USB charging port
7. ANT ： external antenna port
8. RJ45&RS232:RJ45communication port, RJ45toRS232communication port

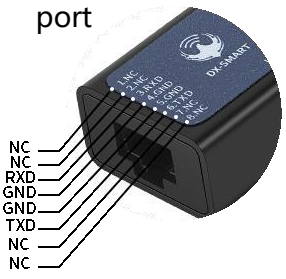


Figure 1： CP26 Product diagram

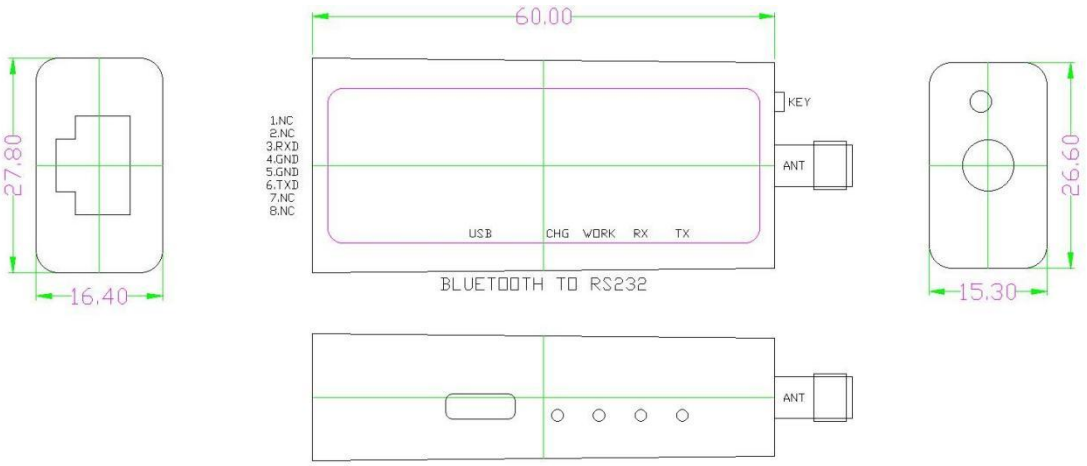


Figure 2：CP26 Product size chart

3. Hardware Construction Description

3.1. KEY button

- Disconnect function：
  Bluetooth connected status: short press once to disconnect the Bluetooth connection.
- switching function：
  Switch on: Long press for one second to switch on;
  Switch off: long press for three seconds to switch off.
  Baud rate switching function:
  Press the KEY pin twice consecutively to switch the baud rate, the number of times the blue light blinks represents the baud rate number.
  Flashing once is 2400, twice is 4800, three is 9600, four is 19200,five is 38400, six is 57600,and seven is 115200

3.2. TX\RX\WORK\POWER Indicator

- TX　Data indicator: flashing when Bluetooth sends data.

- RX Data indicator: flashing when Bluetooth receives data
- WORK Work status indicator:
  - ✧ Bluetooth not connected status: blue light blinks, the number of times the blue light blinks represents the baud rate number. The number of times the blue light blinks represents the baud rate number. 2400 for one blink, 4800 for two, 9600 for three, 19200 for four, 38400 for five, 57600 for six, and 115200 for seven.
  - ✧ Bluetooth connected status: blue light is on for a long time.
- POWER Charging light: Red light always on during charging, red light will go out when fully charged

4. Specification Params

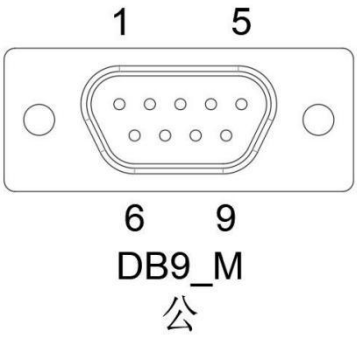
4.1. Bluetooth default parameters

4.1.1. Basic parameters

- Bluetooth name：RS232\485
- Module serial port default parameters：9600bps/8/n/1 (baud rate/data bit/no parity/stop bit)
- Module BLE UUID：SERVICE UUID：FFE0
  NOTIFY/WRITE UUID：FFE1
  WRITE UUID：FFE2
- PIN：1234（only support mobile phone/laptop）

4.2. Hardware interface params

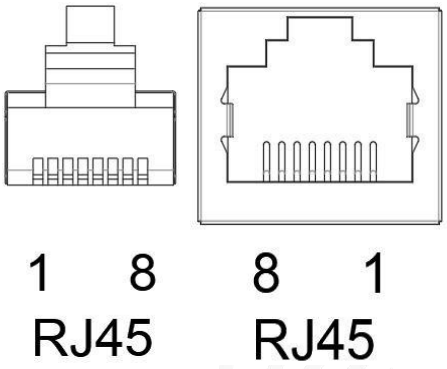
- RS232communication port: default 9600bps/8/n/1 (baud rate/data bit/no parity/stop bit), module supports software flow control. Support baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200. The VCC power supply voltage range is 4.5V-6V.
  The interface definition is shown in Figure 3:



PIN	DB9_M
2	RXD
3	TXD
5	GND
1/4/6/ 7/8/9	NC

Figure 3：DB19 Interface Definition

RJ45 port: default 9600bp suitable for switches/routers/firewalls/servers with RJ45 (8P8C) Console interface.The interface definition is shown in Figure 4:



PIN	RJ45
3	RXD
4/5	GND
6	TXD
1/2/ 7/8	NC

Figure 4：RJ45 Interface Definition

5. Android APP Modify Module Parameters

1. Step 1: Connect CP26 to the device through the 232 /RJ45 interface;
2. Step 2: Install the Android testing app in the data package onto the Android phone, open the transparent interface for searching and connecting (the Android app interface is shown in Figure 5);
3. Step 3: After searching for the Bluetooth name, click on the name to connect;
4. Step 4: Click "Query" to get the default parameters of the module;
5. Step 5: Fill in the Bluetooth parameters that need to be modified, and then click "Set".

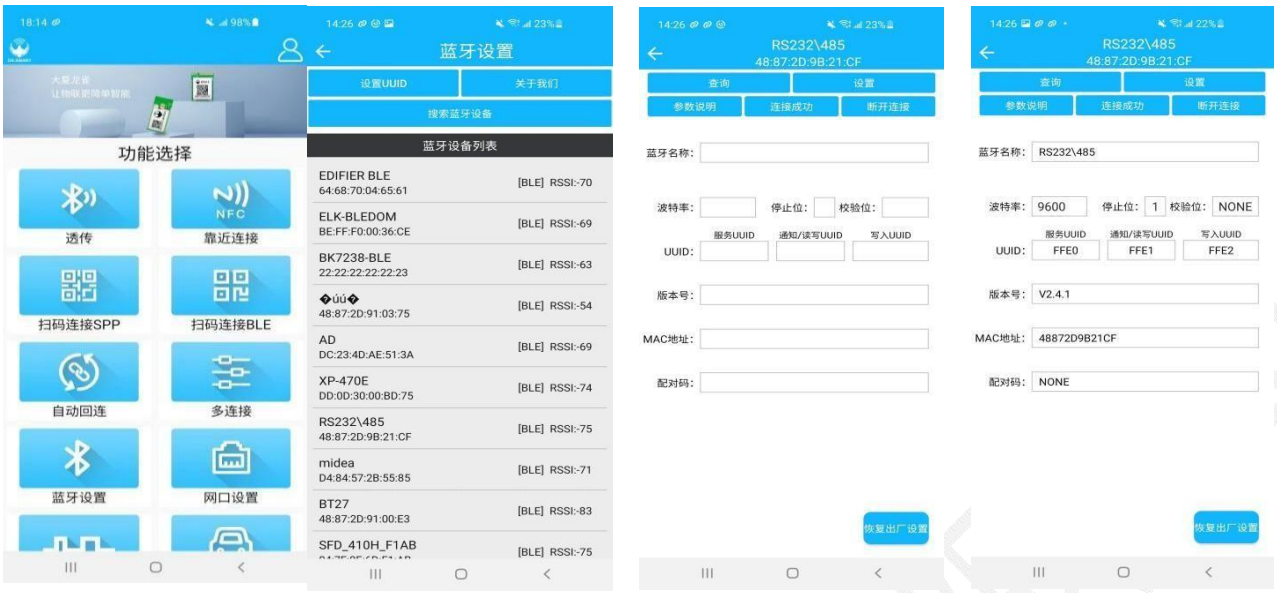


Figure 5：Android APP Modify Module Parameters

6. Wireless communication between CP26 and Phone&laptop

Wireless data communication between phone&laptop is achieved through the CP26 Bluetooth wireless converter and 232/RJ45 interface, as shown in the following figure:

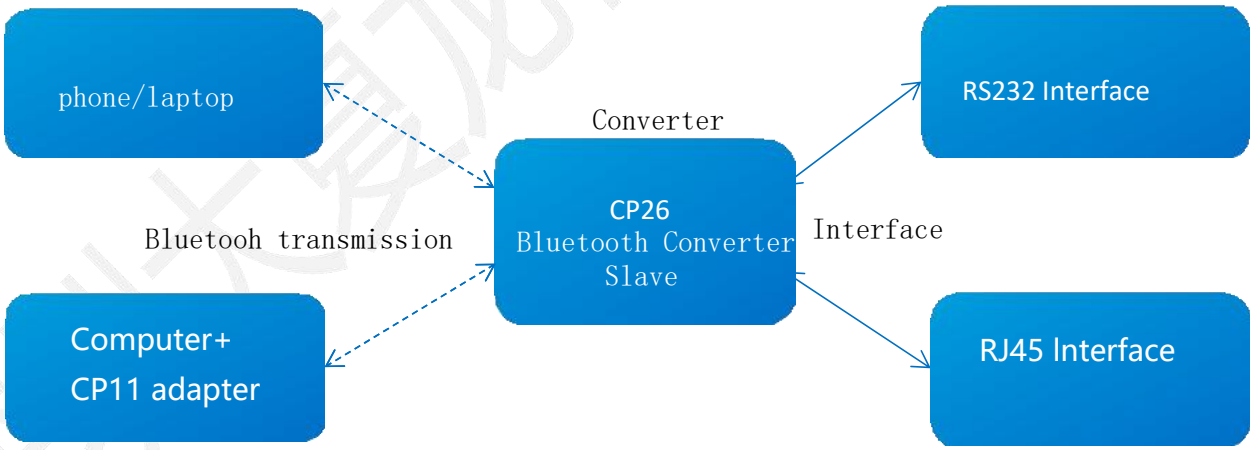


Figure 6： CP26 Functional diagram

6.1. Wireless communication between devices and mobile phones

1. Step 1: Connect the CP26 Bluetooth to 232/RJ45 Wireless Adapter to the device via one of the two 232/RJ45 ports;
2. Step 2: Install the Android testing app in the data package onto the Android phone, open the transparent interface for searching and connecting (the Android app interface is shown in Figure 7); Download our company's "DX-SMART" app from the Apple Store and use it for data transmission testing (the Apple app interface is shown in Figure 8);
3. Step 3: After searching for the Bluetooth name, click on the name to connect;
4. Step 4: After connecting, data exchange can be carried out

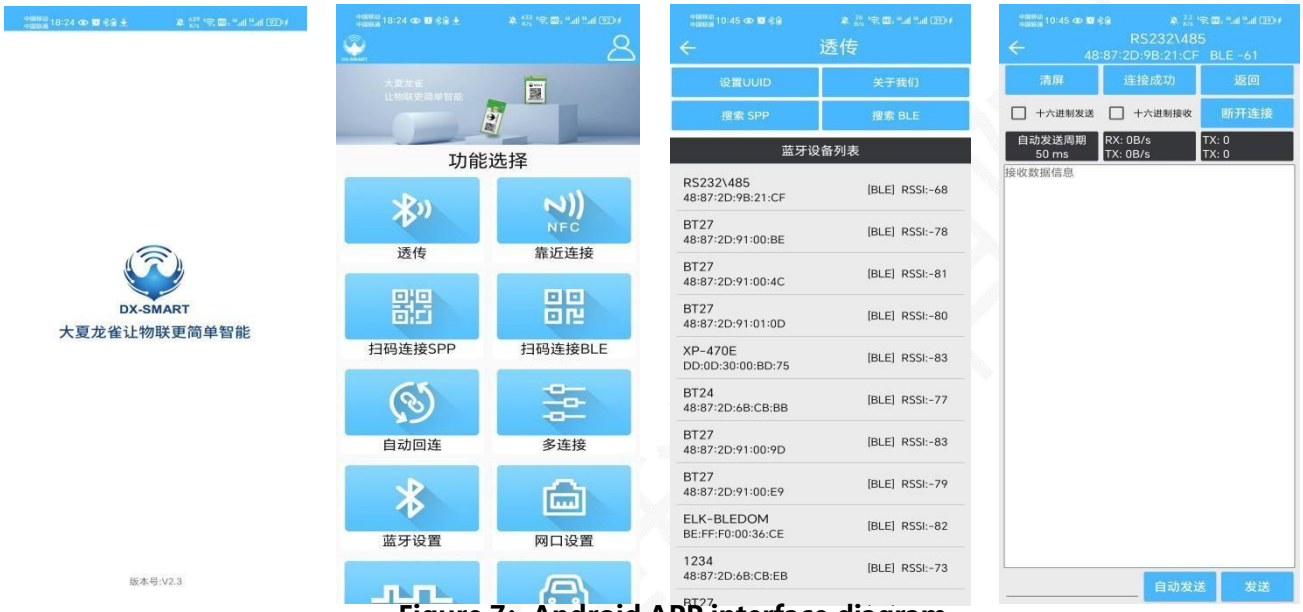


Figure 7: Android APP interface diagram

Figure 8: Apple APP interface diagram

6.2. Connect devices and Android phones by scanning QR code

1. Step 1: Connect the CP26 Bluetooth to 232/RJ45 Wireless Adapter to the device via one of the two 232/RJ45 ports;
2. Step 2: Install the Android testing app in the data package onto the Android phone, and open the scan interface to scan and connect (the APP interface is shown in Figure 9);
3. Step 3: After aligning the device QR code, a "drop" sound indicates successful connection;
4. Step 4: After connecting, data exchange can be carried out;

Figure 9: Android app scans QR code to connect

6.3. Wireless communication between devices and computers

Laptop Bluetooth can be directly connected with "CP26-Laptop" (PC system below Win10 can be directly connected, Win11 must be used with a Bluetooth adapter).

1. Step 1: Connect CP26 to the device through the 232/RJ45 interface;
2. Step 2: After searching for the Bluetooth name, click on the name to connect;
3. Step 3, Search for 'RS232\485' and enter '1234' to connect.
4. Step 4, After connecting, data exchange can be carried out.

图 10：Laptop Bluetooth Connection Diagram

6.4. Wireless communication between devices and PC

Desktop PC need to be used with our CP11 Bluetooth adapter.

1. Step 1: Connect the CP26 Bluetooth to 232/RJ45 Wireless Adapter to the device via one of the two 232/RJ45 ports;
2. Step 2: install the "CH341" driver in the data package on the computer;
3. Step 3: insert the CP11 adapter on the computer end;
4. Step 4: Install the sscom5.13.1 computer serial port software, open the serial port software and select the corresponding COM port of the CP11 adapter. Configure the default parameters for serial port software installation as 9600bps/8/n/1 (baud rate/data bit/no parity/stop bit);
5. Step 5: the CP11 adapter will actively search for the CP12 Bluetooth adapter and connect it;
6. Step 6: After connecting, data exchange can be carried out;

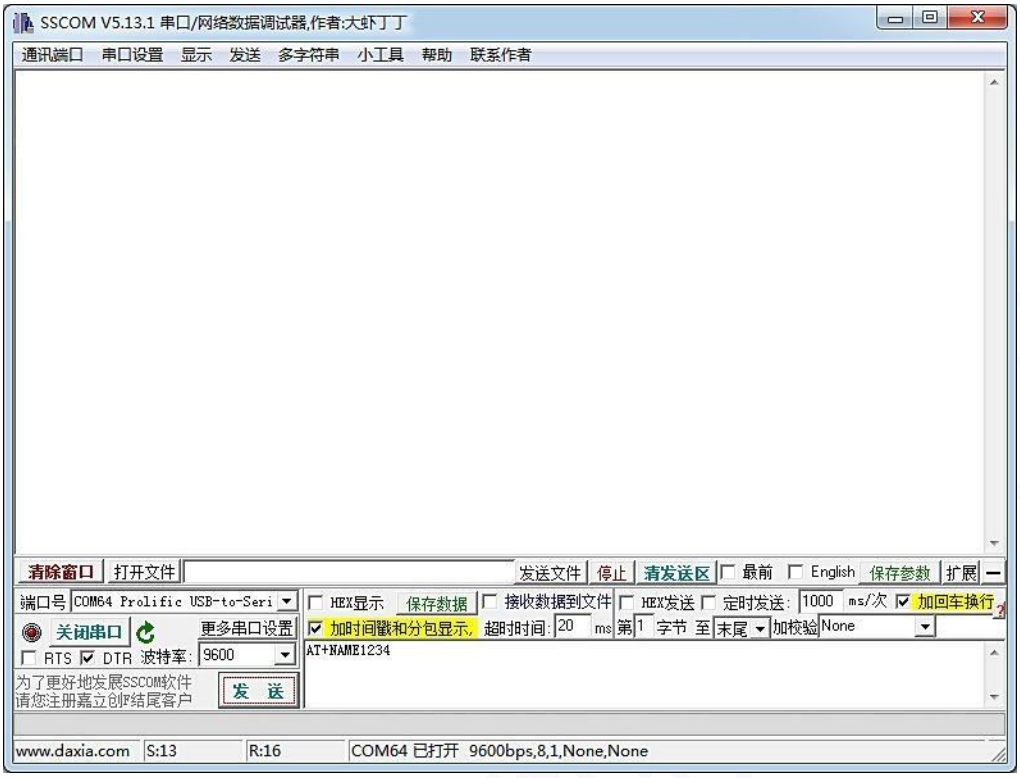


Figure 11: Serial Port Software Diagram for PC

7. Wireless communication between devices and devices

Wireless data communication between two devices is achieved through the CP26 Bluetooth wireless converter and 232/RJ45 interface, as shown in the following figure:

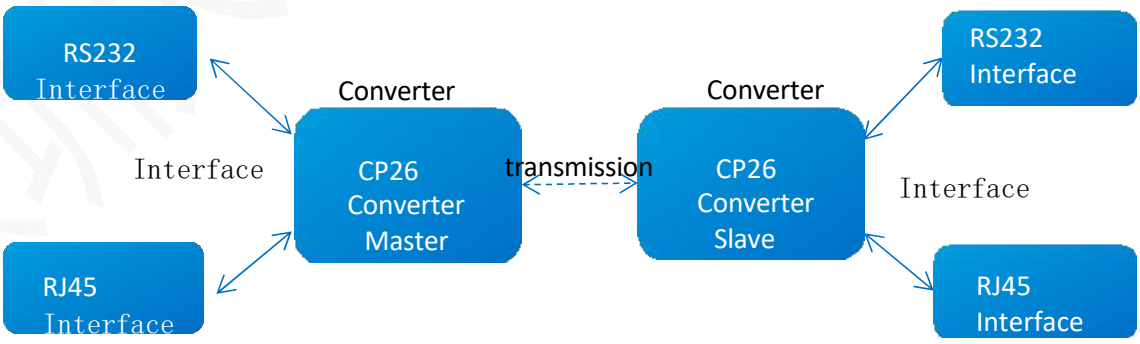


Figure 12: CP26 master-slave connection

1. Step 1, a CP26 Bluetooth to 232/RJ45 wireless adapter host is connected to device 1 through one of the two 232/RJ45 ports;

2. Step 2, a CP26 Bluetooth to 232/RJ45 wireless adapter slave connects to Device 2 via one of the two 232/RJ45 ports;

3. Step 3, the CP26 Master Bluetooth will automatically connect to the CP26 Slave Bluetooth, thus enabling wireless data communication between the multiple interfaces of Device 1 and Device 2.

8. Points for attention

- Avoid external pressure on the product
- Indoor and outdoor use in normal temperature environments, prohibited from use in damp or watery environments
- Non professionals are not allowed to disassemble and repair themselves

9. Packing List

- CP26 for Phone/Laptop
  - ✧ Product ×1
  - ✧ Manual ×1
  - ✧ Glue stick antenna ×1
  - ✧ USB charging cable ×1
  - ✧ RJ45 adapter ×1
  - ✧ RS232 adapter ×1
- CP26 for PC
  - ✧ Product ×1
  - ✧ Manual ×1
  - ✧ Glue stick antenna ×1
  - ✧ USB charging cable ×1
  - ✧ RJ45 adapter ×1
  - ✧ RS232 adapter ×1
  - ✧ CP11 Master ×1
- CP26 for device
  - ✧ Product ×2
  - ✧ Manual ×2
  - ✧ Glue stick antenna ×2
  - ✧ USB charging cable ×2
  - ✧ RJ45 adapter ×2
  - ✧ RS232 adapter ×2