DC500_NB-IoT People Counter
Configuration Manual

V1.1
Date:2021-07-16

Changed

V1.1 Modify hardware picture;

V1.0 Initial version;

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1 Overview

This document describes how to modify device parameters through the serial port, such as upload interval, alarm threshold, and how to modify NB-IoT parameters through serial port, such as deveui,appeui,band frequency,and so on.

The main steps are as follows:

   1>Tools

   2>Connect TTL to sensor

   3>Send the command through the serial port software

2 Modify Device Parameters

2.1 Required tools

   ●TTL and wires; TTL is a complimentary accessory, please check it when receiving the goods. As shown in Figure 2.1 and Figure 2.2

   ●Serial port software

   ●DC500 Device

Note: Due to the update, the TTL appearance you may receive is inconsistent with the
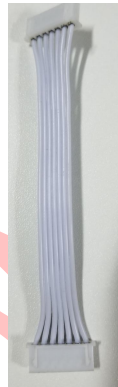
picture.

Figure 2.1   Figure 2.2

● Serial port software: ,If you have other serial software, you can also use it.

2.2 Connect TTL to sensor

1 Connect the GND of TTL pin terminals to GND of DC500 device;

 The GND positions of the DC500 device and the TTL tool are marked in Figure 2.3 and Figure 2.4. Please refer to it.

2 Connect the other end of the TTL (USB) to your computer;

Figure 2.3

Figure 2.4

For example: TTL has been connected to the device
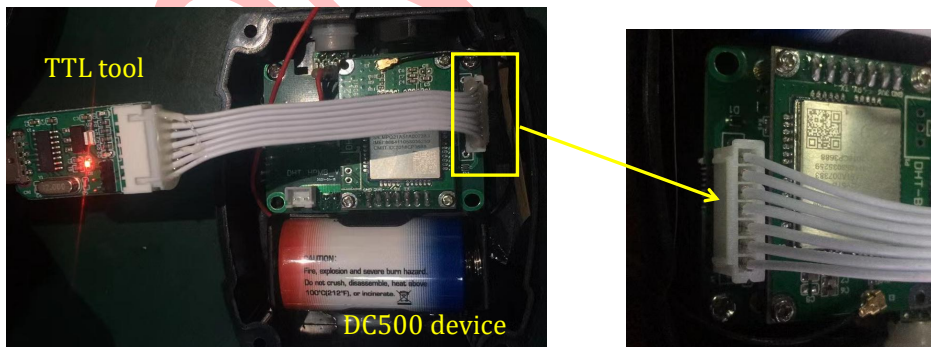

Figure 2.5

2.3 Send the command through the serial port software

After completing the two steps 2.1 and 2.2, you can refer to this step to configure the corresponding parameters through the serial port software.

![CN DINGTEK logo]

Step1 serial port software setting

 COM Num.: You can check the port number used in "Device Manager -> Port" on your computer

 Baudrate: 115200

 Parity bit: NONE

 Data bit: 8

 Stop bit: 1

Note: DONOT select the "Receive as hex" option. As shown in Figure 2.6:
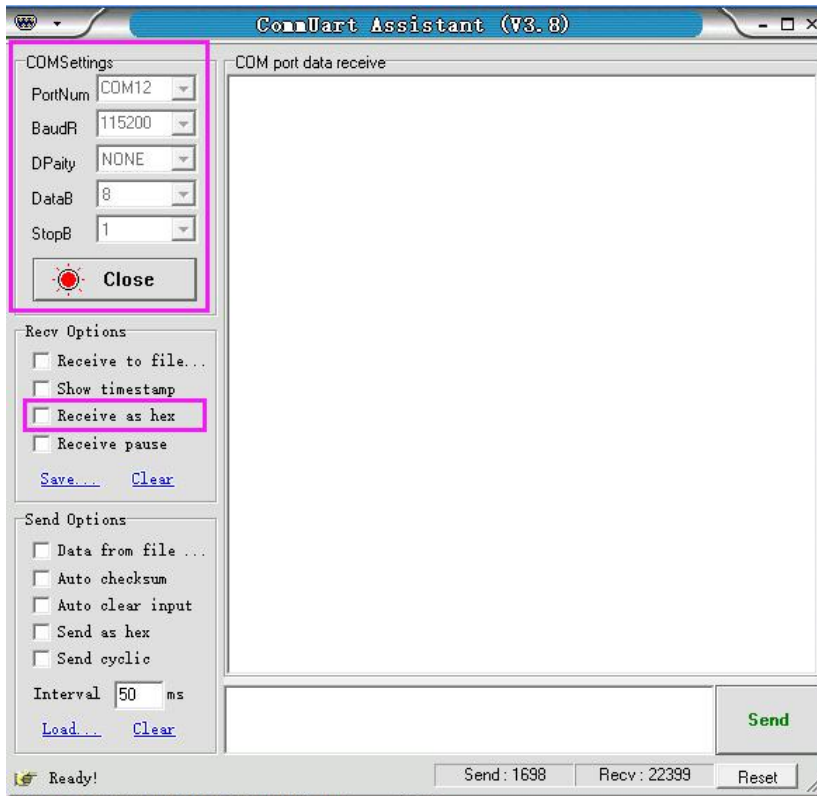

Figure 2.6

Step2 Connect power

Connect the capacity and battery to the connector location(2PIN) on the motherboard, or restart sensor by magnet.

Step3 Send command

When the serial port starts to output device information,you can send command in ASCII. If the configuration is successful, you can receive a reply from sensor.

For example:

Note: The following commands are reference examples, please refer to the product protocol documentation for a more detailed description of the commands.

Example 1 Configure the heartbeat reporting interval to 10h

Command in ASCII: 80029999010A81

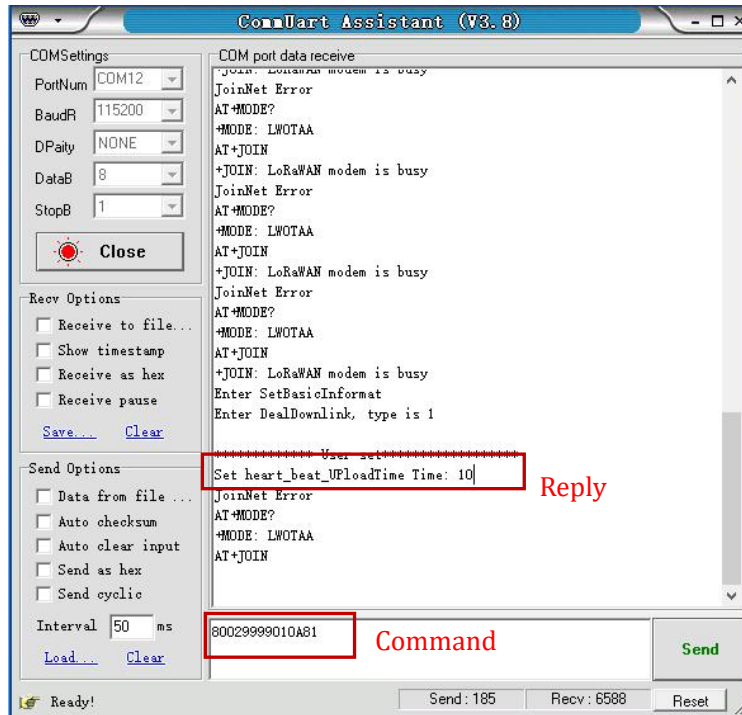Reply from sensor: Set heart_beat_UPloadTime Time: 10

Figure 2.7

Example 2 set the people counter alarm threshold to 500

Command in ASCII:

800299990201F481

Reply from sensor:
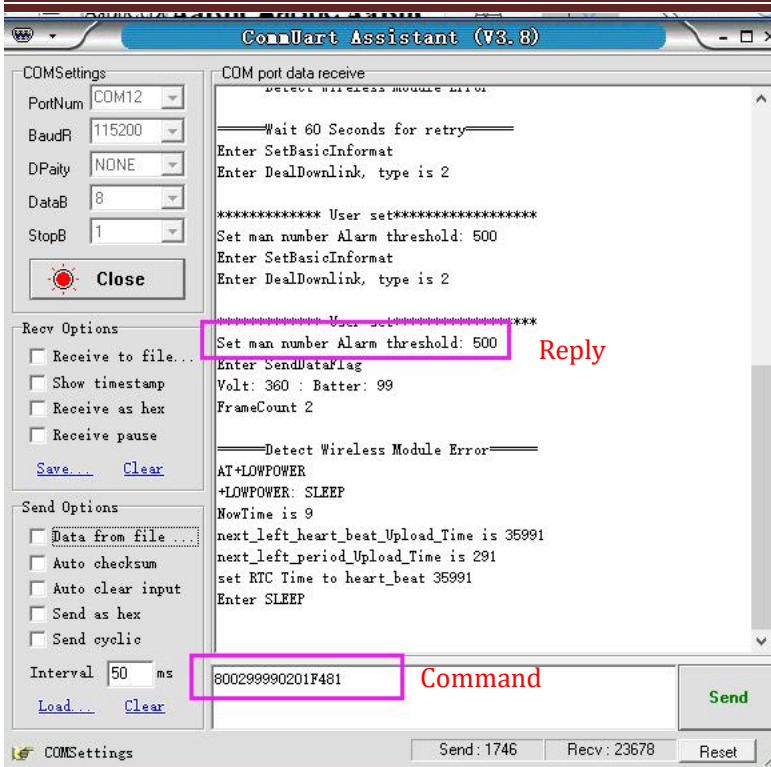
Set man number Alarm threshold: 500

Figure 2.8

Notes:

1 After the device enters the sleep state, the device cannot receive the command; Please restart the device by magnet and send the command again.

2 If the serial port does not output any information after the device is powered on or restarted, and the parameters cannot be configured; you can check whether the TTL is correctly connected to the device. If the RX and TX are connected incorrectly, the parameters cannot be configured.

3 Common Problem

Q1: Do not see any information on the serial port software after connecting the TTL and connecting the device power?

A1:The serial port number selected is incorrect, or it is not the serial port number of the TTL device. You can view the serial port number (COM) of the TTL tool in the device manager of your computer, as shown in the following figure:
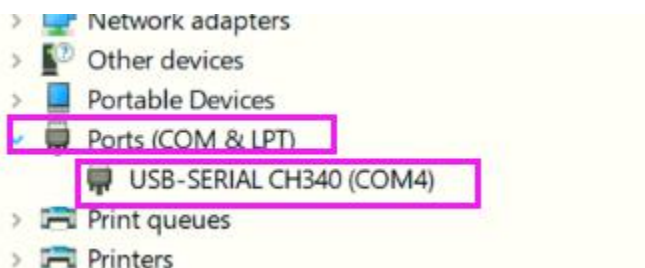
A2: RX and TX are reversed; The TX of the device should be connected to the RX position of the

TTL, and the RX of the device should be connected to the TX bit of the TTL. Please check it carefully.

A3:The device has gone to sleep; you can try to restart the device by magnet and check again if you can see the data.

Q2: Can't receive any reply from sensor after sending the command?

A1:Incorrect command;

Check if the commands are correct according to the protocol document. Note: all characters in the command are in English.

A2:The device has entered the sleep mode;

When the "Enter sleep" character appears in the serial port, as shown in the following figure,it means that the device has entered the sleep mode, therefore the device cannot receive the command. You can restart DC500 sensor, then you try to send the command again.
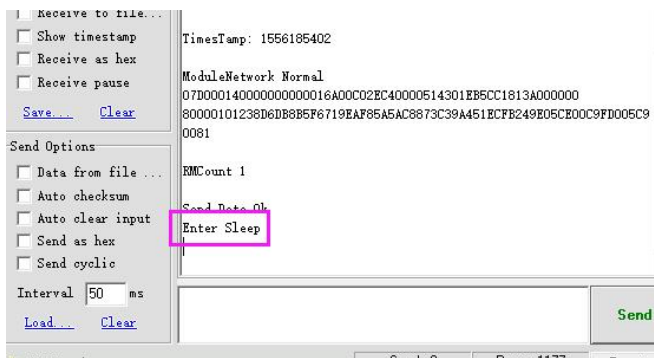
Q3:Can't find the TTL device serial port number (COM)?

A1: don't installed driver;

If you see a yellow exclamation mark at Device Manager -> Port in computer, it means that the driver is not installed. Try to download the CH340 driver and install it.