



Silicon Wireless Systems Pvt Ltd

SWS501 Waste Bin Detector Configuration Manual

NB-IoT & 4G & Multi Tech



V1.3

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Disclaimer

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1. Overview

This document describes how to modify device parameters through the serial port/bluetooth, such as cycle detection time, upload time, full alarm threshold, battery alarm threshold, etc.

2. Modify SWS501 Sensor Parameters

2.2 Connect SWS501 sensor to PC

The methods of connecting to the computer are different for the TTL version and the Bluetooth version. If you purchased the TTL version, please refer to Section 2.2.1. If you purchased the Bluetooth version, please refer to Section 2.2.2.

2.2.1 Connect SWS501 sensor to PC(for TTL version)

Required tools

- TTL and cables
- TTL is a complimentary accessory, please check it when receiving the goods. As shown in Figure 2.1;
- Serial port software, such as Uart Assist software
 - SWS501 sensor

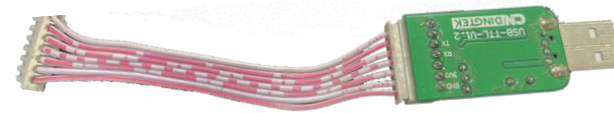


Figure 2.1 TTL tool and cable

Connect the TTL cable to the debug interface of SWS501 sensor

Please refer to Figure 2.2. Note: only need to make GND_SWS501 to GND_TTL when use our TTL tool.

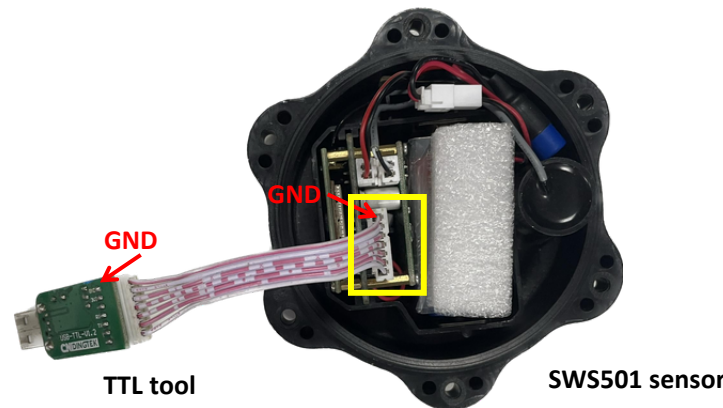


Figure 2.2 Connect the TTL tool to SWS501 sensor

Connect the TTL's USB interface to computer



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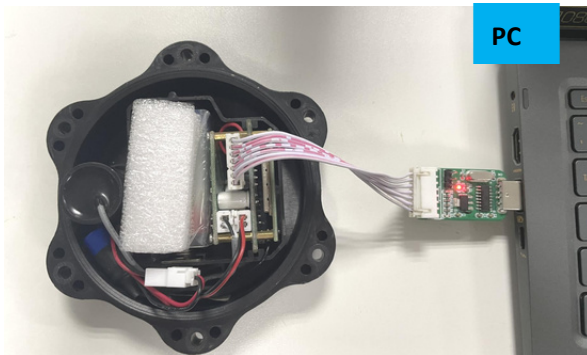


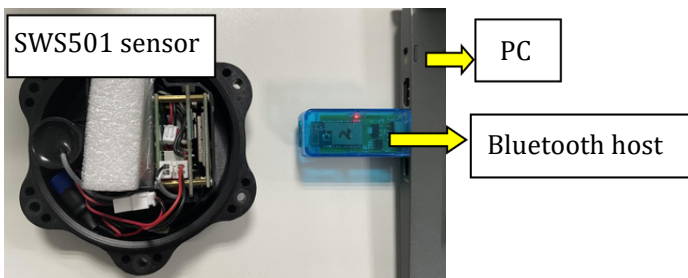
Figure 2.3 Connect the sensor to PC

2.2.2 Connect SWS501 sensor to PC (for BLE version)

Required tools

- Bluetooth host
- Serial port software, such as UartAssist software
- SWS501 sensor

Connect the Bluetooth host interface to computer



The LED status of Bluetooth host: When the Bluetooth host is not connected to the SWS501 sensor, the red light flashes. After the connected to the SWS501 sensor, the red light is always on.

Notes of Bluetooth version:

1 Default bluetooth mode is disabled. So it only can be configured after reset. If enable the bluetooth mode, it will show all the log at cycle upload time, cycle detection time, or when occurs trigger events.

2 If Bluetooth mode is turned on, power consumption will increase. It is recommended to turn off Bluetooth mode on site.

3 Please configure the SWS501 sensor one by one. All devices share one Bluetooth host. If multiple sensors are restarted at the same time, it may not be possible to distinguish which sensor is connected.



2.3 Send the command by the serial software

After connect the sensor to PC according to Section 2.2, you can refer to this to configure the corresponding parameters through the serial port software.

Step 1 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

Stopbit: 1

Note: Do not select the "Receive as hex" option.

As shown in Figure 2.4:

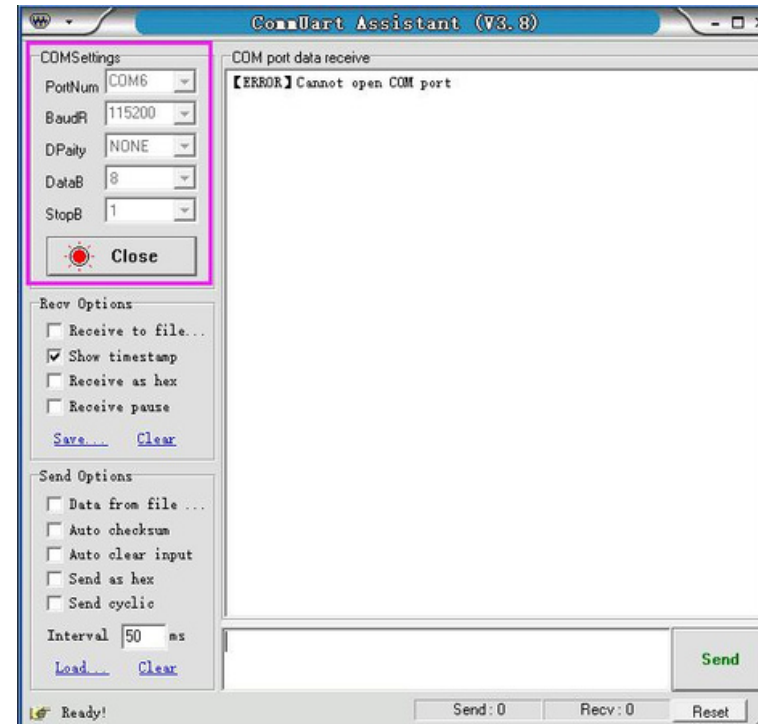


Figure 2.4

Step 2 Power SWS501 sensor on

Connect battery or you can restart SWS501 sensor by magnet if you have powered it on before.



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Step3 Send command

When the serial port starts to output SWS501 sensor's information, you can send command in ASCII. If the configuration is successful, you will receive a reply from the 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 upload time to 10h

Command in ASCII: **80029999010A81**

Reply from sensor: **UPLoadTime: 10 h** (The reply means modify this configuration successfully.)

Notes:

1 After the SWS501 sensor enters the sleep state, it can not receive the command; Please restart the sensor by magnet and send the command again.

2 For the TTL version, If the serial port only can output the information after the sensor is powered on or restarted, but the parameters cannot be configured; Please check whether the TTL cables is correctly connected to the sensor. Or try to turn TTL cable on 180 degree then configure it again.

