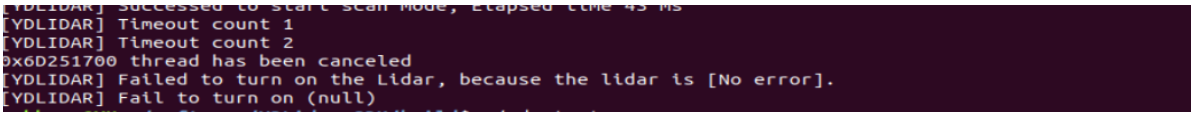
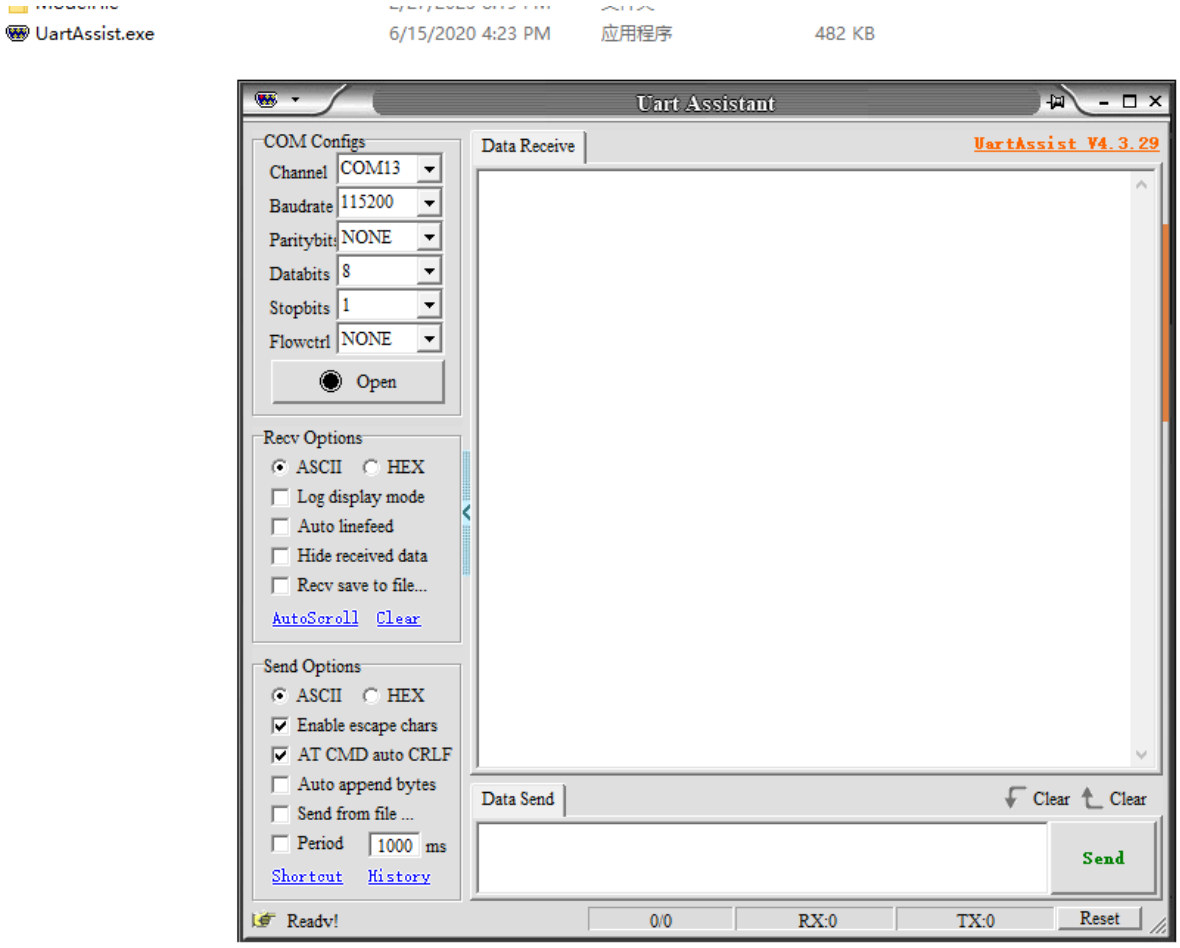
Set data mode

If SDM15 is used in Linux and ros, the connection timeout and TimeOut error may occur because the data mode is not set correctly. Please refer to this section to set the data mode.



1. Connect the module to the Windows computer, double-click to open the * * UartAssist.exe * * upper computer software, select the port and set the baud rate, as shown below.



2. Click "Open Serial Port", select multiple sending commands, and input the following commands in sequence.

```
AA 55 67 01 01 68
AA 55 60 00 5F
AA 55 61 00 60
AA 55 67 01 00 67
```

3. Send the above commands in turn, and the module will receive the sent data in turn. After sending, AA 55 67 01 00 67 appears, indicating that the setting is complete.

```
74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B
4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39
0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30
2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D
3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74
65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D
61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D
0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E
34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A
20 30 2E 34 38 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65
72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61
73 74 65 72 5D 3A 20 30 2E 34 38 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A
5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 35
30 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20
30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 38 0D 0A 5B 4D 61 73 74 65 72
5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73
74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B
4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39
0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 38 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30
2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D
3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74
65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D
61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 38 0D
0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E
34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A 20 30 2E 34 39 0D 0A 5B 4D 61 73 74 65 72 5D 3A
20 30 2E 34 39 0D 0A AA 55 61 00 60 AA 55 67 01 00 67
```

4. According to the previous tutorial, connect the module to linux and run sdm_test program, check whether the setting is successful. After running the program, select the serial port type (after the prompt, select 1, press enter), and the data will indicate success.

```
yahboom@VM:~/software/YDLidar-SDK/build$ ./sdm_test
__   ______  _     ____  _____     _     ____
\ \ / /  _ \| |   |  _ \|_ _\ \   / \   |  _ \
 \ V /| | | | |   | | | || | \ \ / _ \  | |_) |
  | | | |_| | |___| |_| || |  \ V ___ \ |  _ <
  |_| |____/|_____|____/___|  \_/_/   \_\|_| \_\

[0] ydlidar /dev/ttyS9
[1] ydlidar2 /dev/ttyUSB0
Please select the lidar port:1
[YDLIDAR] SDK initializing
[YDLIDAR] SDK has been initialized
[YDLIDAR] SDK Version: 1.1.4
[YDLIDAR] Lidar successfully connected
[YDLIDAR]:Lidar running correctly ! The health status: good
[YDLIDAR] Connection established in [/dev/ttyUSB0][460800]:
Firmware version: 0.9
Hardware version: 0
Model: SDM15
Serial: 2022070400000000
[YDLIDAR] Current scan frequency: 100.00Hz
[YDLIDAR] Lidar init success, Elapsed time 46 ms
[YDLIDAR] Create SDM thread 0x16946700
[YDLIDAR] Successed to start scan mode, Elapsed time 40 ms
[YDLIDAR] Sample Rate: 0.10K
[YDLIDAR] Current Sampling Rate : 0.10K
[YDLIDAR] Now YDLIDAR is scanning ...
0 distance:   69.0 I 78.0
0 distance:   70.0 I 77.0
0 distance:   68.0 I 75.0
0 distance:   68.0 I 77.0
0 distance:   71.0 I 74.0
0 distance:   68.0 I 75.0
0 distance:   68.0 I 77.0
```