
# TZS-MAG-1600-A
# Test Process Instruction

**Zhejiang Tongzhu Technology Co., Ltd.**

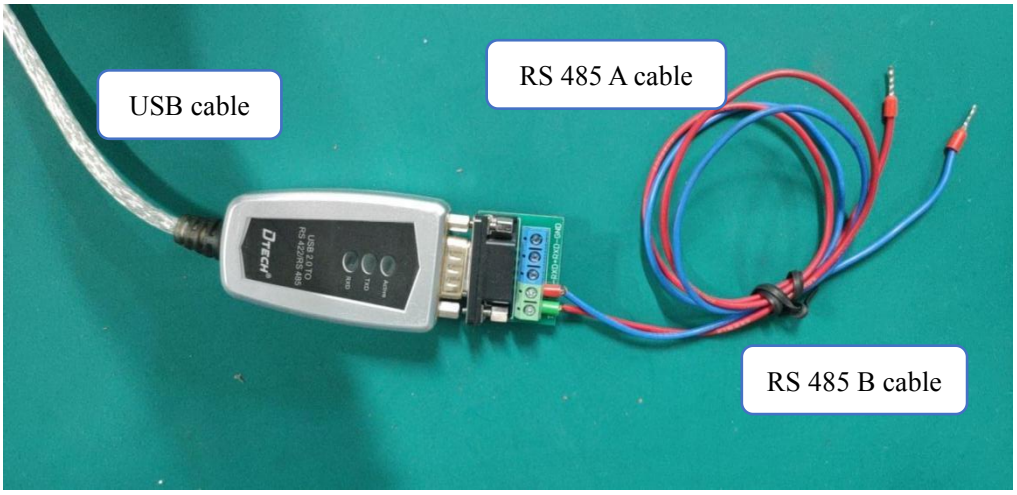
# Catalog

# 1. Debugging Equipment

List of debugging equipment and debugging cables used.

(1) USB-CAN analyzer;


(2) USB-485 communication cable;

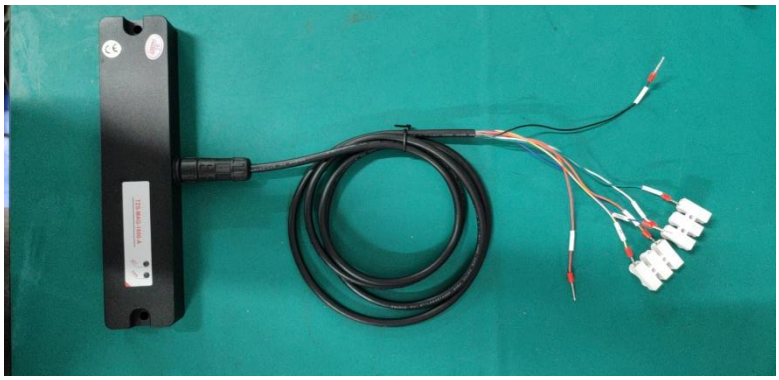



(3) Magnetic stripe;

## 2. Connecting Cables

Use the USB-CAN analyzer and USB-RS 485 communication cable to connect the magnetic navigation to the PC as shown in the figure below.

(1) Connect the magnetic navigation with its own connection cable, and connect the other end to the power supply, usb-can analyzer, and usb communication cable;



(2) The connection at the other end is shown in the figure below;

The red cable (cable marked 24V) is connected to the positive pole of the 24V power supply;

The blue cable (cable marked GND) is connected to the negative pole of the 24V power supply;

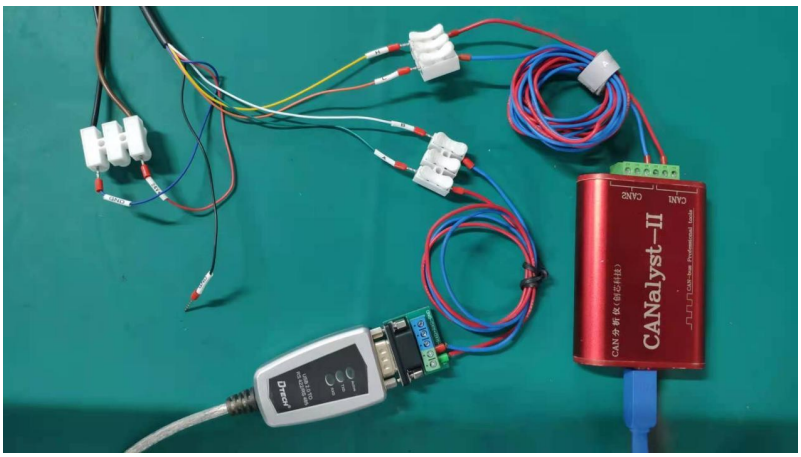
The green cable (cable mark A) is connected to the RS485 A cable;

The white cable (cable mark B) is connected to the RS485 B cable;

The yellow cable (cable mark H) is connected to the CAN H cable;

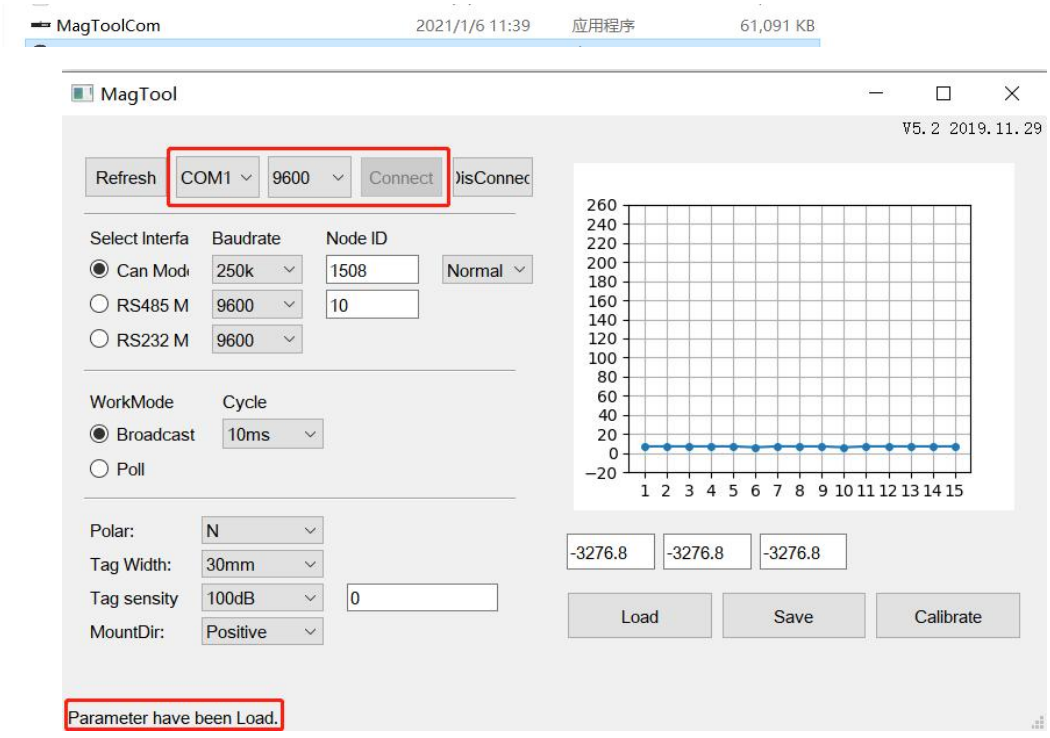
The orange cable (cable mark L) is connected to the CAN L cable;

The usb-can communication device is connected to the pc with the usb end of the usb-RS485 communication cable;

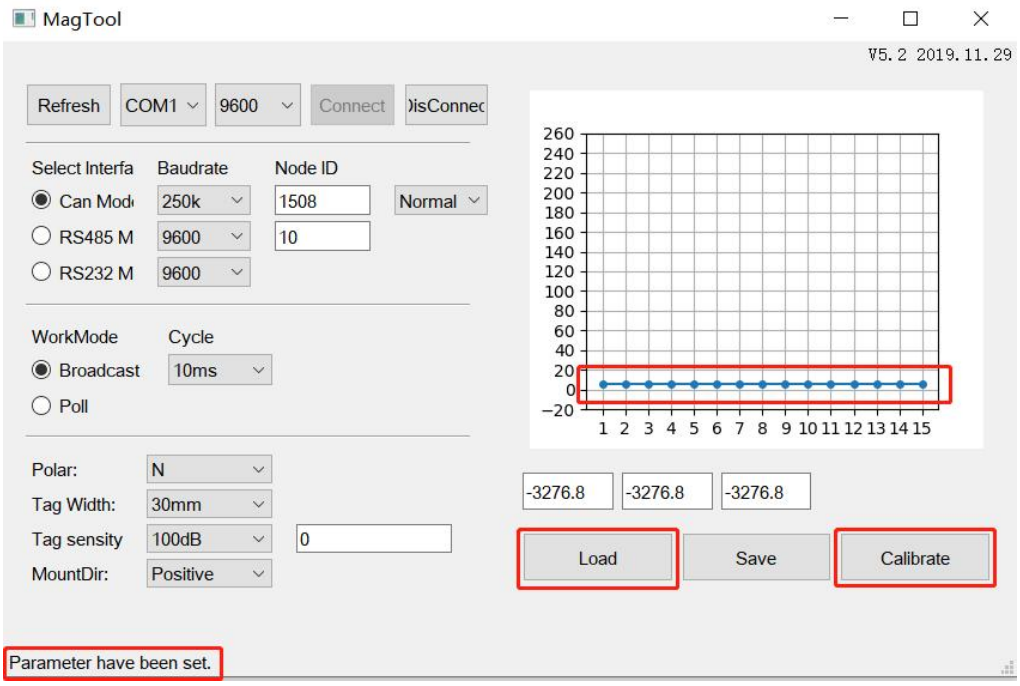


## 3. Reading Function Test

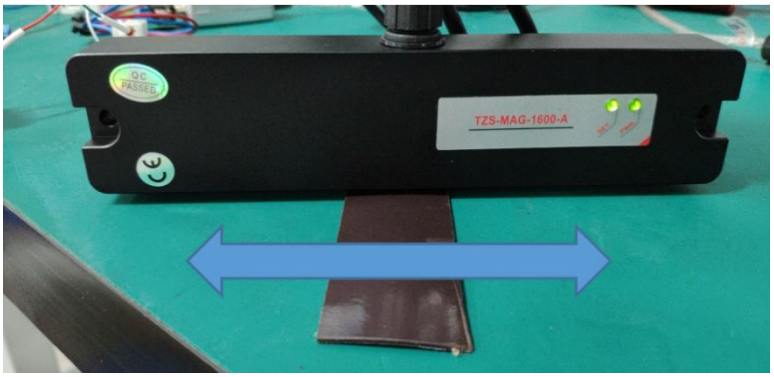
(1) Turn on the 24V power switch, supply power to the magnetic navigation, the magnetic navigation light is on, open the MAG ToolCom software, select the corresponding COM port, select the baud rate as 9600, click Connect to connect, and the display of Parameter have been Load indicates that the connection is successful;

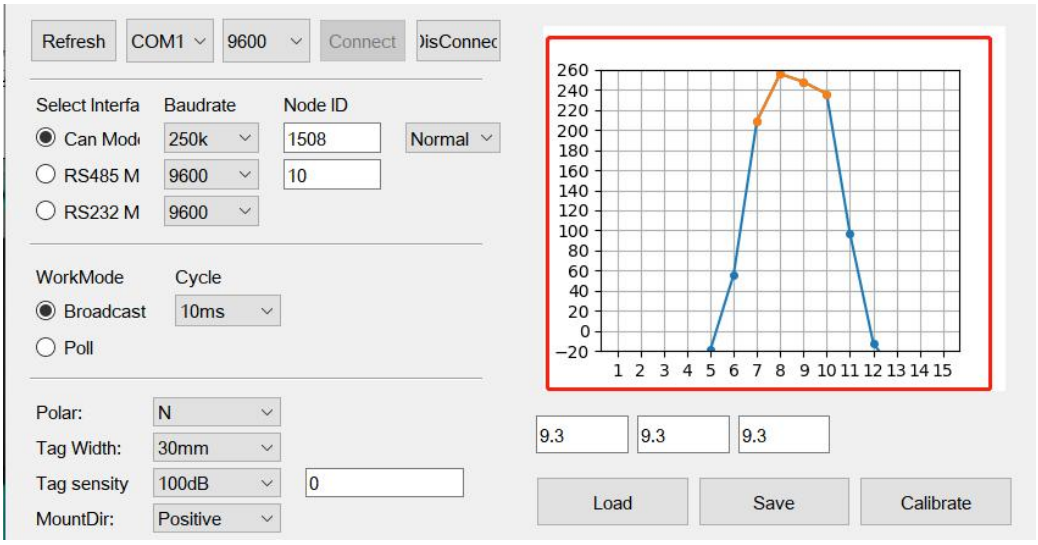




(2) Click Load to read the current magnetic navigation parameters, do not place the magnetic strip first, click Calibrate to calibrate the magnetic navigation, you can see that the blue curve on the right basically becomes a straight cable with the vertical coordinate at 0, and the following shows Parameter have been Set means the calibration is successful.



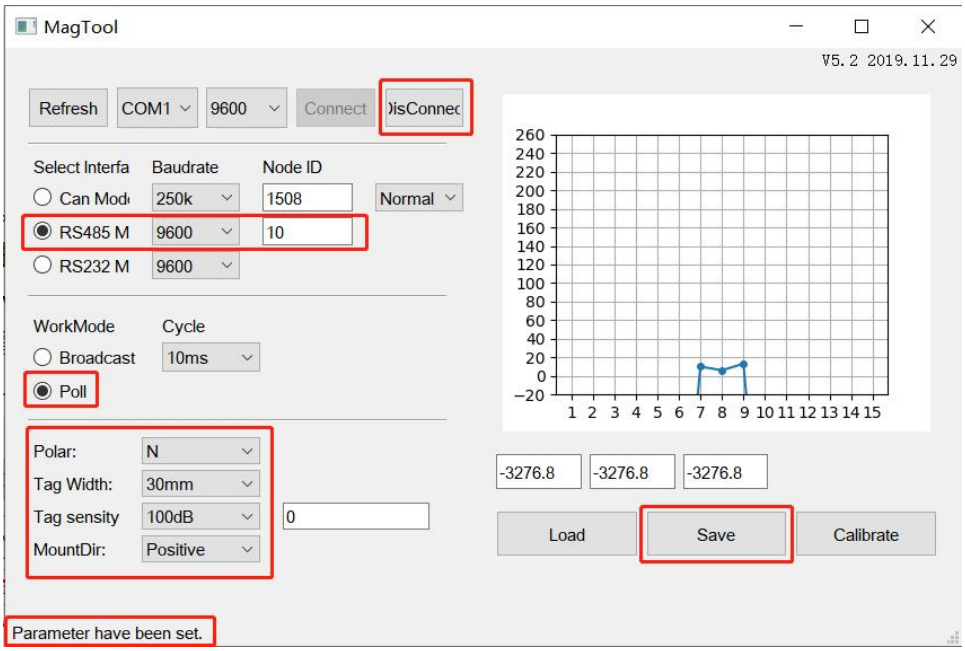

(3) Place the magnetic strip under the magnetic navigation, move the magnetic strip left and right, you can see the curve following the change on the right side of the software, indicating that the magnetic navigation reading function is OK.



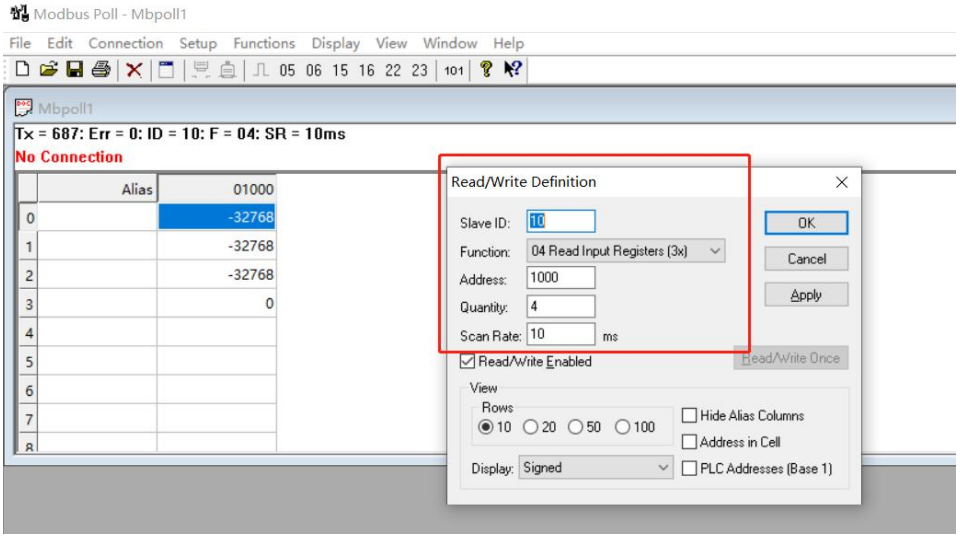
## 4. RS485-Poll Mode Test

(1) Select RS485 Mode for Select Interface, select 9600 for Baudrate, set ID to 10, select Poll for WorkMode, select N for Polar, select 30mm for TagWith, select 100dB for Tag sensitivity, select Positive for MountDir, as shown in the figure below, click Save to save, and Parameter have is displayed below been Set means the setting is successful, click Disconnect to disconnect, and re-power on the magnetic navigation;

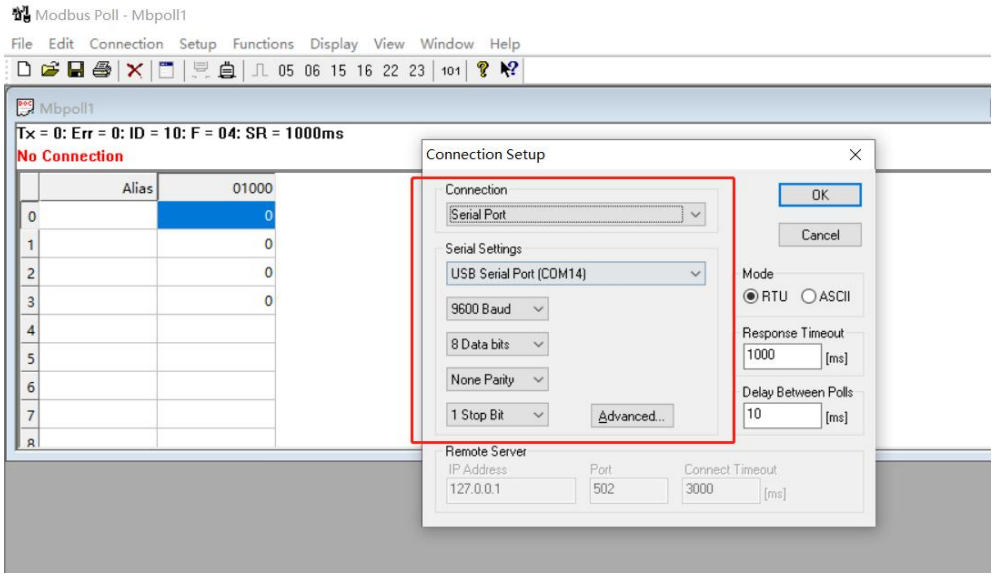



(2) Open the mbpoll software and set it in Setup-Read/Write Definition;

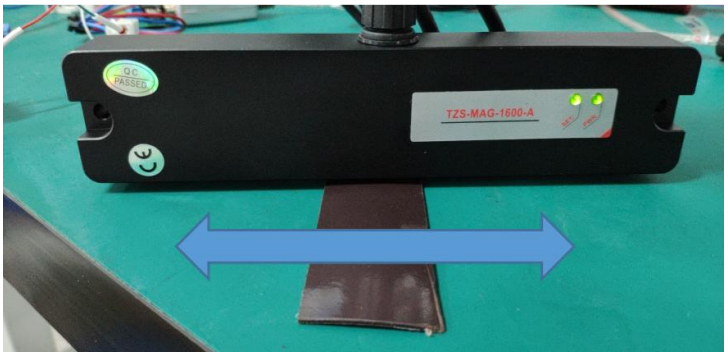
Slave Id: 10, Function: 04, Address: 1000 Quantity: 4, Scan Rate: 10, click Apply after setting, ok;

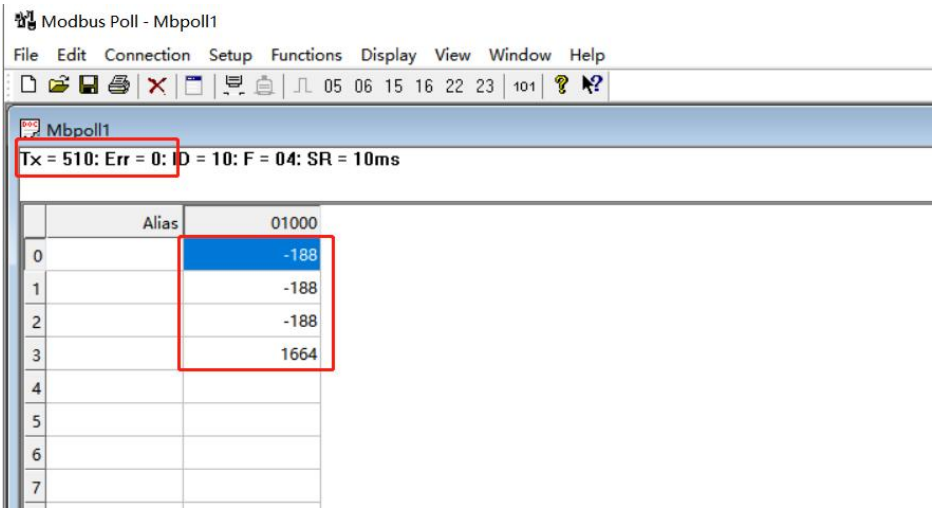


(3) Set in Connection-Connection Setup, select the corresponding serial port, select 9600 Baud, 8 Data bits, None Parity, 1 Stop Bit, and click OK;



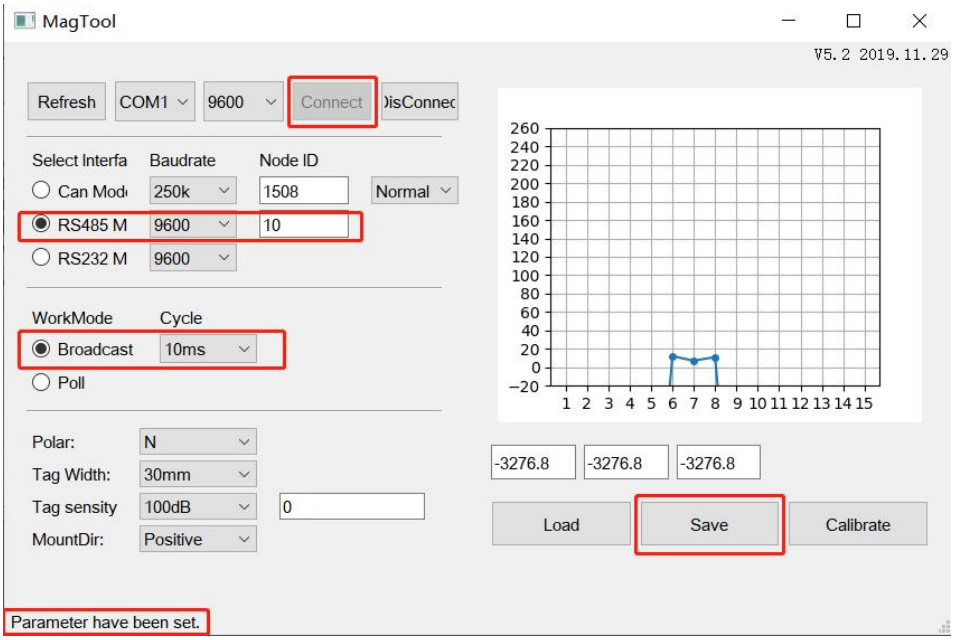

(4) Put the magnetic strip under the magnetic navigation to start the test, Tx starts counting, and Err=0 at the same time, move the magnetic mark left and right to see the data changes in the list, then the test mode is ok, after the test is completed, select Disconnect in Connection to disconnect connect;



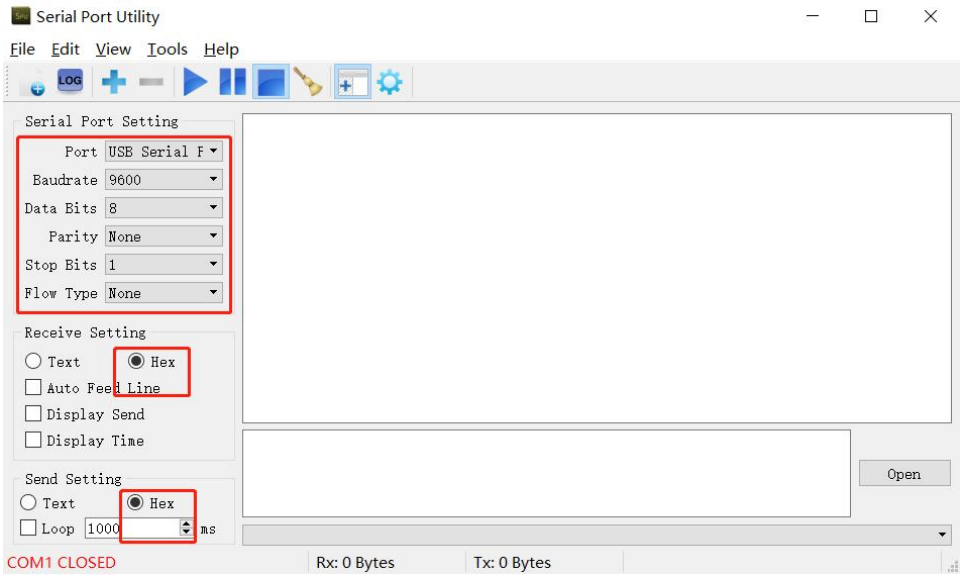



## 5. RS485-Broadcast Mode Test

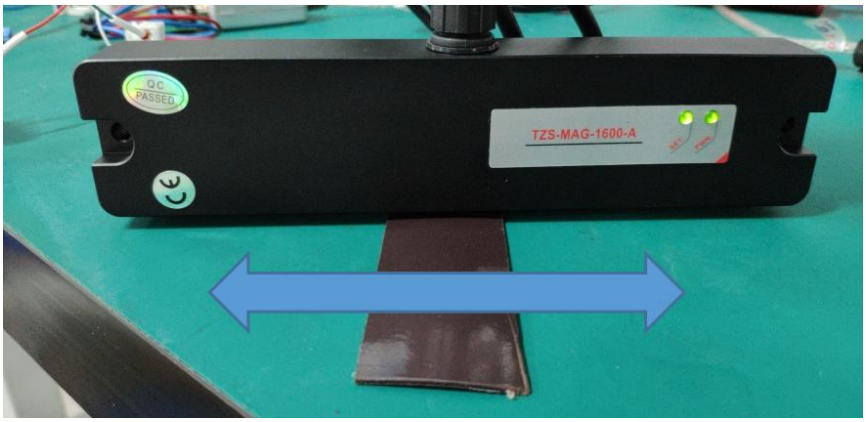
(1) Re-open the MAG Tool software, click connect, select RS485Mode for Select Interface, select 9600 for Broadrate, select 10 for ID, select Broadcast for WorkMode, select 10ms for Cycle, click Save, and the display of Parameter have been Set indicates that the setting is successful, click Disconnect to disconnect Connect and re-power on the magnetic navigation;

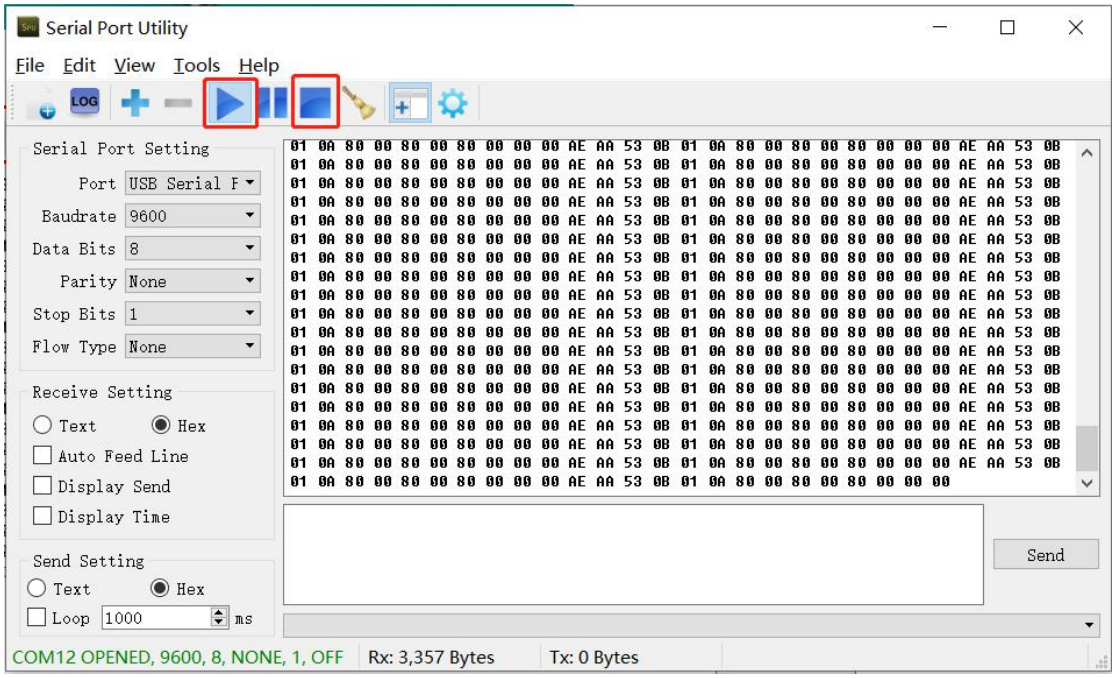



(2) Open the Serial Port Utility software, select 9600 for Baudrate, select 8 for Data Bits, select None for Parity, select 1 for Stop bits, check Hex in Receive Setting, and check Hex in Send Setting.



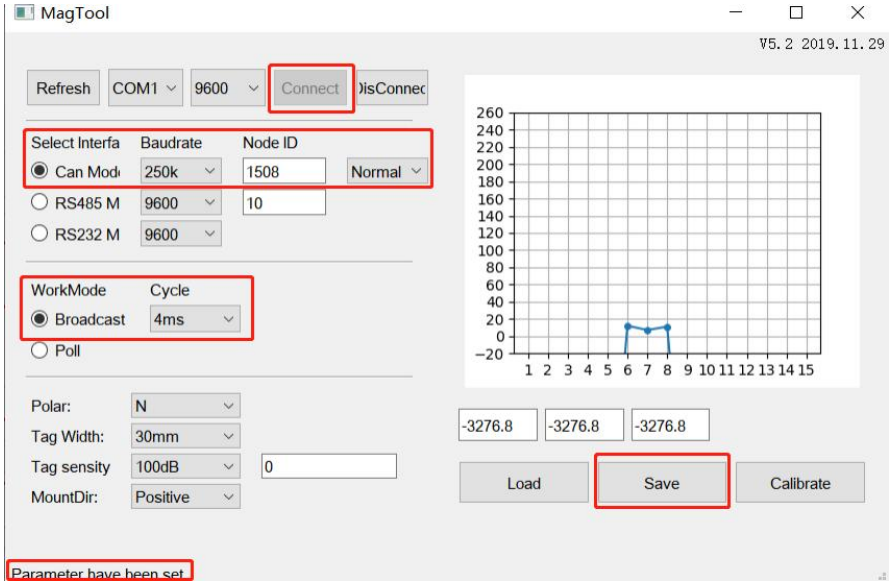
Click Start to open the serial port, place the magnetic strip under the magnetic navigation and move left and right, and the data can be seen in the receiving area, then this mode is ok, and after the test, click Stop to close the serial port;



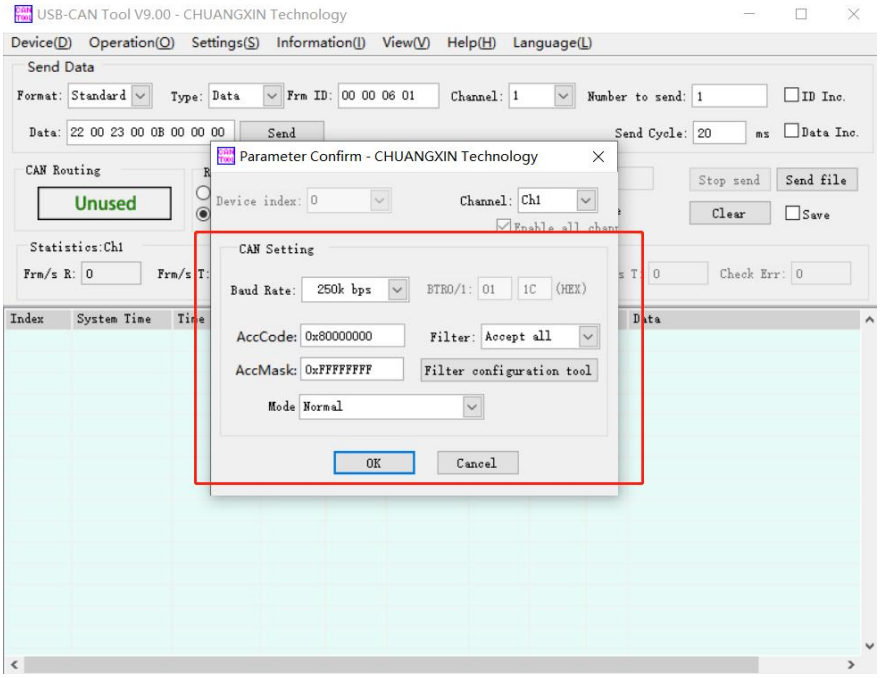



## 6. Can Communication Test

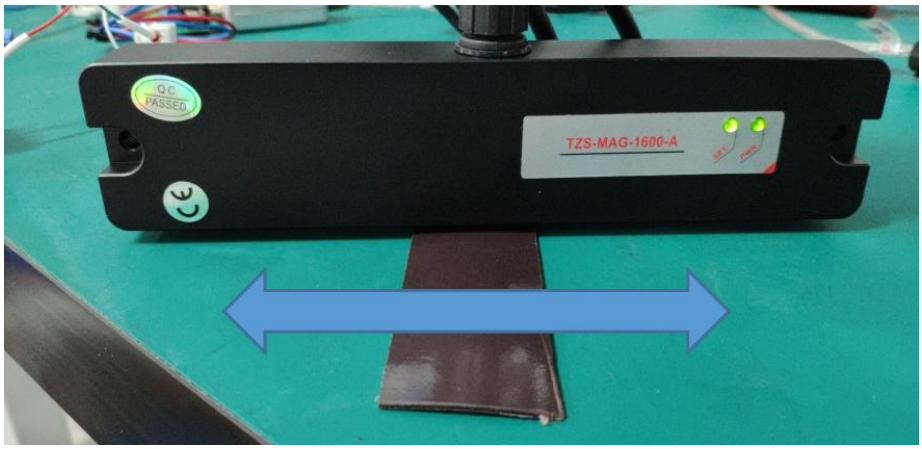
(1) Open MAG Tool, click Connect, select Can Mode for Select Interface, select 250k for Baudrate, select 1508 for ID, select Normal, select Broadcast for WorkMode, select 4ms for Cycle, click Save to save, and display Parameter have been Set to indicate that the setting is successful, click DisConnect is disconnected, and the magnetic navigation is powered on again.

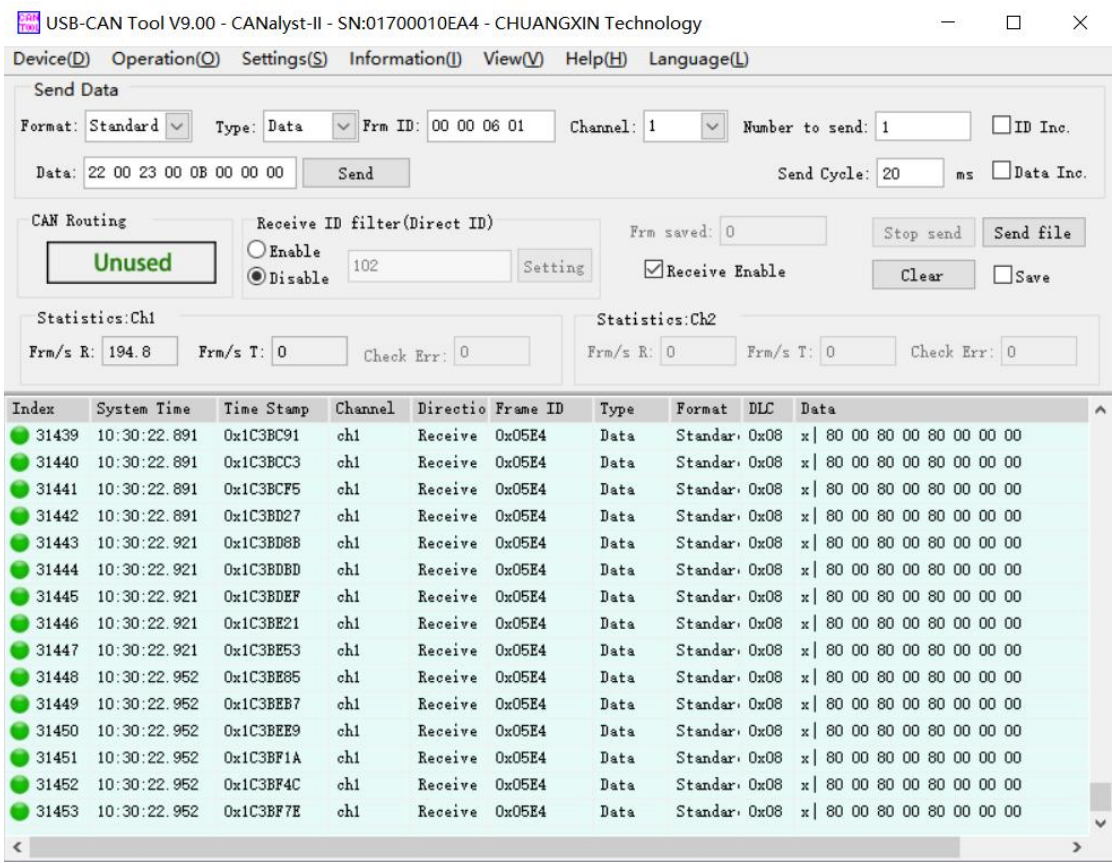



(2) Open the USB CAN TOOL software, click operation-start, set the Baud Rate to 250k, click OK after setting, and prompt USB-CAN Device start! Then open successfully.



After turning on the device, place the magnetic strip under the magnetic navigation and move it left and right, and the received data can be viewed on the PC, indicating that the function test is OK.




After the test is completed, click Stop in the operation to disconnect, and the test is completed;