



# Module LWNV7

## 测试说明

### Test introduction

## 一、测试设备 Test equipment

硬件：电脑 1 台、USB 转 TTL 模块、可输出 3.3V 标准电源 1 台、测距模块 1 个，  
软件：V2.40 上位机软件

Hardware: Computer, USB to TTL module, 3.3V standard power supply, ranging module,

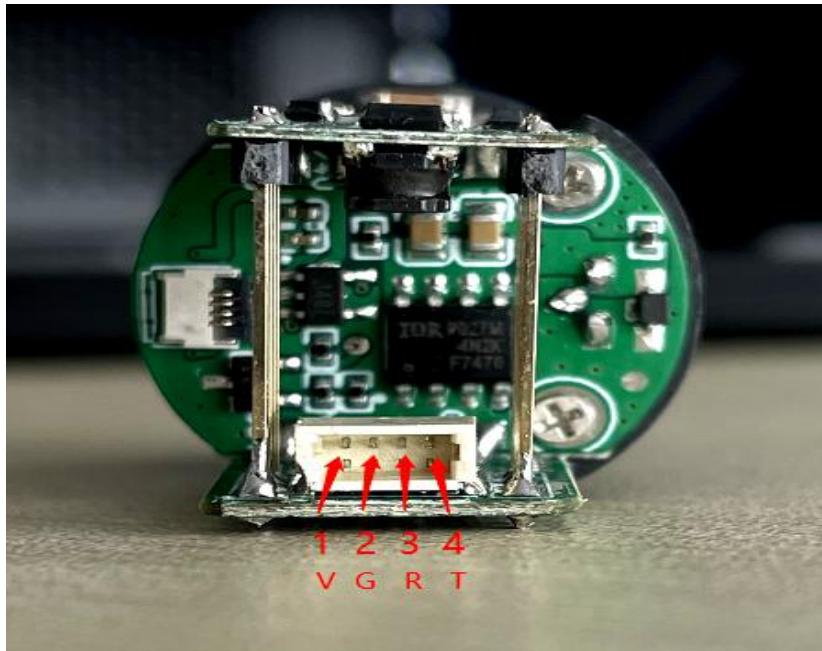
Software: V2.40 computer software

## 二、设备连线 Equipment connection

接口类型为 GD125-04，接口电平为 TTL,线缆颜色符合如下定义：

The interface type is GD125-04, the interface level is TTL, and the cable color conforms to the following definition:

序号 No	颜色 Color	性能 Performance	备注 Remark
1	红色 Red	电源正极 Power positive	V
2	黑色 Black	电源负极 Power negative	G
3	绿色 Green	内部接收数据 RX Internal receive data RX	R
4	黄色 Yellow	内部发送数据 TX Internal transmission data TX	T



因本产品瞬时电流较大（最大 1A），USB 本身供电能力不足，因此需要外界 3.3V 标准电源作为模块的供电。

具体接线：

将模块黑色线（GND）、USB 转 TTL 模块的 GND 端和 3.3V 标准电源的负极端连接在一起（供地）

将设备的绿色线与 USB 转 TTL 模块的“TX”端连接在一起

将设备的黄色线与 USB 转 TTL 模块的“RX”端连接在一起

将设备的红色线与 3.3V 标准电源的正极端连接在一起

设备连接完毕，此时打开 3.3V 标准电源（电压输出保证为 3.3V），电流应该为 30-45mA 左右

Due to the large instantaneous electric current of this product (maximum 1A), the USB itself with insufficient power supply capability, so an external 3.3V standard power supply is required as the power supply for the module.

#### **Specific wiring:**

Connect the **black wire (GND)** of the USB to TTL module, the **GND terminal** of the module and the **negative terminal** of the 3.3V standard power supply together.

Connect the **green wire** of the device to the **"TX"** end of the USB to TTL module;

Connect the **yellow wire** of the device to the **"RX"** end of the USB to TTL module;

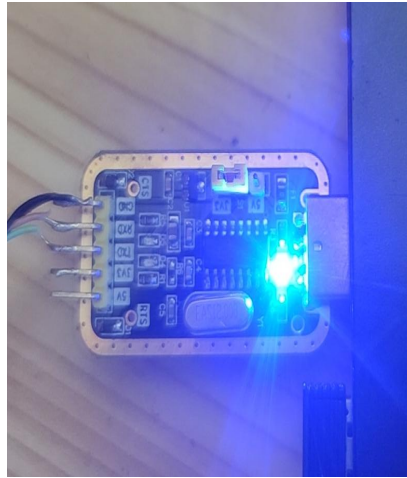
Connect the **red wire** of the device to the **positive terminal** of the 3.3V standard power supply.

After the device is connected, turn on the 3.3V standard power supply (voltage output is guaranteed to be 3.3V), and the current should be about 30-45mA.

### 三、设备测试 Equipment test

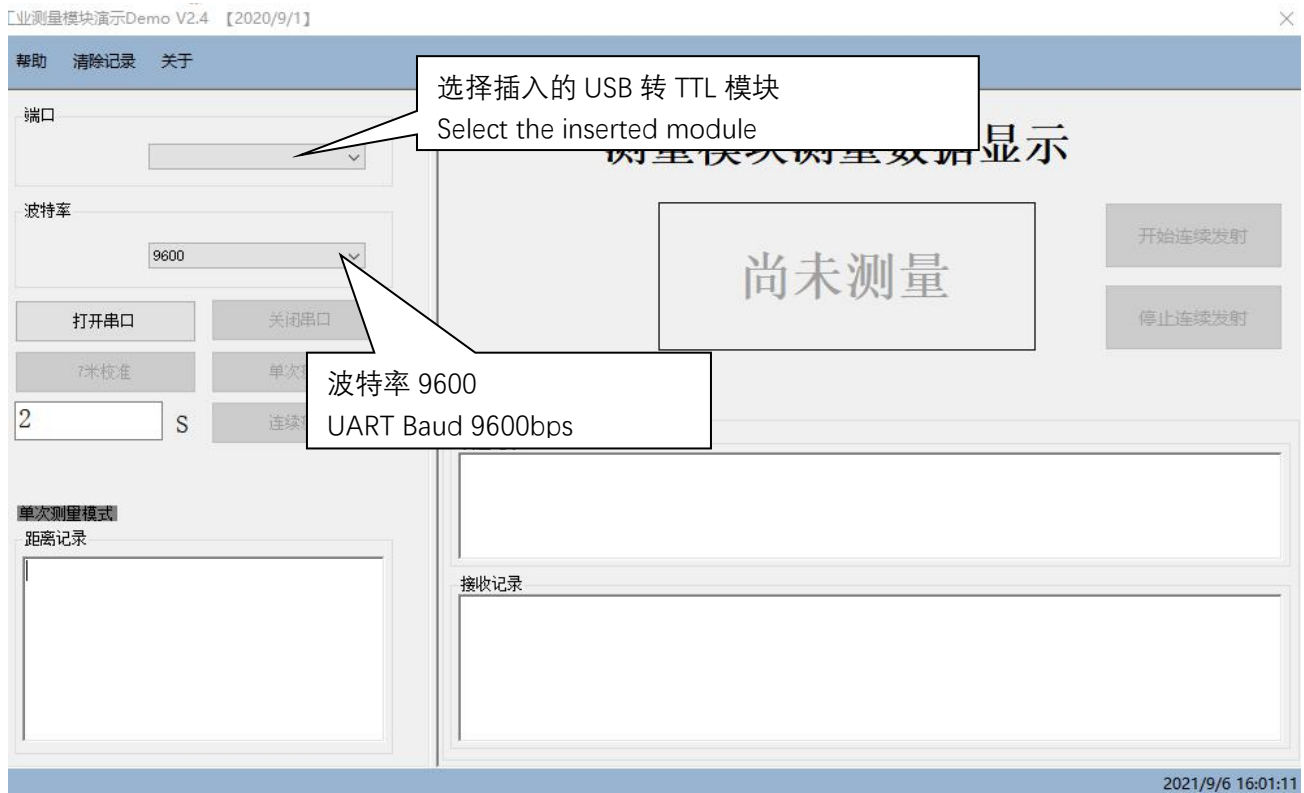
1、将 USB 转 TTL 模块插入电脑，如下图

Insert the module into the computer, as shown below



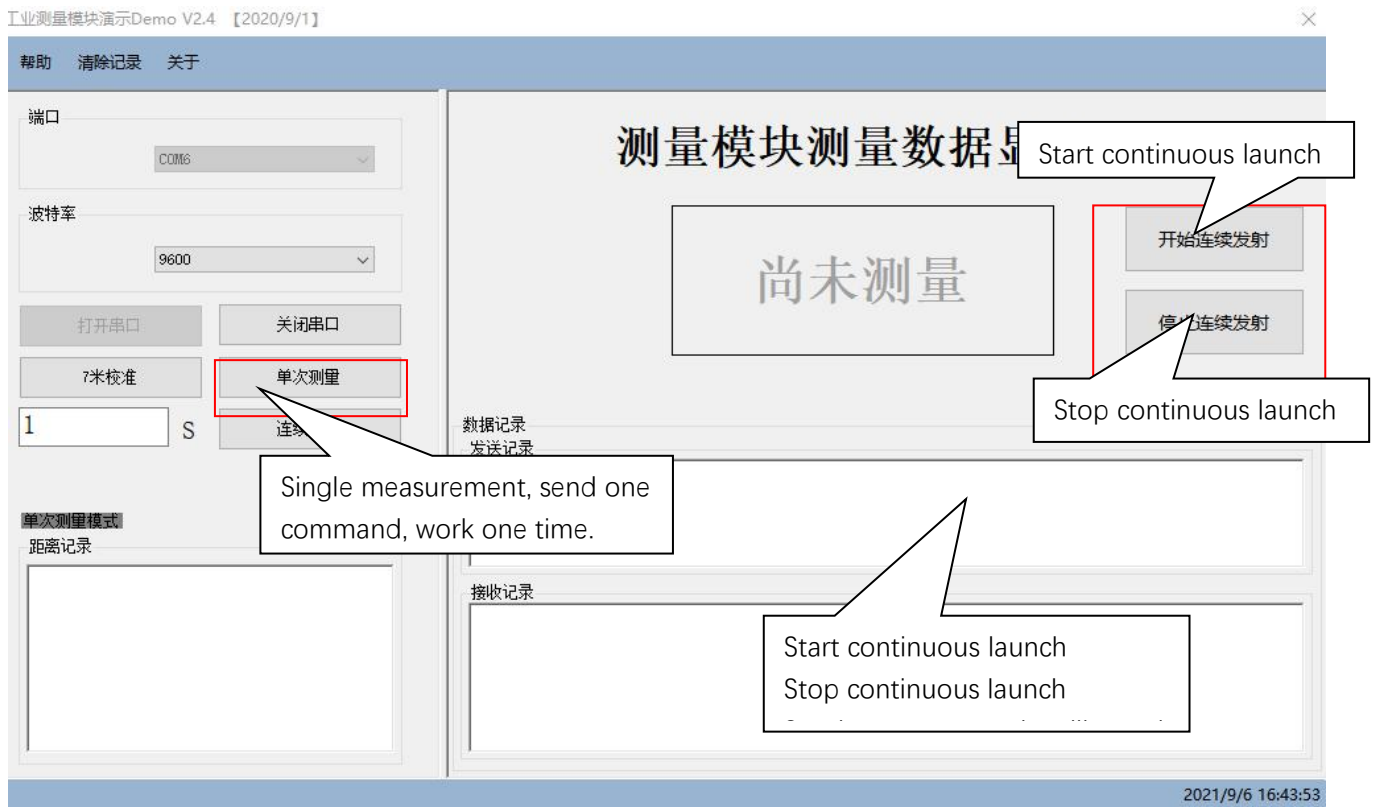
2、打开 V2.40 上位机软件，打开后如下图：

Open the Software V2.40, as shown below:



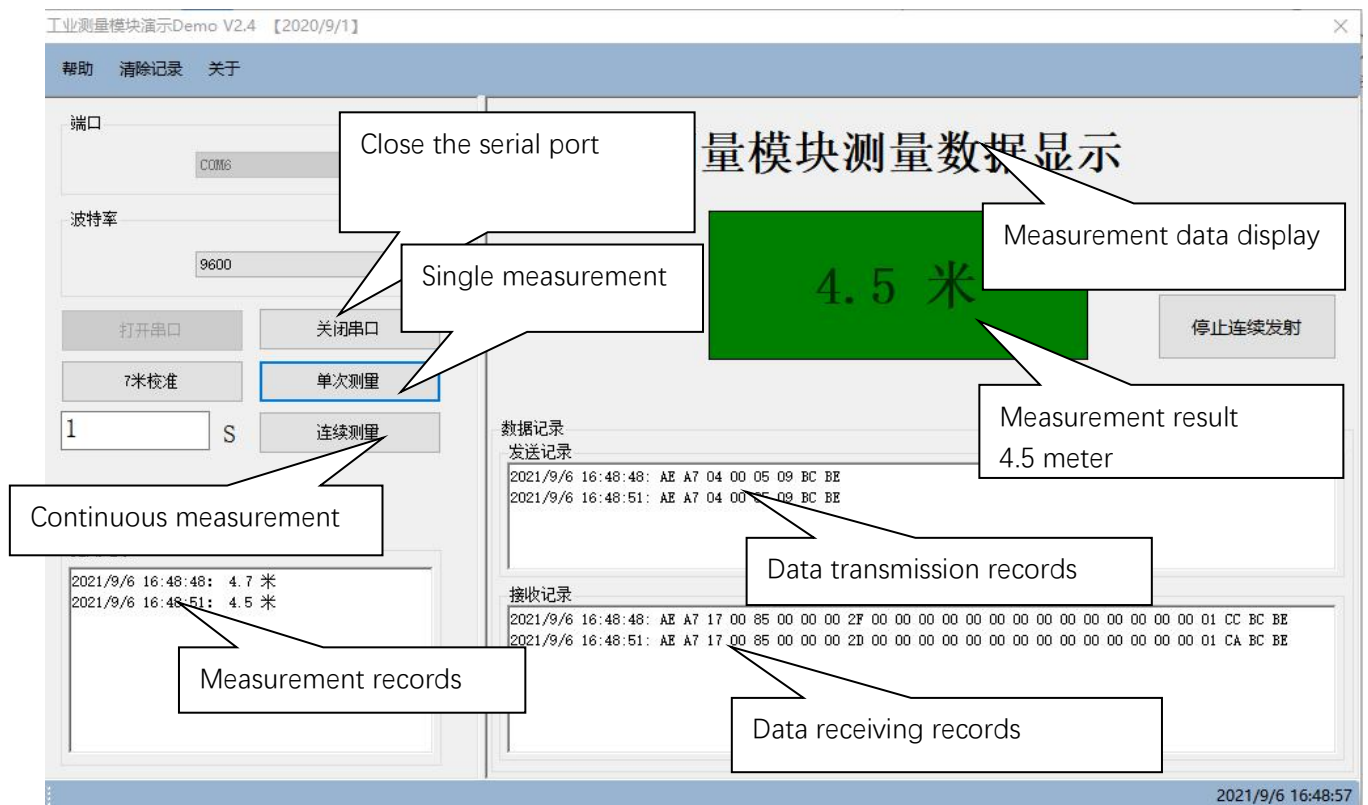
选择端口：选择刚插入的串口端口与般若率，然后打开下串口如下图：

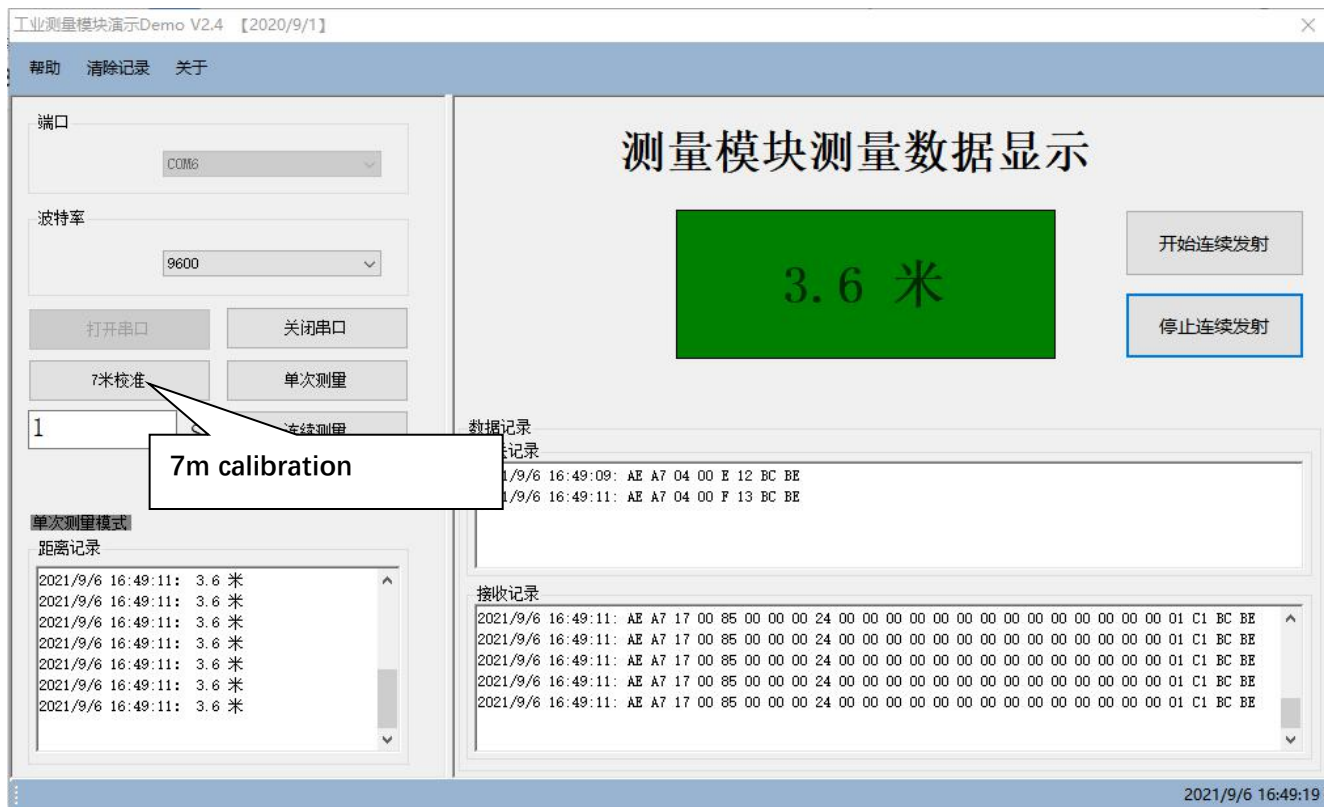
Select port: select the serial port and Prajna rate just inserted, and then open the serial port as shown in the figure below:



工作如下图:

Work as follows:





其中“7米校准”功能，需要找一个7米的测量物，设备对准测量物，单击此功能，校准完毕。

（设备出厂时已经进行了校准，如果操作失误或因为其他因素需要进行校准，请使用此功能）

For the "7m calibration" function, need to find a 7m measuring object, aim the device at the measuring object, click this function, and the calibration is completed.

（The device has already been calibrated before shipping. If there is any mistake in operation or have other problems that need to be calibrated, please use this function.）



上图中，红框内的白光，是通过普雷德夜视仪观测出、设备发出的光斑，此光斑指示的位置为测量位置。

如果需要将本设备嵌入到其他系统中，需要注意本设备的光斑与其嵌入系统的靶心位置相同，否则测距不准。

In the above figure, the white light in the red frame is the light spot emitted by the Module observed by Night Vision , and the position indicated by this light spot is the measurement position.

Please make sure that the light spot of Module and its embedded system's bullseye are in the same position if need to embed the Module into other systems, otherwise the distance measurement will be inaccurate.