

iMeter Installation Instruction

网络电量表接线说明

60安培电量模块

By Muggle

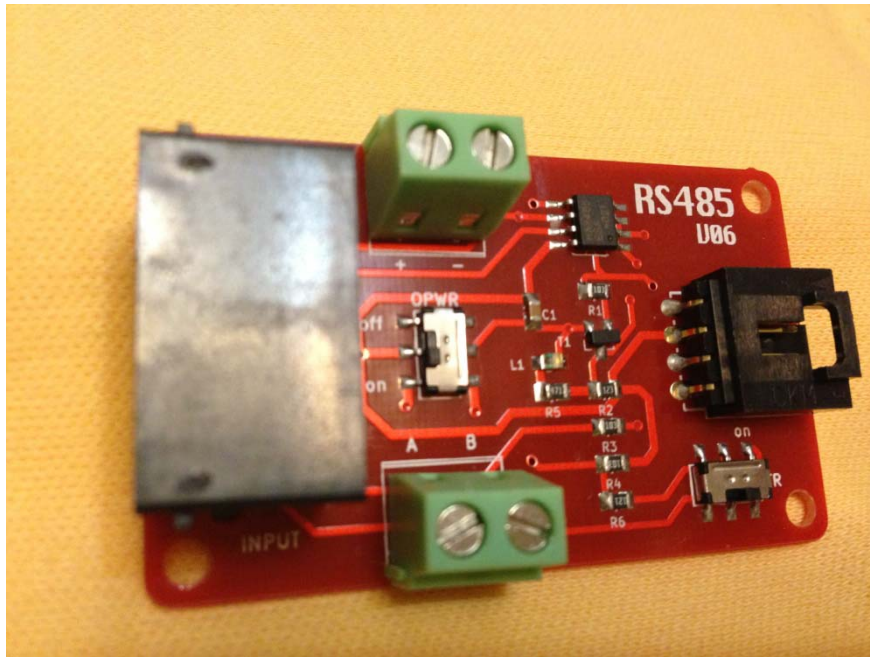
# 注意事项



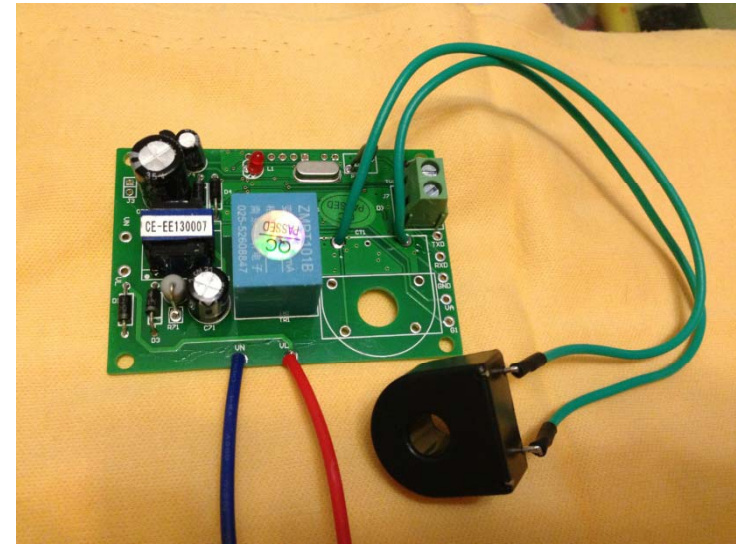
当心触电



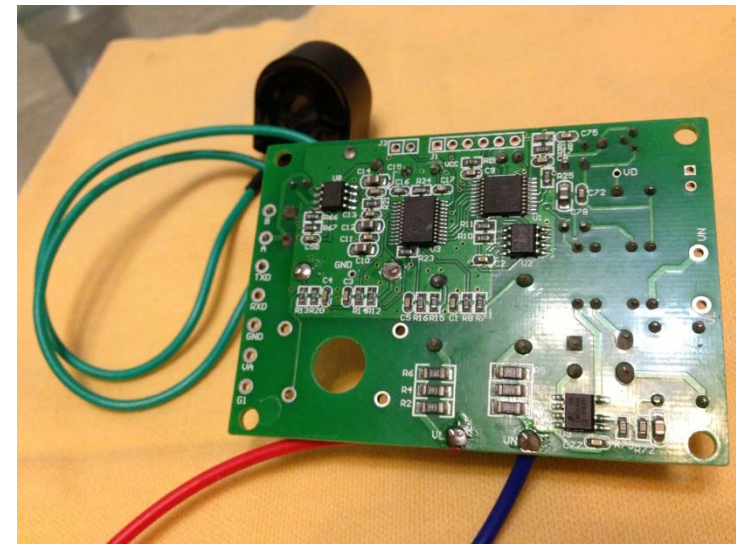
# Modules



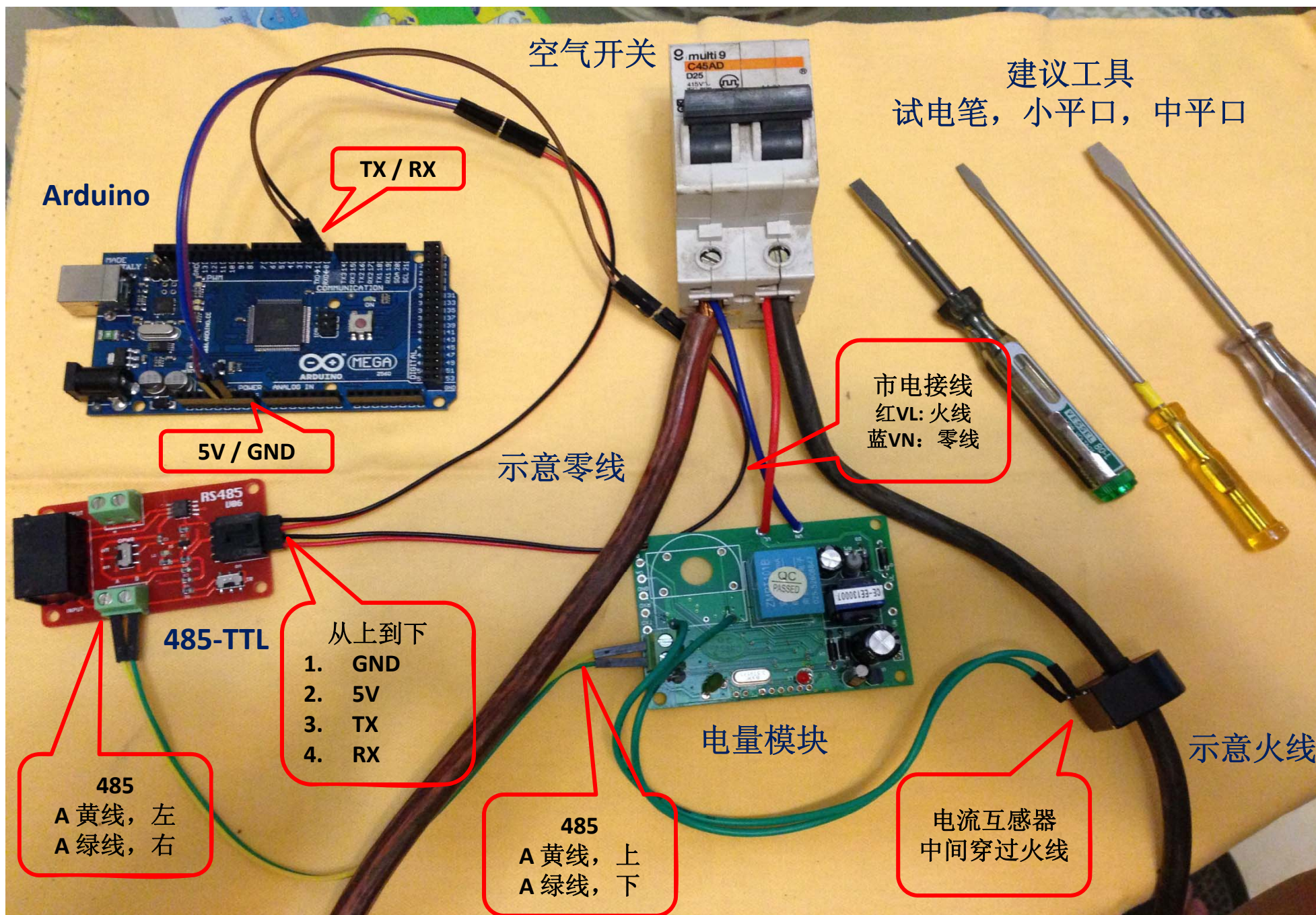
485-TTL



60安培电量模块







空气开关

建议工具  
试电笔, 小平口, 中平口

Arduino

TX / RX

5V / GND

示意零线

市电接线  
红VL: 火线  
蓝VN: 零线

485-TTL

从上到下

1. GND
2. 5V
3. TX
4. RX

485

A 黄线, 左  
A 绿线, 右

电量模块

485

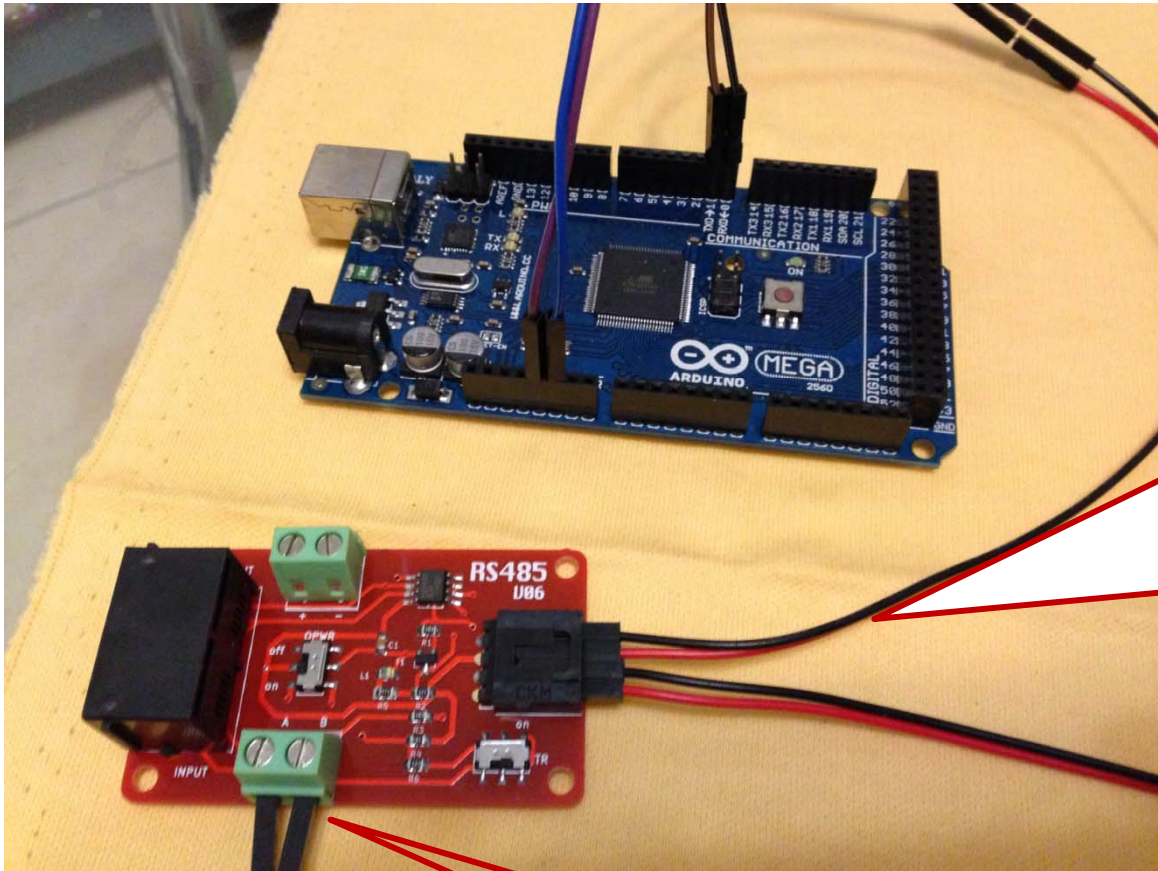
A 黄线, 上  
A 绿线, 下

电流互感器  
中间穿过火线

示意火线



# Arduino & 485-TTL

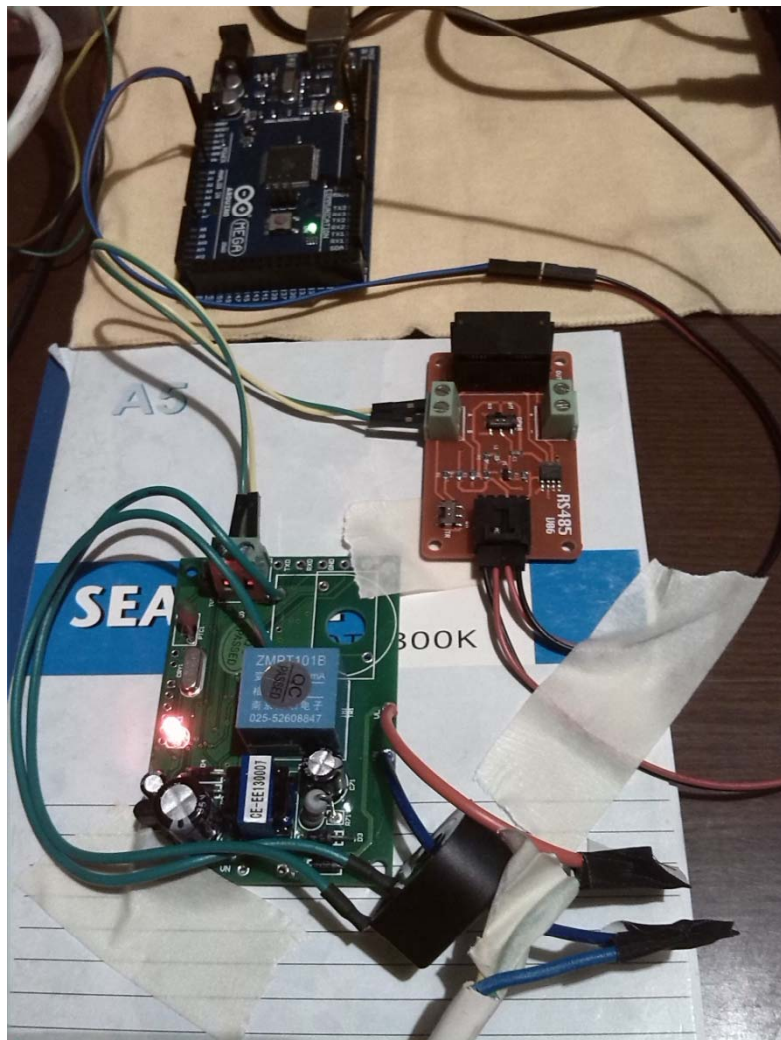


4P 杜邦插头  
从上至下

1. GND
2. 5V
3. TX
4. RX

485  
A 黄线, 左侧  
B 绿线, 右侧

# 60安培电量模块测试接法



## 接线顺序

- 1. Arduino => 485-TTL (5v / GND / TX / RX)
- 485-TTL => 电量模块 485 接线
- 电量模块接线上电，模块红灯点亮，正常状态

# 电量模块独立测试程序

## 注意事项

- 模块断电后烧入程序
- TX/RX，拔掉一根，才能写入程序，不然串口冲突
- 重新上电，观察串口监视器返回数据

The screenshot displays the Arduino IDE environment. The main window shows a sketch named "Lewei\_AcMeter\_485tester\_20130712" with the following code:

```
// LeWei AC Power Meter Module test program 2013.07.12
// Change log:
// 2013.07.12  v1 release

/* FIXME: not yet being used */
unsigned long interframe_delay = 2; /* Modbus t3.5 = 2 ms */

/*
 * preset_multiple_registers: Modbus function 16. Write the data from an
 * array into the holding registers of a slave.
 * INPUTS
 * slave: modbus slave id number
 * start_addr: address of the slave's first register (+1)
 * reg_count: number of consecutive registers to preset
 * data: array of words (ints) with the data to write into the slave
 * RETURNS: the number of bytes received as response on success, or
 *          0 if no bytes received (i.e. response timeout)
 *          -1 to -4 (modbus exception code)
 */
```

The bottom status bar indicates "Arduino Mega 2560 or Mega ADK on COM20". The right sidebar shows the Serial Monitor with the following output:

```
Watt: 0
Kwh: 0.01
Pf: 0.00
Cabon: 0.00
H Eb
Voltage: 224
Amp: 0.00
Watt: 0
Kwh: 0.01
Pf: 0.00
Cabon: 0.00
H Eb
Voltage: 224
Amp: 0.00
Watt: 0
Kwh: 0.01
Pf: 0.00
Cabon: 0.00
H Eb
Voltage: 224
Amp: 0.00
Watt: 0
Kwh: 0.01
Pf: 0.00
Cabon: 0.00
```

The Serial Monitor settings at the bottom right are: Autoscroll checked, No line ending, and 4800 baud.

# 电量模块安装和数据上传



Q & A