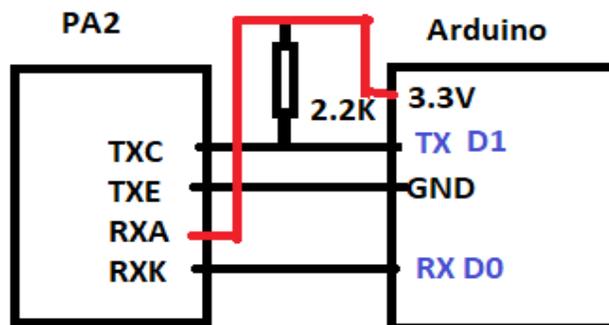


## SENDING COMMANDS FOR POWER ANALYZER 2 STEP BY STEP USING ARDUINO

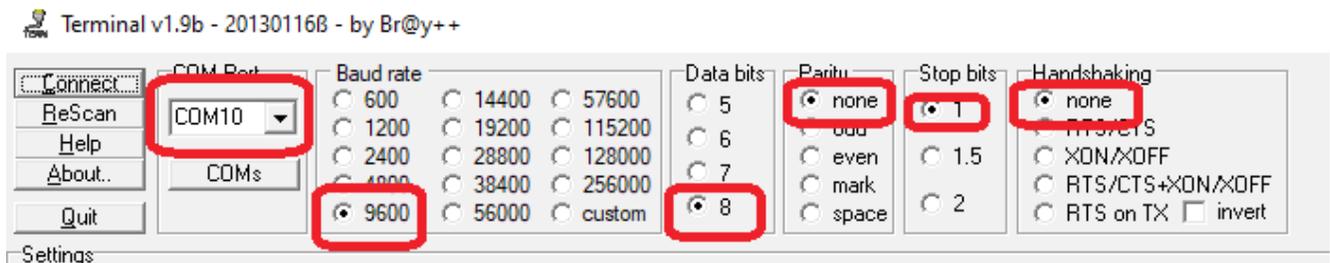
1. Upload the this code.

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }
```

2. Construct the wiring Diagram using Arduino UNO as UART.



3. Open Terminal 1.9b. Rescan and choose the right comport (make sure the arduino is connected to PC via USB). Set the baudrate, data bits, patiry,sto bits, handshaking.



4 After you set the terminal. Click Connect.  
There should be a display like on the picture below. (Readable Formart - M1)

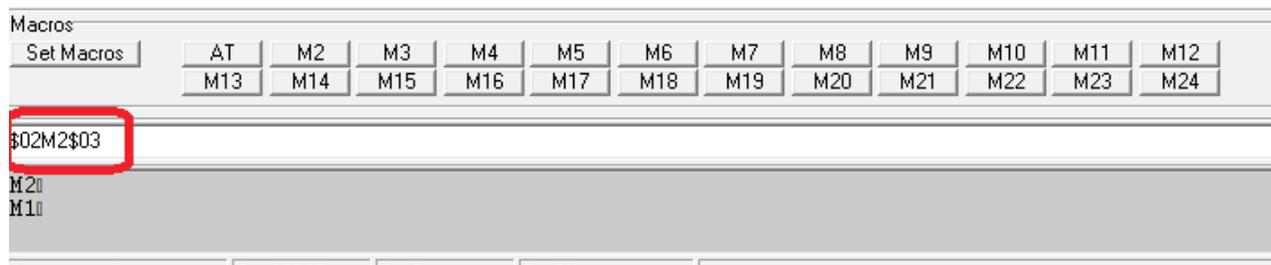
Terminal v1.9b - 20130116B - by Br@y++

The screenshot shows a terminal window with the following sections:

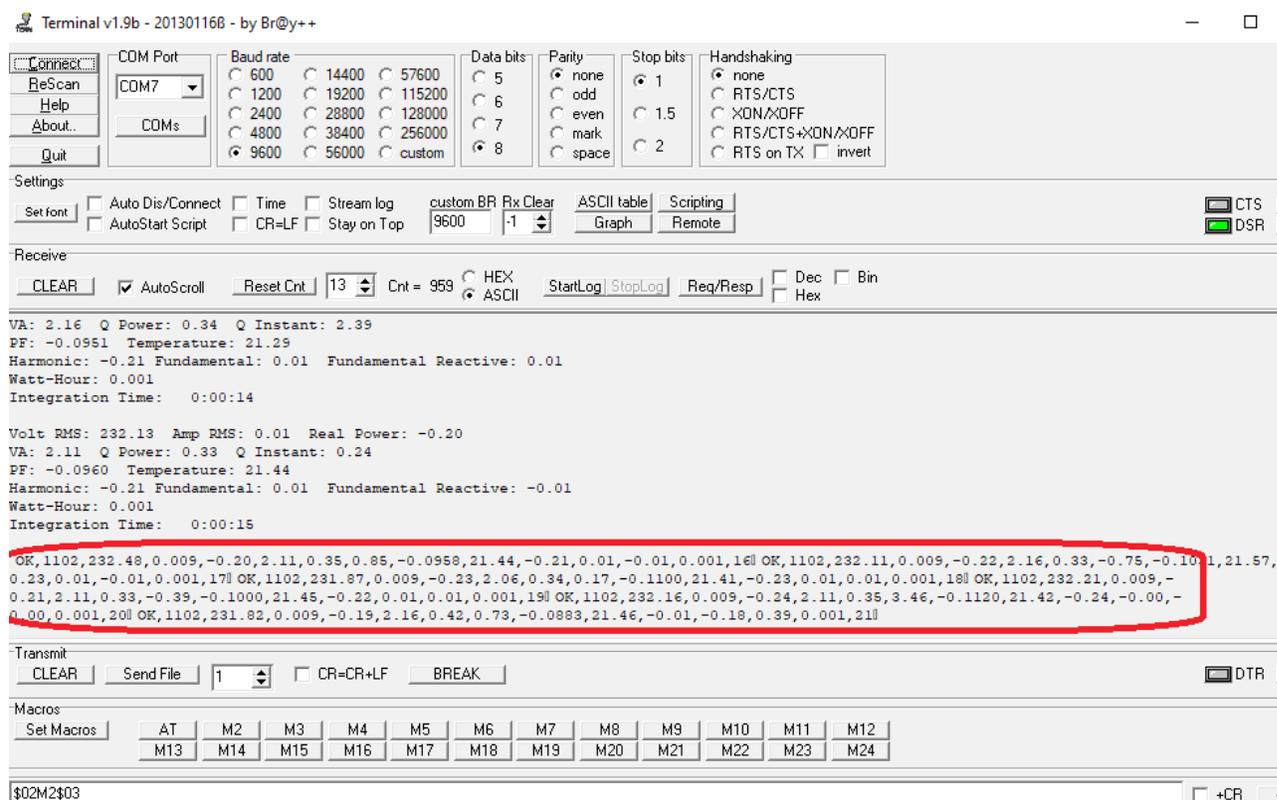
- Connect:** Buttons for Connect, ReScan, Help, About.., and Quit.
- COM Port:** A dropdown menu set to COM10 and a COMs button.
- Baud rate:** Radio buttons for 600, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 56000, 57600, 115200, 128000, 256000, and custom.
- Data bits:** Radio buttons for 5, 6, 7, and 8.
- Parity:** Radio buttons for none, odd, even, mark, and space.
- Stop bits:** Radio buttons for 1, 1.5, and 2.
- Handshaking:** Radio buttons for none, RTS/CTS, XON/XOFF, and RTS/CTS+XON/XOFF, with an invert checkbox.
- Settings:** Checkboxes for Auto Dis/Connect, Time, Stream log, AutoStart Script, CR=LF, and Stay on Top. Includes fields for custom BR (9600) and Rx Clear (-1), and buttons for ASCII table, Scripting, Graph, and Remote.
- Receive:** Buttons for CLEAR, AutoScroll (checked), Reset Cnt (13), Cnt = 917, HEX, ASCII, StartLog, StopLog, Req/Resp, Dec, Bin, and Hex.
- Transmit:** Buttons for CLEAR, Send File, a dropdown menu (1), CR=CR+LF, and BREAK.
- Macros:** A grid of buttons for AT, M2 through M24, and a Set Macros button.
- Output:** A text area displaying power measurement data, highlighted by a red box. The data is as follows:  
VA: 2.11 Q Power: 0.38 Q Instant: 2.83  
PF: -0.0786 Temperature: 26.61  
Harmonic: -0.02 Fundamental: -0.15 Fundamental Reactive: 0.38  
Watt-Hour: 0.010  
Integration Time: 0:03:04  
VA: 2.11 Q Power: 0.40 Q Instant: -2.17  
PF: -0.0772 Temperature: 26.45  
Harmonic: -0.02 Fundamental: -0.15 Fundamental Reactive: 0.40  
Watt-Hour: 0.010  
Integration Time: 0:03:05  
VA: 2.11 Q Power: 0.44 Q Instant: 0.64  
PF: -0.0967 Temperature: 26.52  
Harmonic: -0.01 Fundamental: -0.19 Fundamental Reactive: 0.43
- Input:** A text field containing the command \$02M2\$03.

To Change it to M2 – ASCII CSV format.

5. Type the \$02M2\$03.



6. The display should be like this after you send the Command.



DONE