

HOW TO GET BACK THE POWER ANALYZER 2 CALIBRATION.

(or read the page 10-11)

Power Analyzer 2 /Energy Meter 2

Equipments Required

- A PC with COM port using “Terminal by Br@y++” program (<https://sites.google.com/site/terminalbpp/>)
- Serial cable to connect to PC.
- Download the Supporting Documents for Power Analyzer2(<https://drive.google.com/folderview?id=0BxdLxDCD6HiddTRhWGhxUGh6Sk0&usp=sharing>)
- Note: You can skip STEP1-4 then go to STEP5-12 (For immediate calibration).

1.Download Terminal by Br@y++

Terminal

com port development tool

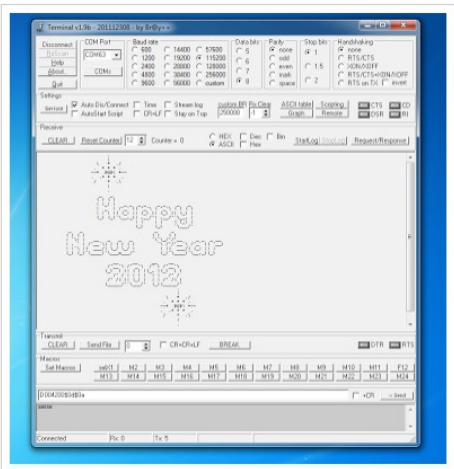
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What is it?

Terminal is a simple serial port (COM) terminal emulation program. It can be used for communication with different devices such as modems, routers, embedded uC systems, GSM phones, GPS modules... It is very useful debugging tool for serial communication applications.

What's new:

- * 20080315 - 10 more macros
- * 20091126 - more com ports, bug fixes
- * 20091127 - sample scripts added
- * 20100630 - higher COM ports bugfix, new script commands
- * 20110827 - req/resp, new macro/script commands
- * 20111215 - more speed/response at high baud rates, lognote, bugfixes
- * 20111230 - CSV graph
- * 20130116 - some improvements and new features
- * 20141030 - new features and fixes



Download & Links

Download new version of the Terminal software - version 1.93b 20141030



[Click to download](#)

(<https://sites.google.com/site/terminalbpp/>)

2. Construct this Serial cable to connect to PC.

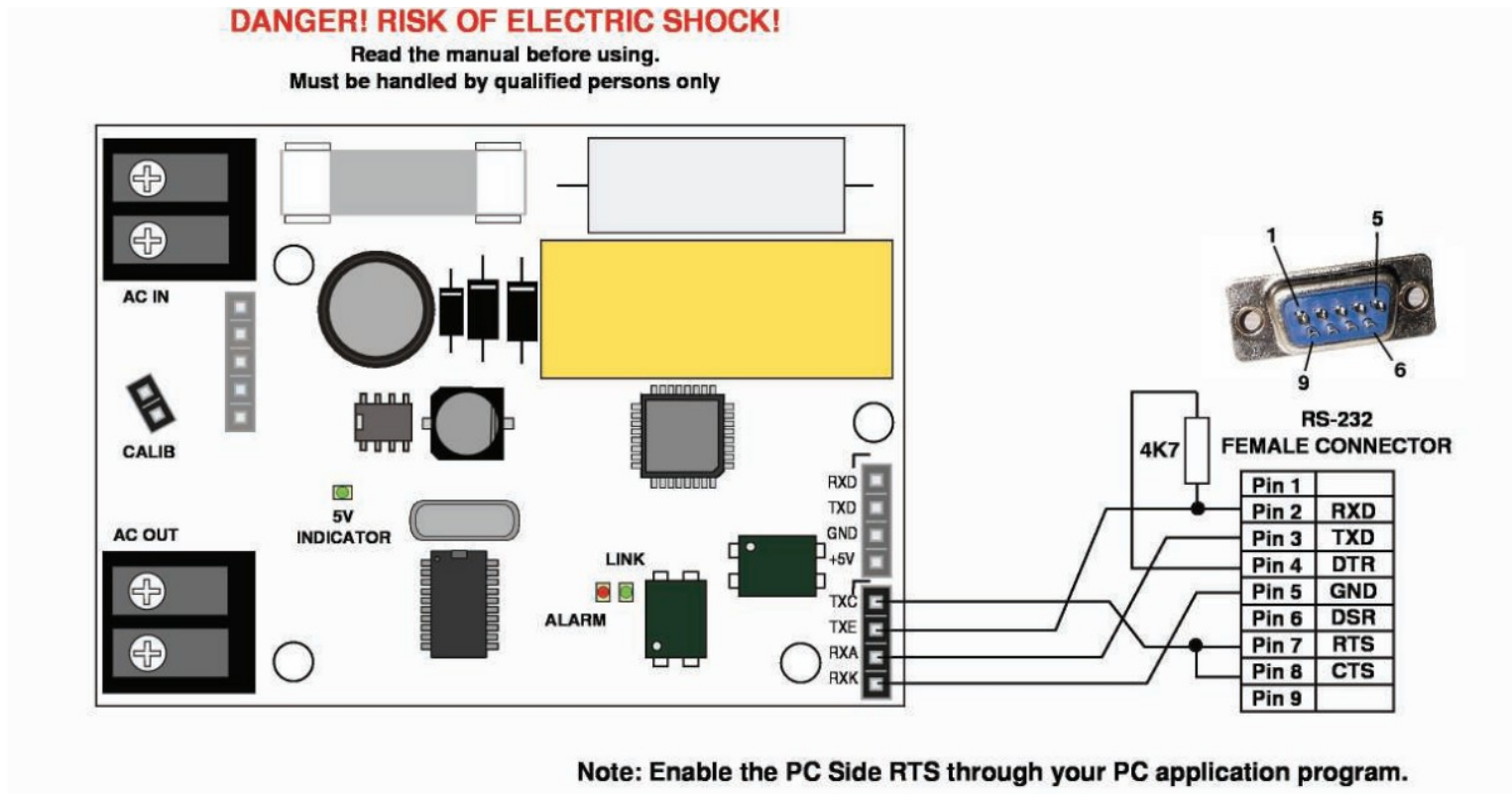


Figure 4. Interface wiring to a PC RS-232 COM port is surprisingly simple. Measurements can be displayed on a PC using terminal programs such as Terminal by Br@y++ (see section 5.2). If you can write your own PC app, then, you can customize your own display and functions. A sample program written in VB.net can be downloaded for free from the corresponding product page of this kit @ e-gizmo.com.

3. Set Communication

- In Terminal, Settings

BAUDRATE: 9600

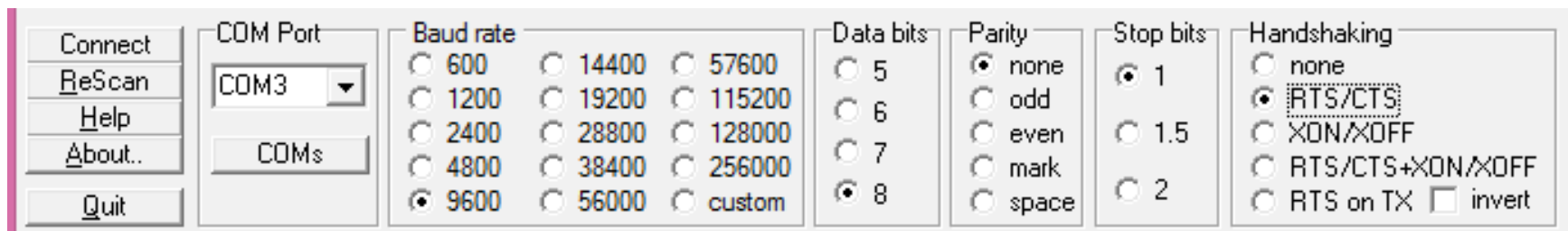
DATA BITS – 8

PARITY – NONE

STOP BITS – 1

HANDSHAKING – RTS/CTS

Select the COM# then connect.

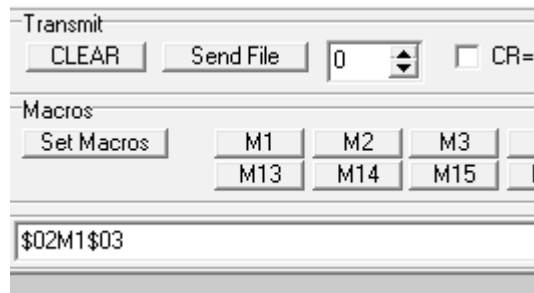


The image shows a screenshot of a terminal settings dialog box. The dialog is organized into several sections:

- Buttons:** A vertical column on the left contains buttons for "Connect", "ReScan", "Help", "About..", and "Quit".
- COM Port:** A section with a dropdown menu currently set to "COM3" and a button labeled "COMs".
- Baud rate:** A grid of radio buttons for various baud rates: 600, 1200, 2400, 4800, 9600 (selected), 14400, 19200, 28800, 38400, 56000, 57600, 115200, 128000, 256000, and a "custom" option.
- Data bits:** Radio buttons for 5, 6, 7, and 8 (selected).
- Parity:** Radio buttons for "none" (selected), "odd", "even", "mark", and "space".
- Stop bits:** Radio buttons for 1 (selected), 1.5, and 2.
- Handshaking:** Radio buttons for "none", "RTS/CTS" (selected), "XON/XOFF", "RTS/CTS+XON/XOFF", and "RTS on TX". There is also an "invert" checkbox.

4. Power ON the Power Analyzer

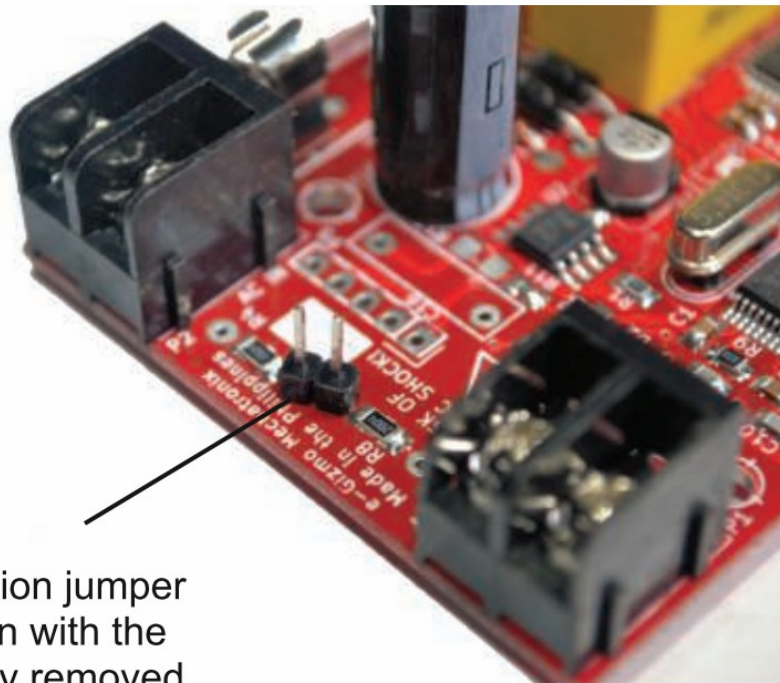
- The data should start streaming in.
- If no data is displayed, try typing: \$02M1\$03



- The Click SEND.

5. Power OFF the Power Analyzer

6. Remove the OFFSET CALIBRATION JUMPER and UNPLUG/DISCONNECT ANY LOAD in the P1 AC OUT side.

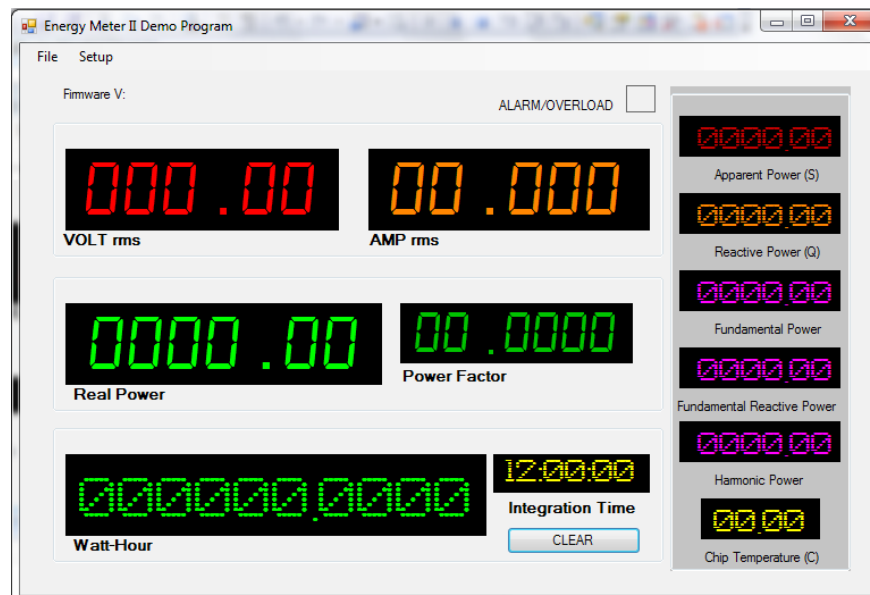


Offset calibration jumper location shown with the jumper already removed.

WITHOUT JUMPER!!!

7. Reapply AC POWER. Open/Run the Visual Basic Sample program.

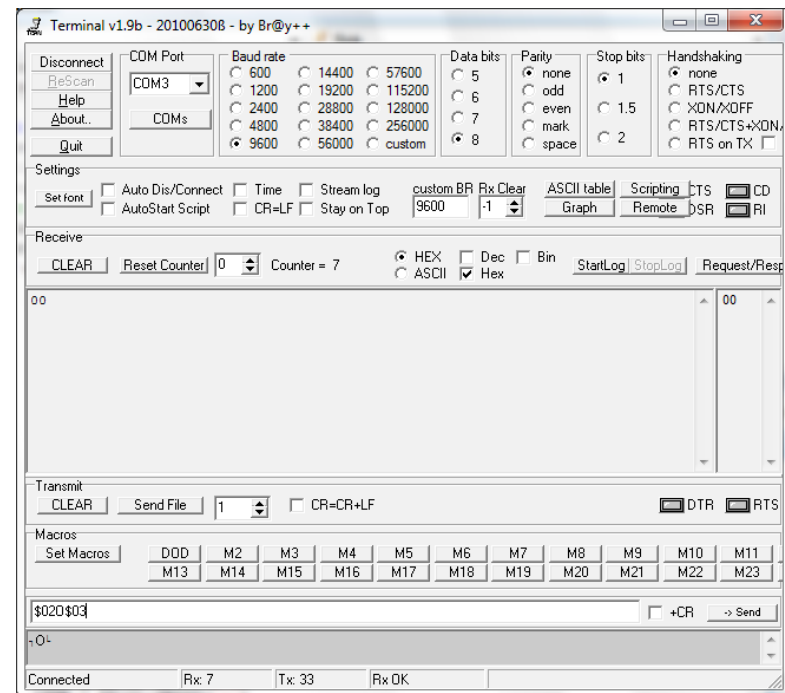
8. Find the portion in the displayed measurements that indicates VOLT RMS. **Make sure it displays a value of less than 5 VAC.**



WITHOUT JUMPER!!!

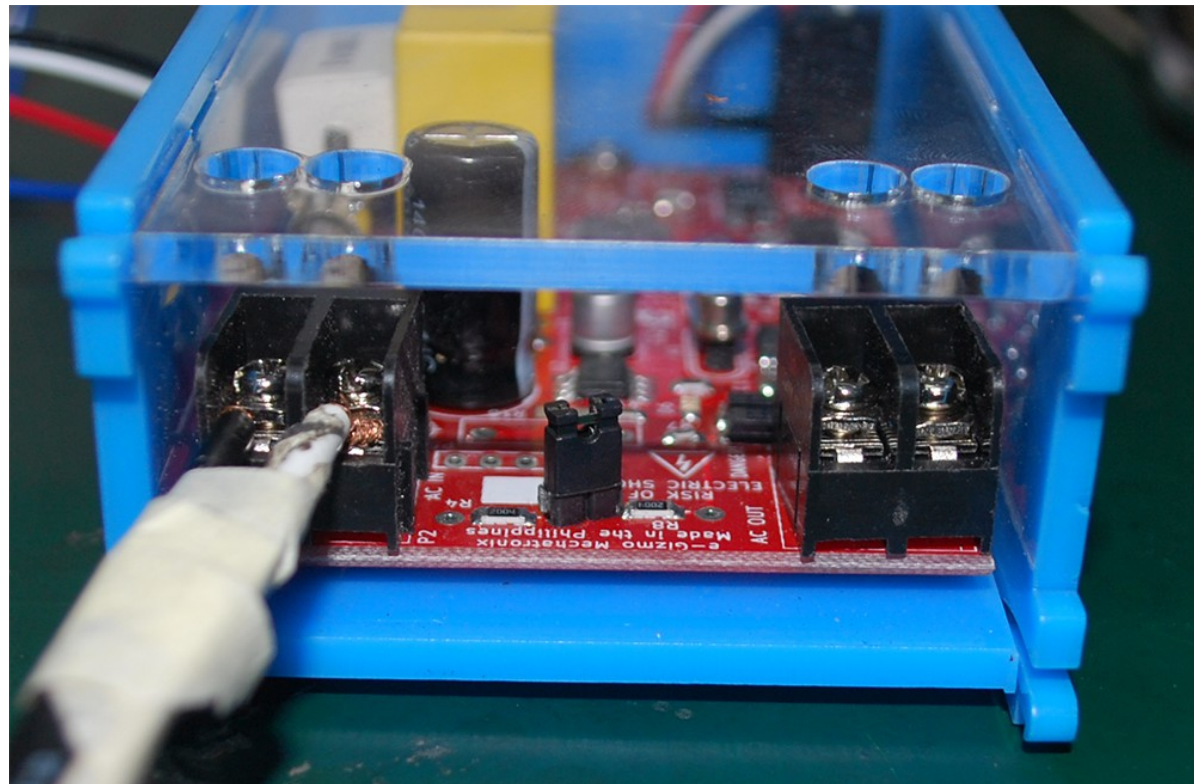
9. Close/Stop the Visual Basic sample.
10. OPEN THE TERMINAL and CONNECT AGAIN.
11. Type **\$020\$03** at the terminal transmit window and then click SEND.

This will initiate the offset calibration procedure. Wait until the Power Analyzer completes the procedure. *This should take less than 30 seconds.*

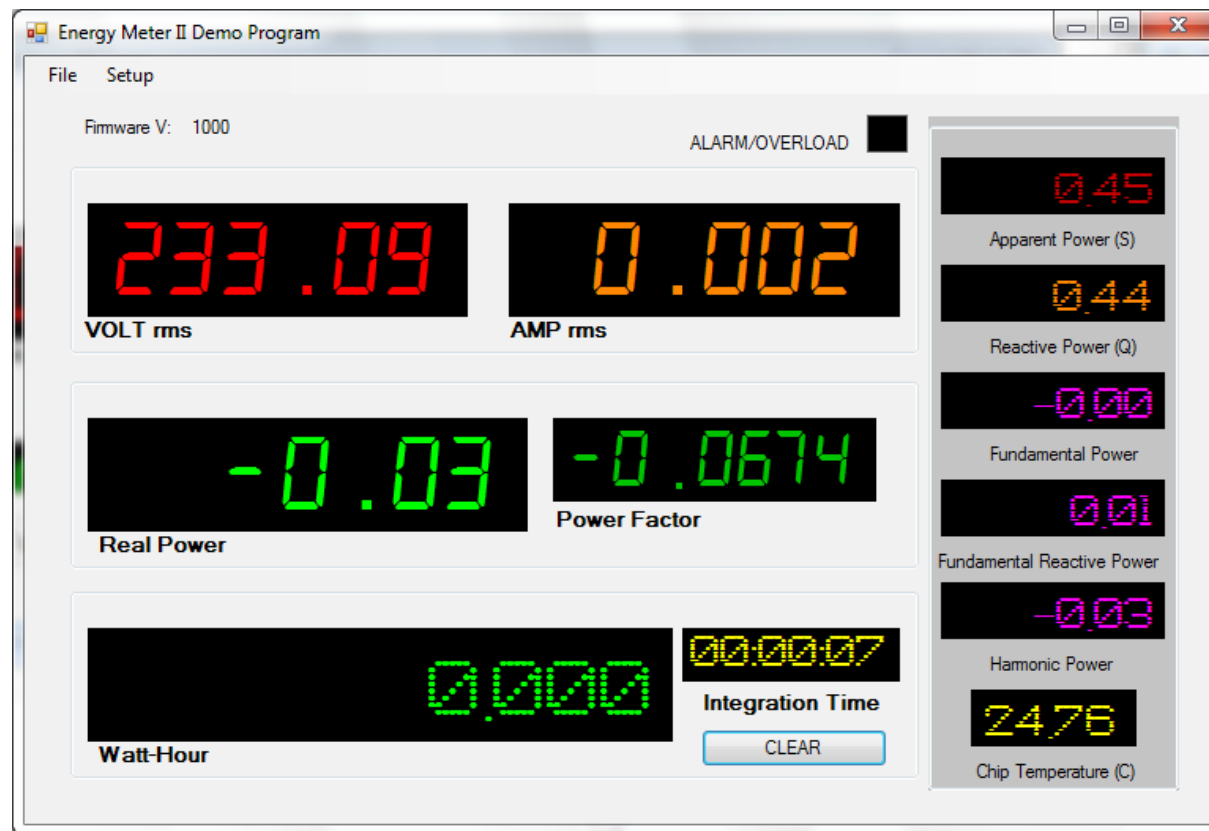


AFTER 30 SECONDS.

**12. POWER OFF the Power Analyzer and
REINSTALL THE JUMPER REMOVED.**



CHECK AGAIN THE VALUE SHOULD BE LIKE THIS.



Done :-)