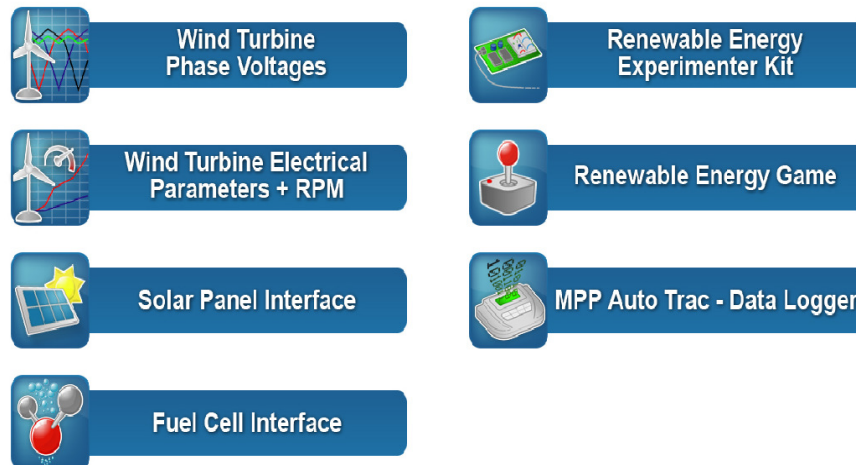
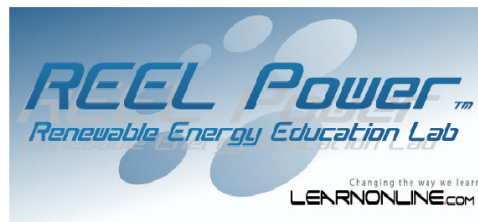


REEL Power Software Installation and Features

Software Installation

Note: DO NOT connect the USB cable to the computer until the software installation procedure (below) has been completed. You will be prompted when to do this in Step 8 below.

1. Insert the REEL Power CD-ROM into your computer's disc drive and close the door.
2. If the dialog box to proceed does not come up, on the Desktop, right-click on "Start" then click "Explore". Find your CD-ROM drive (D, E or higher) then click it to bring up the folder's contents.
3. Double click on the USB driver software ([USB Driver Installer.exe](#)) to install it first.
4. Then double-click on the [REEL Power Installer file](#) and follow the instructions to install it.
5. Next, minimize all applications until the Desktop reappears again. A REEL Power icon like that shown here should appear:
6. Double click on the REEL Power icon.
7. A menu selection will appear. Click on the menu item to get started.



8. Connect the USB cable to the computer.
9. At this point you have successfully installed the hardware and software. Now proceed to "**Learning to Use the Graphics Software**" to understand what to do next.

Learning to Use the Graphic Software

Note: This example is for the Wind Turbine Interface product. Other products may have a different screen display. Check the specific User Manual for details.

The PC graphic software screen is divided into several regions that control how electrical quantities such as voltage, current, power and RPM readings are displayed.

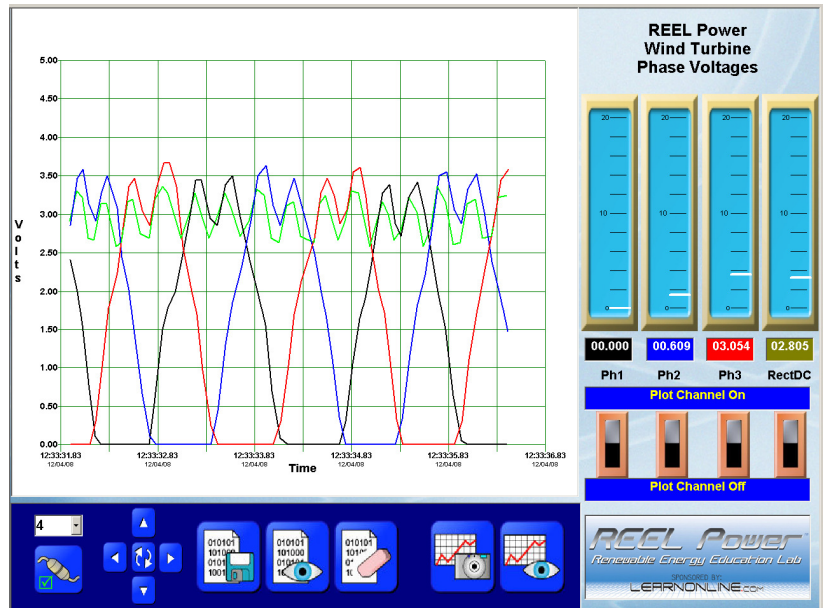
The large grid area continuously displays four plotted lines in four colors. The colors match the values displayed below the vertical meters.



Wind Turbine Phase Voltages

When viewing the Wind Turbine Phase Voltages...

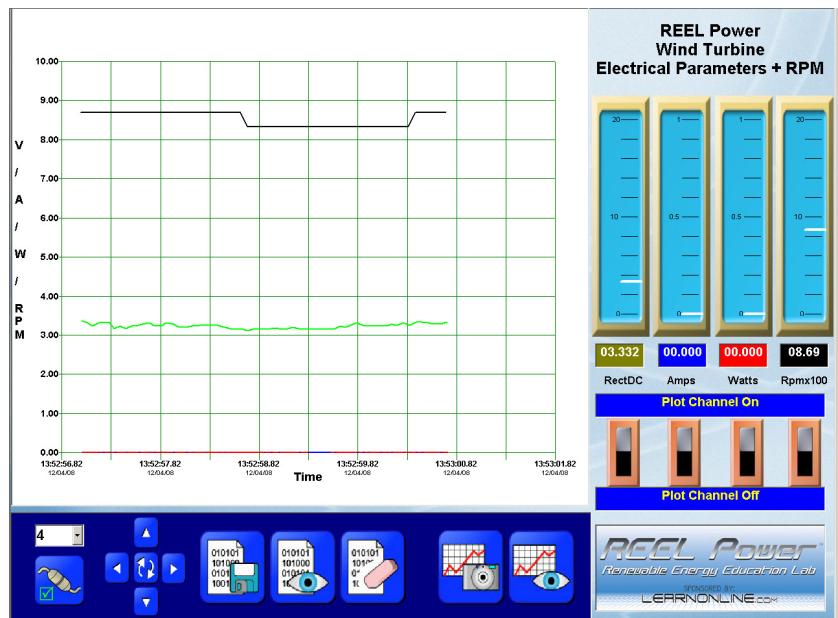
- **Black** – Phase 1 voltage
- **Blue** – Phase 2 voltage
- **Red** – Phase 3 voltage
- **Green** – Rectified DC

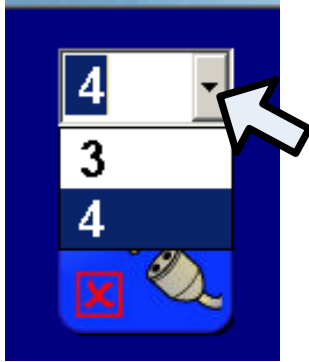


Wind Turbine Electrical Parameters + RPM

When viewing the Wind Turbine Electrical Parameters and RPM...

- **Black** – RPM x 100
- **Blue** – Current in amps
- **Red** – Power in watts
- **Green** – Voltage in volts





Before any plots can occur, the graphic software must connect with the attached circuit board that is transmitting data. To do so, first select the correct Comm port number. **Click on the arrow next to the number to see if a higher number Comm port is displayed. If so, it's probably the one to use.** When in doubt, find the correct Comm port on your PC by going to **Control Panel -> System -> Hardware Manager -> Device Manager** then click on Comm port. The number displayed is the correct Comm port **to type into the number area here. Then click the connector icon – the one with the red x.** Since you are using a USB connection rather than the traditional RS-232 connection, the Comm port number is not dependent on hardware so much, but rather on software settings in the **Control Panel** of the Windows operating system.



If correct, the Connect icon will show that the connection is made. If the Comm port is not correct an error message will be displayed, which is usually due to the Comm port already in use.



The plot area can be zoomed in and out of a time range (horizontal axis) or a voltage, current, power or resistance range (vertical axis).

The up and down arrows will adjust the plot in a vertical direction. Up to increase the scale (x2) and down to decrease it (1/2).

The left and right arrows will adjust the plot in a horizontal direction - left for less time (1/2) and right for more time (x2).

Click the center double-arrow icon to clear the screen and reset the plot. **If the plot does not immediately start, click the double-arrow icon again.**



Data Logging – Recording Experimental Data

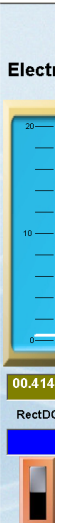
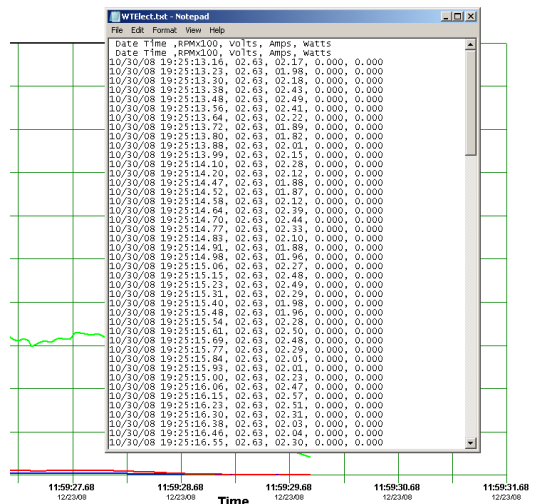
You can record your experiments for later analysis. To begin data logging, click the data log icon. A file will automatically open to record the data being sent by the circuit board. Click once to start data logging and click, again, to stop data logging. Repeated clicking (On & Off) will append new data to old.



To view the logged data, click on this icon. The logged data will be displayed over the plot area where it can be examined. This same file can be ported to a spread sheet program like Excel for further analysis and plotting.



Click this icon to close the data log file and erase all logged data.





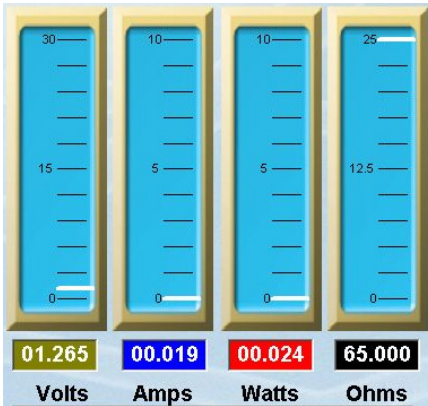
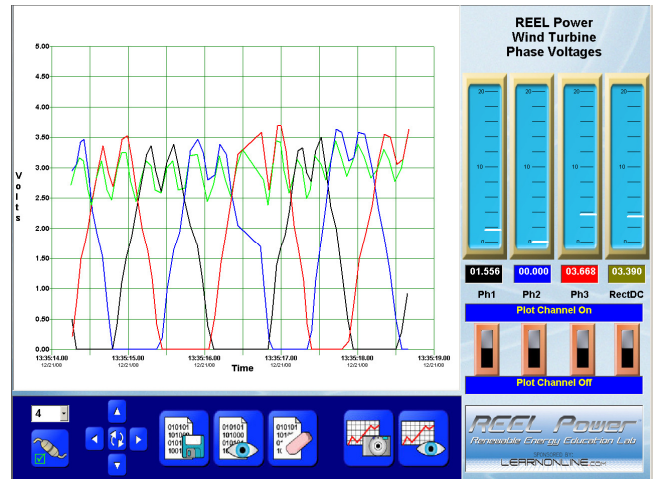
Screen Capture and Display

Click this icon to capture the plot image on the screen.



Click this icon to view the captured images. Only the latest captured image can be displayed with this icon. Go to "**C:\My Documents\Reel Power\Data**" and click the corresponding files for

other saved images.



The four meters display the voltage, current, power and resistance. Their scales are fixed and, unlike the grid plot area, cannot be changed. The data under the meters may not match that of the image here; refer to the beginning of this section for specific details.



To reduce screen clutter in the plot area, the individual switches can be clicked to turn ON or turn OFF the selected plot line.



If your computer is connected to the Internet, clicking on the REEL Power icon will take you to the LearnOnLine.com website.