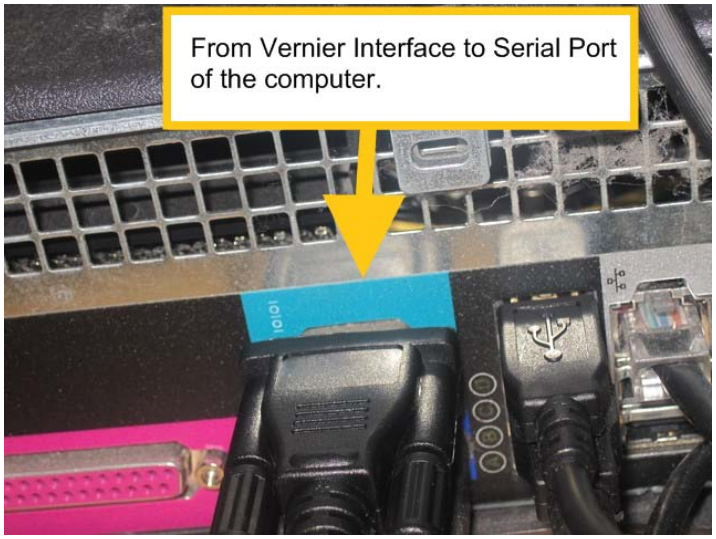
Using Vernier LabPro as a DC Power Supply

First start connecting the interface to the computer. In our case, we will use the serial interface option.

I. Connecting the LabPro Interface

1. Gather the LabPro interface from the LabPro interface box.
2. In most cases, you will find this cable already connected and you can just skip to step 3. If it is not connected, connect the serial port cable to the serial port at the back of the computer:



3. Connect the other End to the LabPro interface. The connection is to the right of the unit (as shown in the photo) You might need to slide a plastic covering to get to the connection.

4. Connect the LabPro Interface to power by using the appropriate power supply:.

5. Position your LabPro interface on top of the video control unit:

II. Connecting the Power Amplifier to the LabPro Interface

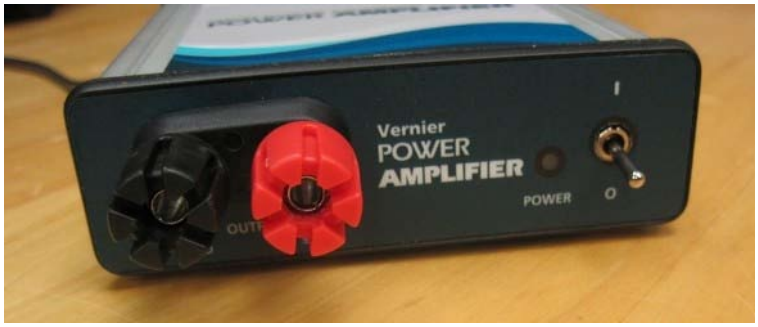
1. Use the Vernier Special Connectors to connect the Power Amplifier to **the Chanel 4 Port** of the Vernier LoggerPro Interface.

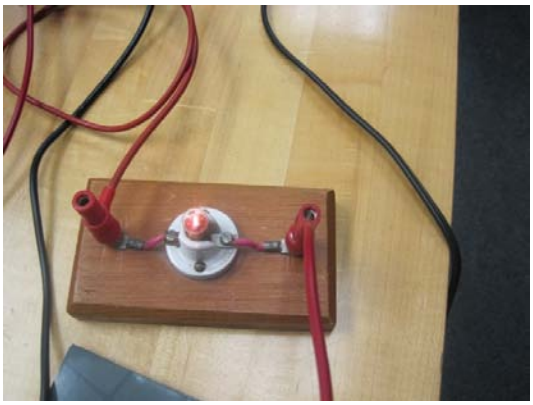
2. Connect the Power Amplifier to the power adapter:

3. Connect the voltage probe to **the Chanel 1 Port** of the Vernier LoggerPro Interface. Do this even when you don't intend to use the Vernier software to make voltage measurements.

III. Connecting the Power Amplifier to the LabPro Interface

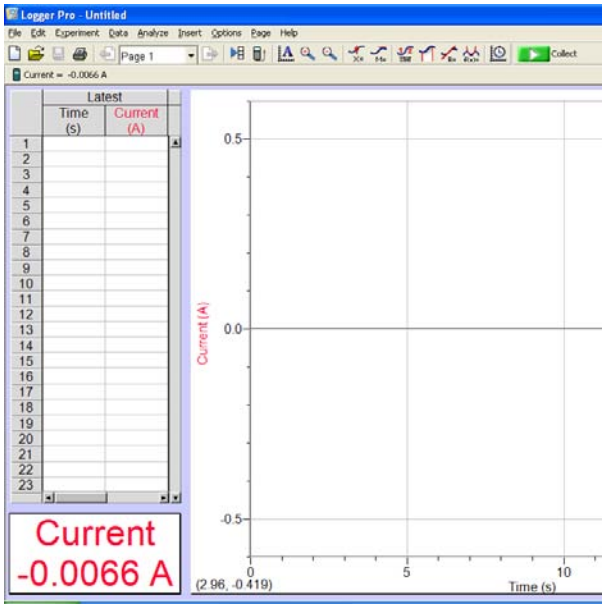
1. Use "banana clip" cables to connect the power amplifier output to your electrical circuit. Note that red output is at a higher voltage (positive) than the black.





IV. Running the Logger Pro software using Lab Settings Files

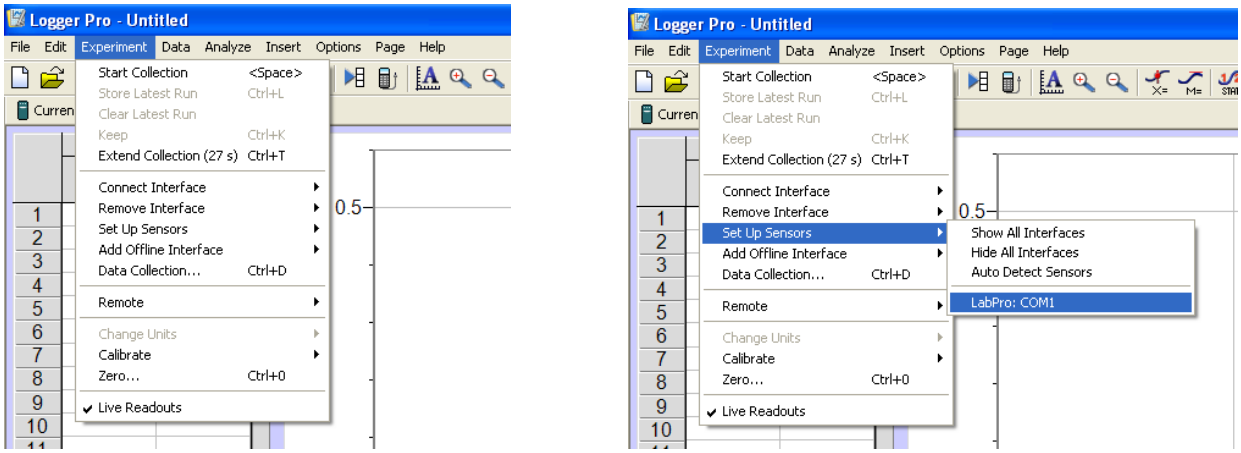
1. Lab computers have a folder on the desktop caller "Vernier" If you don't find the folder, download it from http://physics.kennesaw.edu/vernier.zip (if you had to download the folder, make sure that you unzip the files before proceeding further.)
2. Open the folder, identify the settings file for your particular lab and double click it.



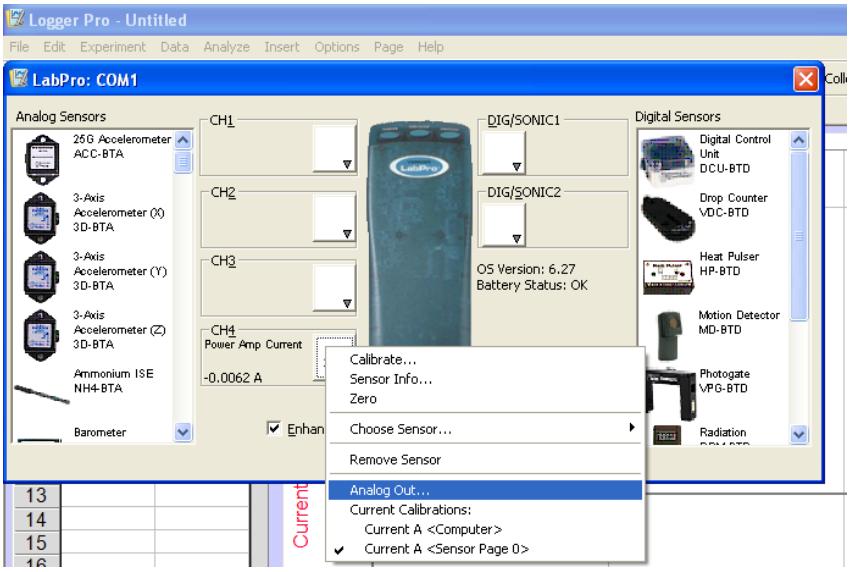
V. Running & Configuring the Logger Pro software

1. Use the start computer menu to find the "Vernier Software" folder and the "Logger Pro" shortcut. Start Logger Pro. The initial view should look like the following.
2. Select "**Connect Interface**" from the "**Experiment**" menu and Select "**LabPro COM1**":.

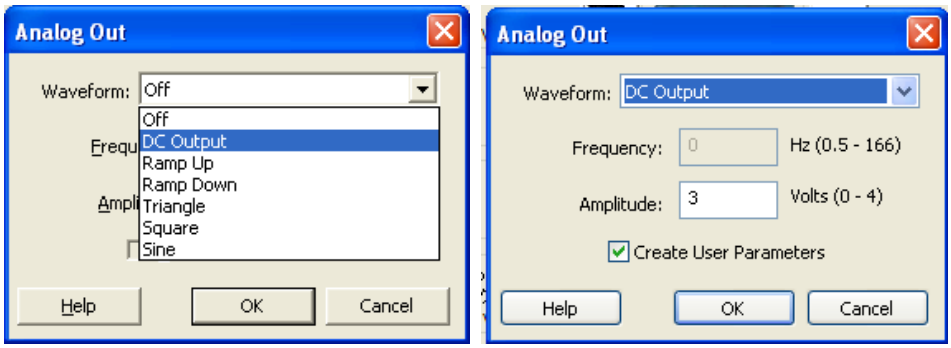
3. Select "**Set Up Sensors**" from the "**Experiment**" menu and Select "**LabPro COM1**":



4. Click on "**CH4 – Power Amp Current**" and Select "**Analog Out….**"

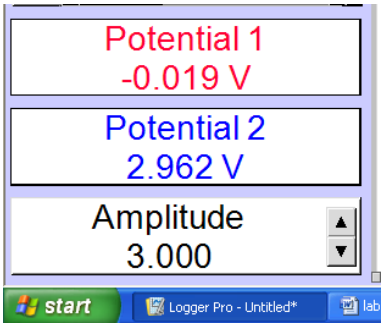


5. Select "**DC Output**" from the "**Waveform**" menu, and set the "**Amplitude**" to half the value you want out (for example, to have 3.0 volts, select 1.5):

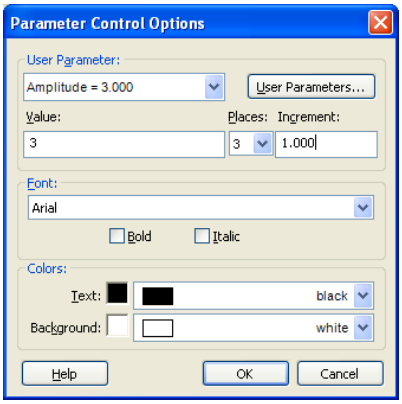


6. Check the "**Create User Parameters**" box
7. Answer **YES** to the prompt.

8. The display will now include the following.



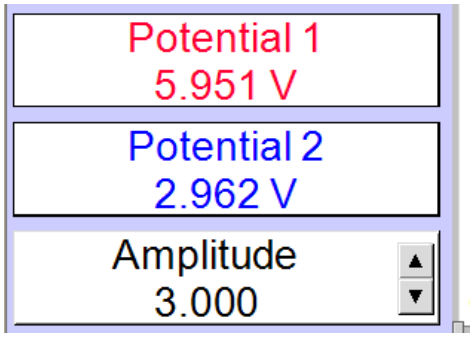
9. Right click on the box that says "**Amplitude**" and select "**Parameters Control Options**". You should get a window that look like this:



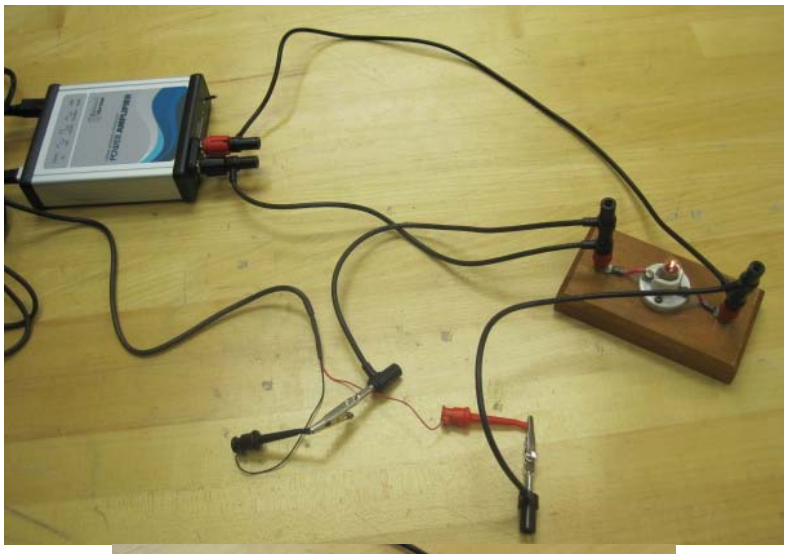
10. Type-in your preferred settings and press OK.

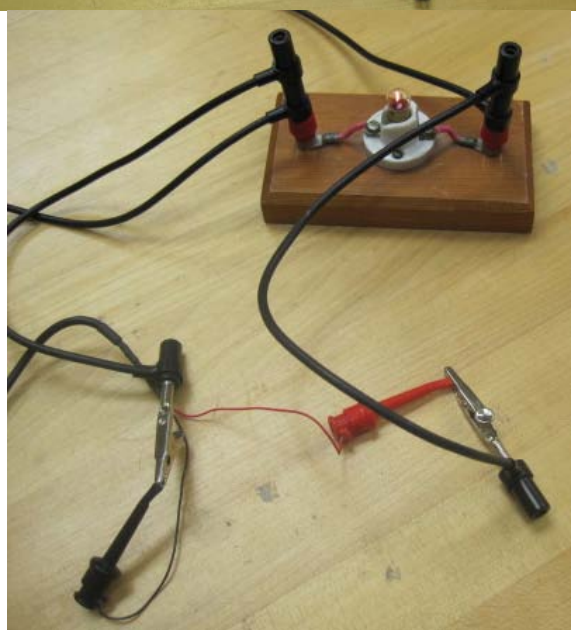
VI. Connecting the LabPro Interface

1. If you connect the voltage probe to port 1 and to the circuit, Potential 1 would read the voltage in the circuit. It should be about twice the amplitude you have chosen.



2. You can change the amplitude by the value you have selected as an increment (in step 8) by pressing the up or down dark triangles on the right of the amplitude box.
3. The following pictures show the fully connected circuit enabling voltage measurements:.





4. The following picture shows a close-up of how we connect the voltage probe:.