

Checklist for bringing the cosmic ray detector to school:

- ✓ Four cosmic ray detector paddles
- ✓ Four 50ft signal extension cables
- ✓ Four 50ft power extension cables
- ✓ Power distribution box
- ✓ Power cable for distribution box (6ft male to male connectors)
- ✓ Power supply for circuit board
- ✓ 6ft serial RS-232 Cable
- ✓ Serial to USB adapter
- ✓ Voltmeter used to plateau paddles
- ✓ Laptop with Cosmic Ray Detector program

Parts List:



Cosmic Ray Detector Data Acquisition Board



Detector Paddles



Power Distribution Box



USB to serial adapter

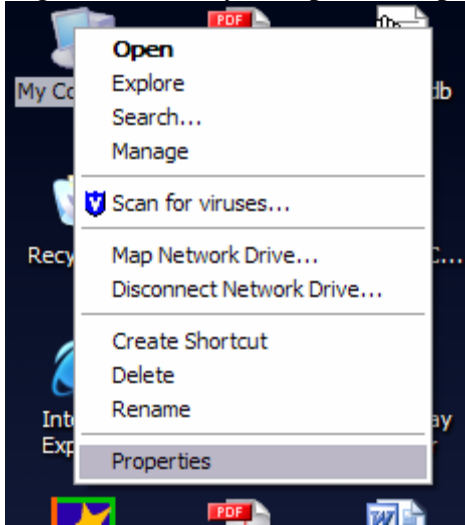
Instructions for installing the USB to serial adapter:

Attach the USB to serial adapter to your computer. Found new hardware wizard should appear.

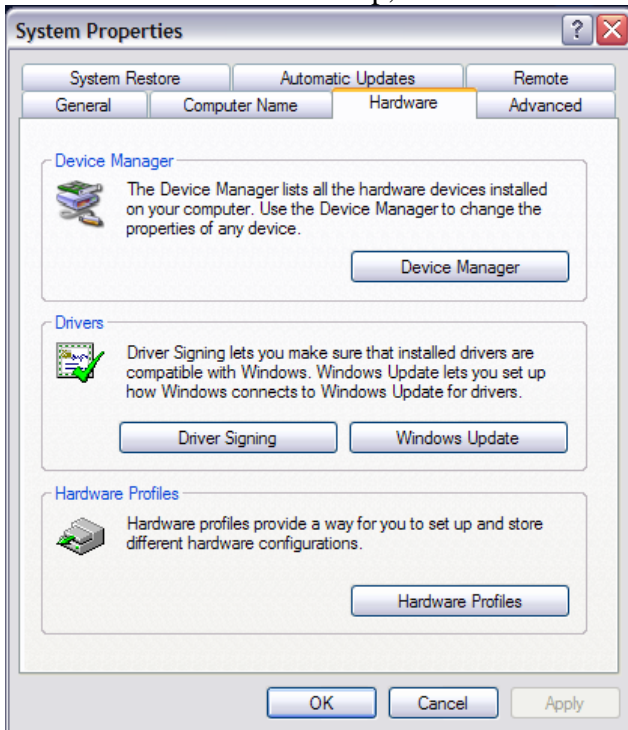
Insert the driver CD into your computer and allow the computer to search for drivers automatically. The driver should install automatically.

How to Find the COM Port Number:

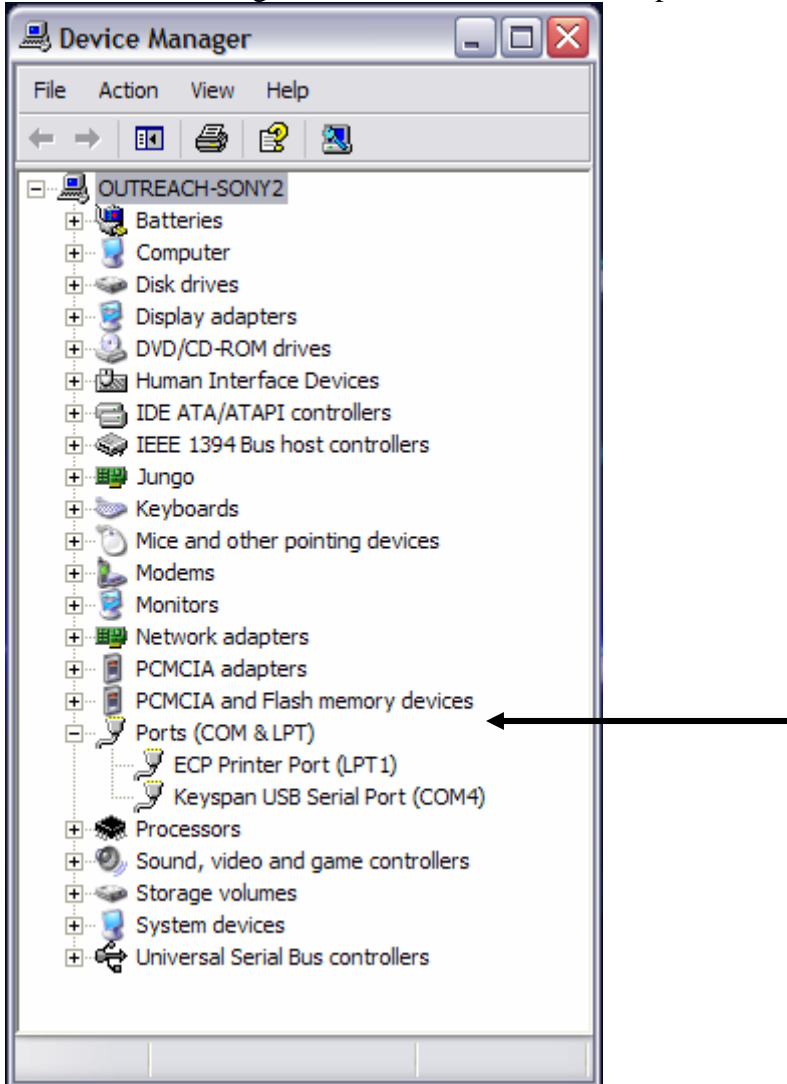
Right click on My Computer and point to properties:



On the window that shows up, select the tab hardware:



Select device manager under the hardware tab. Expand the list “Ports”.



The port that your USB to serial adapter is on is shown under the “USB Serial Port”. In this example the port our detector is attached to is COM 4.

Set-Up of Detector:

Attach paddles to the cosmic ray detector data acquisition board through the signal cables. Make sure the paddles are attached to the proper inputs in the cosmic ray board (color coded).



Attach the power cables from the paddles to the power box. Again, ensure that the proper colors are attached to the proper place on the power distribution box.



Attach the serial connector to the board.



Attach the serial to USB connector to the opposite end of the serial cable. Attach the USB port connector to the computer.



Attach the power cable between the data board and the power distribution box.



Finally, attach the power cable to the board.

Open up the Purdue Cosmic Ray Detector program, and set the COM port to the appropriate number. (See 'How to Find the COM Port Number')