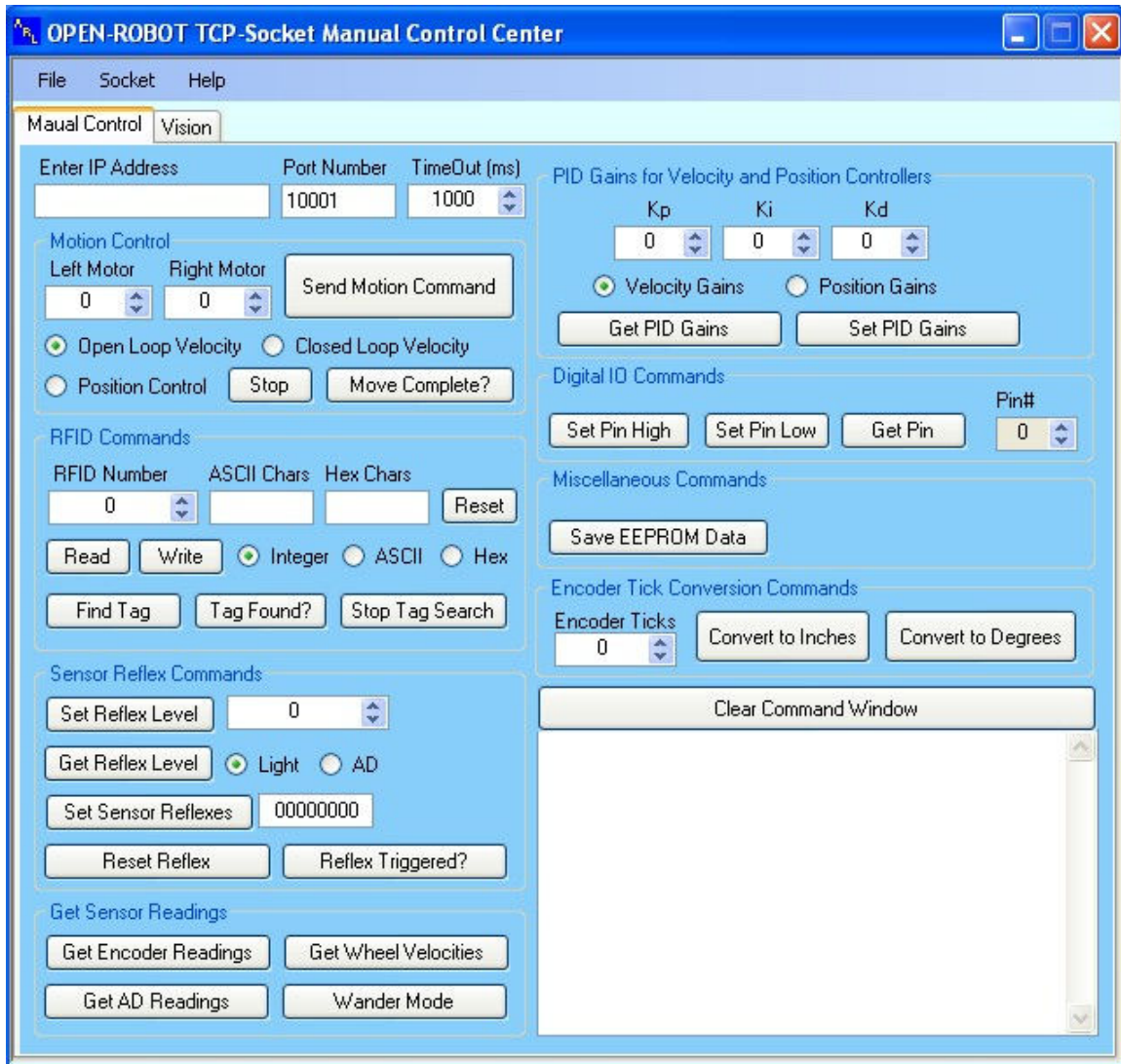


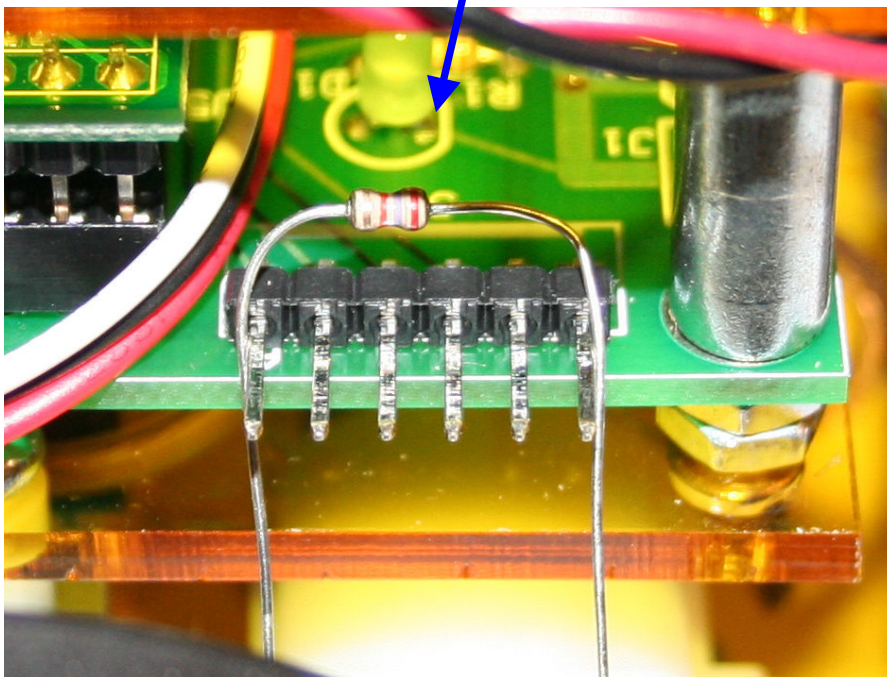
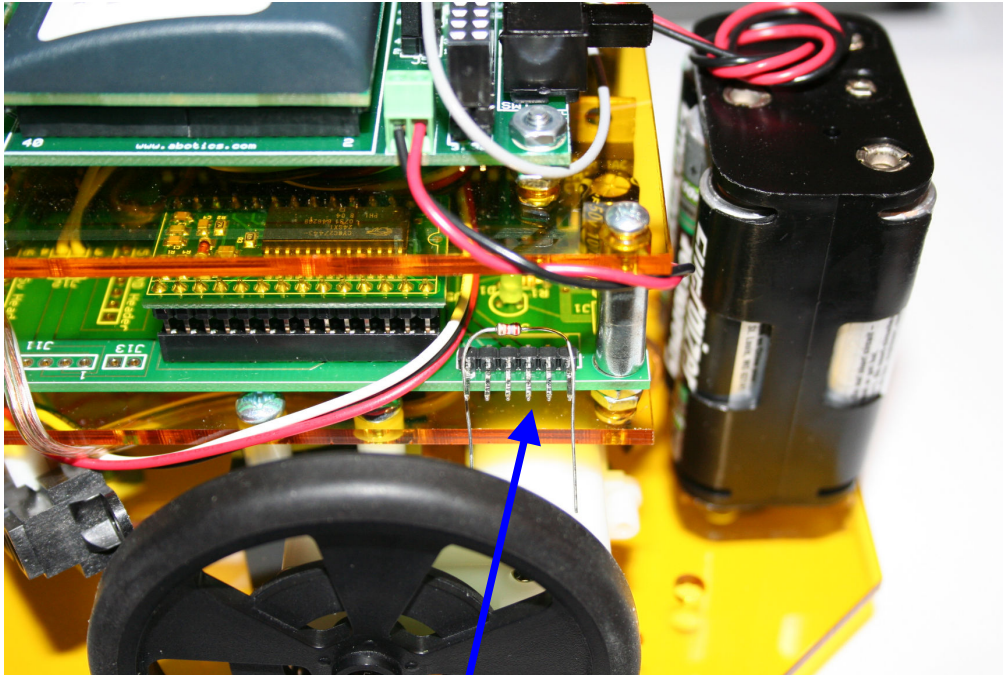
# Wirelessly Upload OPEN-ROBOT's PIC18F4520 Code

## OPEN-ROBOT TCP-Socket Manual Control Program:

Run the OPEN-ROBOT TCP Manual Program.



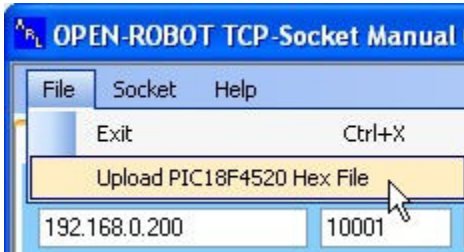
**Connect a 1k Ohm Resistor Across Pin#1 & Pin#6 on J2 Programming Header:**



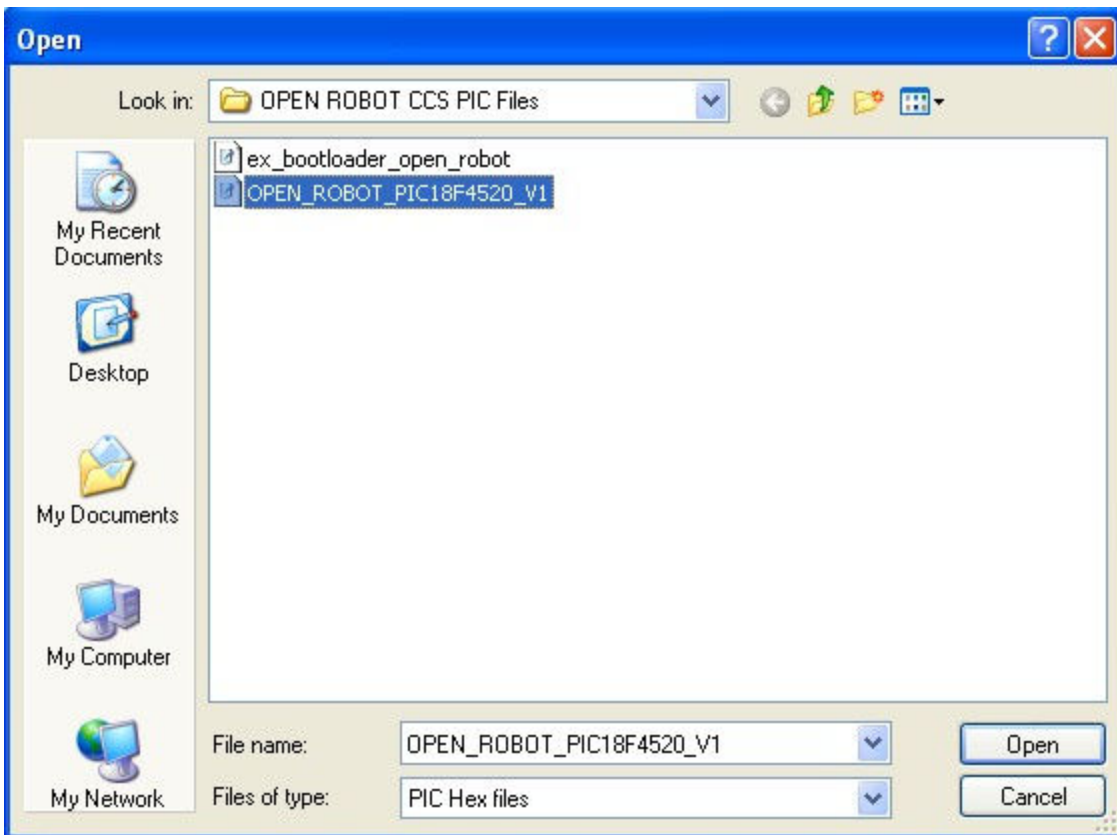
Hold a 1k Ohm resistor across pin#1 and pin#6 on the J2 programming header of OPEN-ROBOT's Controller Board. Now turn on the robot and be sure to hold the resistor firmly in place. After about a second or so of being on you can carefully remove the resistor because as soon as the PIC18F4520 boots it will check and see the resistor. At this point the PIC18F4520 will enter "boot mode" and wait for a new hex program to be uploaded.

## Connect to Robot Using OPEN-ROBOT TCP-Socket Manual Control Program:

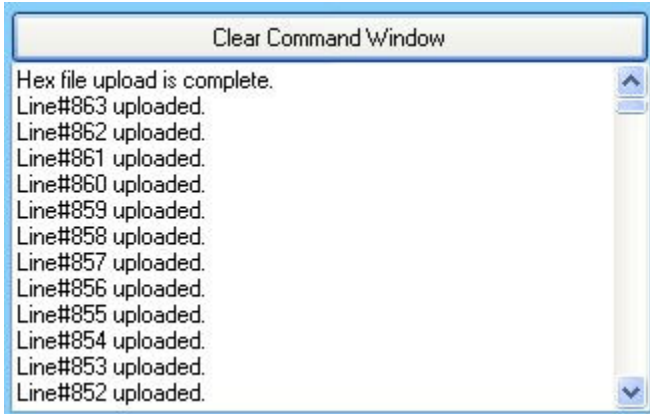
Now connect to your robot using the OPEN-ROBOT TCP Socket Manual Control Program. After making the socket connection you can browse for the PIC18F4520 hex code file by selecting “Upload PIC18F4520 Hex File” from the “File” menu.



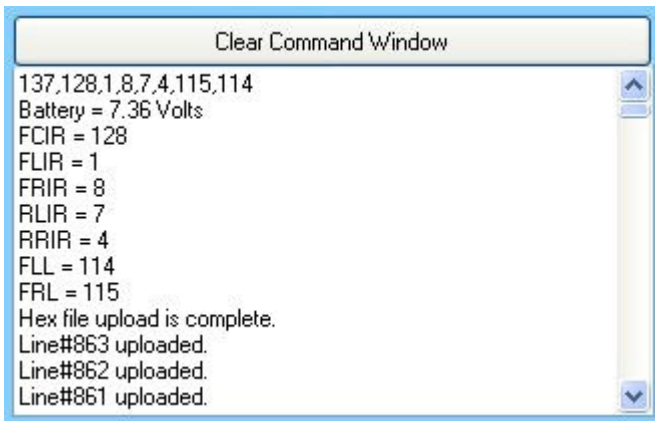
Then browse for the new PIC18F4520 hex file to upload.



Select the new hex file and click the “Open” button. If you are creating your own PIC18F4520 programs using the CCS C Compiler then you must follow our instructions for including the “boot loader” files otherwise you will have to reprogram the PIC18F4520 using a In-Circuit Programmer/Debugger pod. ***If you are uploading a new firmware hex code file that was supplied by Abe Howell’s Robotics, then you don’t have to worry about this.***



Once the file upload is complete it will print, “Hex file upload is complete” in the message window.



At this point the PIC18F4520 has rebooted and the new hex code should be running, so go ahead and try it out by requesting the A/D Sensor Readings.