6.270 Team Assignment 1

January 7, 2002

Due: January 8, 2002
Course Website: http://web.mit.edu/6.270/
Timely and satisfactory completion of this assignment is required for you to pass 6.270.

1 Purpose

The goal of this assignment is for you to assemble the components that you will need to successfully test your motors and sensors, and begin strategizing for the contest.

By the end of this assignment, you will:

- have a working expansion board for your Handyboard

- have a working battery charger

- have a working IR beacon

- have a working battery pack

2 Deliverables

2.1 Assembly

You will need to assemble your expansion board, battery charger, IR beacon, and one battery pack. There are instructions for the assembly of the battery pack and the expansion board online, you will get a booklet detailing the assembly of the IR beacon, and a drawing of the assembly of a battery back can be found in lab. If you have never soldered before, or you have not been specifically taught the proper soldering method and care of soldering equipment, we recommend that you attend one of our soldering workshops, to be held January 7 and 8. Staff members will give a short soldering tutorial, and you will be able to begin assembling the components for this assignment during the workshop. Staff members will be on hand to supervise your progress, and answer any questions.

2.2 Testing

Staff members will provide code, and assembled sensors, in lab for the purpose of testing the assembled expansion board. It is your responsibility to test your expansion board, and notify an organizer of any problems. Mulitmeters are available in lab to test your battery packs. As stated in the IR beacon handbook, the LEDs on the beacon may be used to test its functionality.

2.3 Deliverables

You must show your assembled components to a staff member by the time lab closes on January 8. Staff members will check for completion, not functionality - once again, *it is your responsibility to make sure your components work.*

3 Help and Advice

If you have questions, feel free to email your assigned staff group, use the zephyr instance, or email all of us at 6.270-staff@mit.edu. Good luck!