

Getting Started With Handy Boards and Handy Logo

by

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and

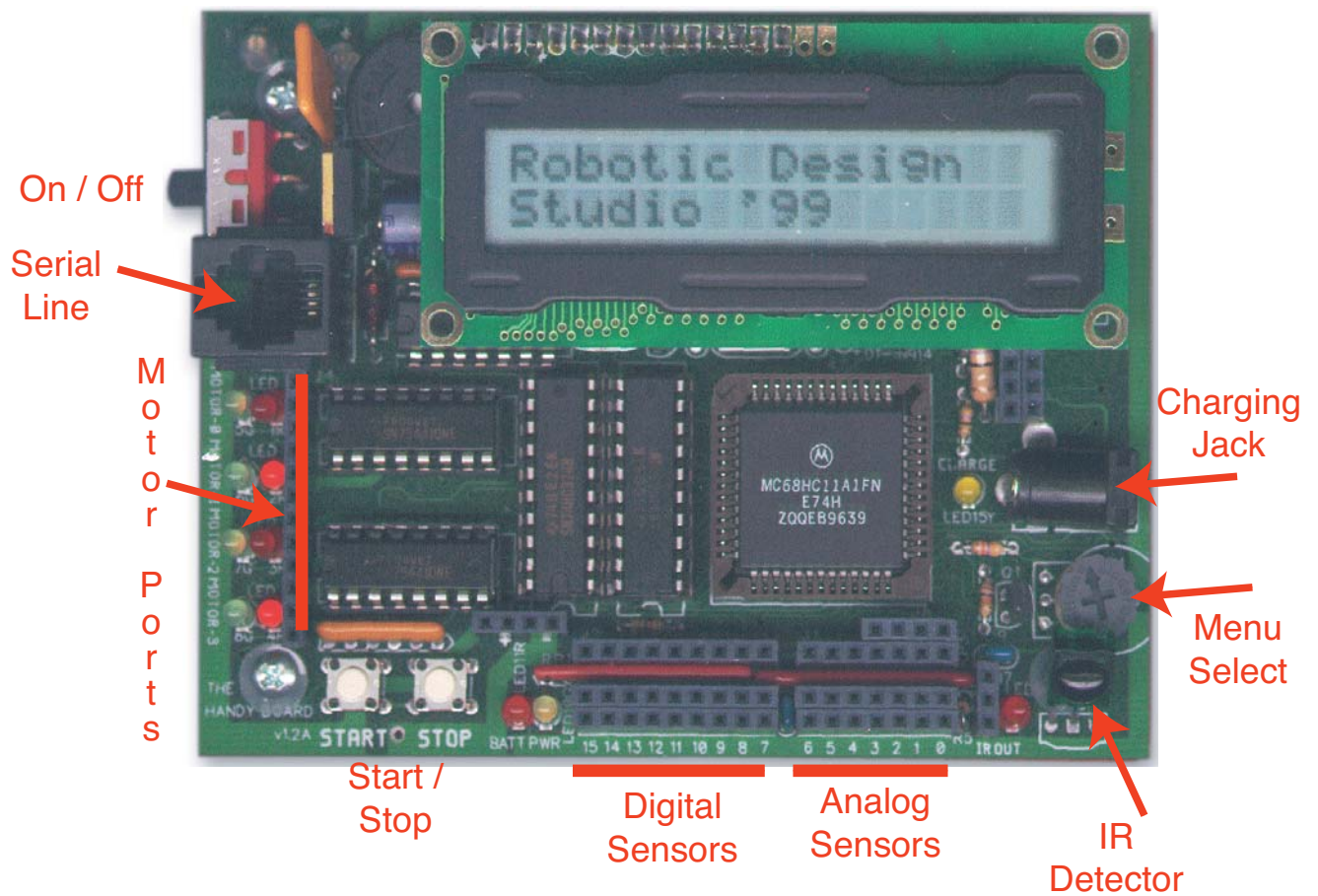
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The Handy Board and Handy Logo were developed by members of the Epistemology and Learning Group at the MIT Media Lab as part of the Programmable Bricks project. For more information please see

<http://lcs.www.media.mit.edu/groups/el/elprojects.html>

Handy Board Parts



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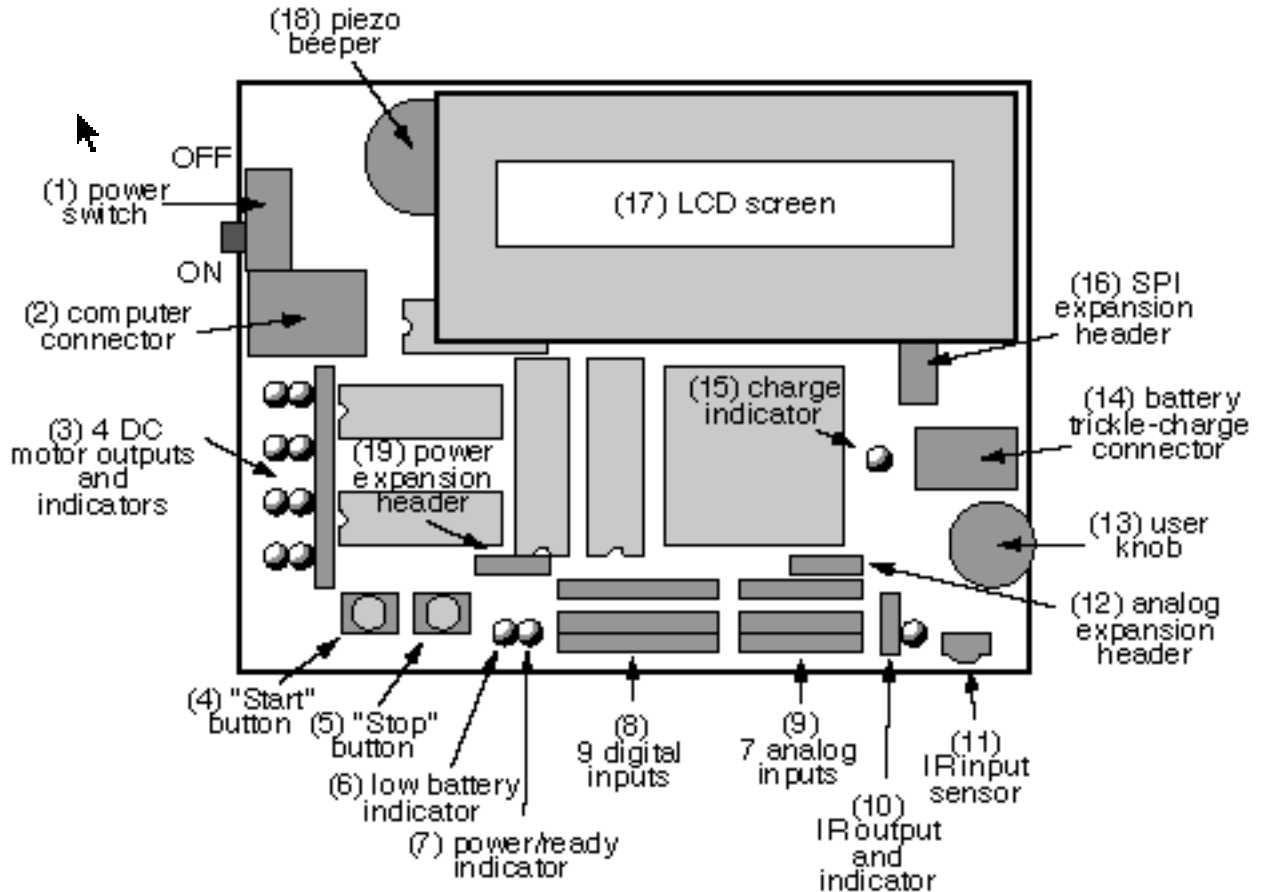


Figure 1

1. Setting Up Your Handy Board

The Handy Board is a hand-held, battery-powered computer that can receive inputs from electronic sensors (including touch, light, and sound sensors) and operate small motors. It is designed for a variety of educational robotics uses, including mobile robot projects, kinetic sculptures, data-taking applications, and “ubiquitous computing” applications (projects that embed computers in the world around us). A schematic drawing of the Handy Board is shown in figure 1 above.

To use your Handy Board you will need to transfer computer instructions from a computer to the Handy Board. The connections for downloading Handy Logo programs to the Handy Board are shown in figure 2. Instructions are sent to the Handy Board via a cable that is connected to the computer’s serial/modem port. This cable is connected to a small electronic device called the Serial Interface/Battery Charger (SIBC), and a telephone cable completes the connection between the SIBC and the Handy Board. **Warning:** never use a telephone cable to connect two Handy Boards or to

connect a Handy Board to a telephone outlet; serious damage can result from such connections! Power is provided to the SIBC (and indirectly to the Handy Board) via an AC adapter (“wall wart”) plugged into a standard electrical outlet. It is also possible to power the Handy Board directly using the AC adapter.

In order to control the Handy Board, make sure it is turned on; you should hear a “boot beep” when you turn on the Handy Board and the green power light should come on. (If you don’t see the green light, it probably means that the battery is dead. If you don’t hear the beep, try turning off the Handy Board, waiting a couple seconds and turning it back on.) If you plan to use motors or sensors in your project, you should connect them to the motor ports (labeled motor 0 through motor 3 on the Handy Board) and sensor ports

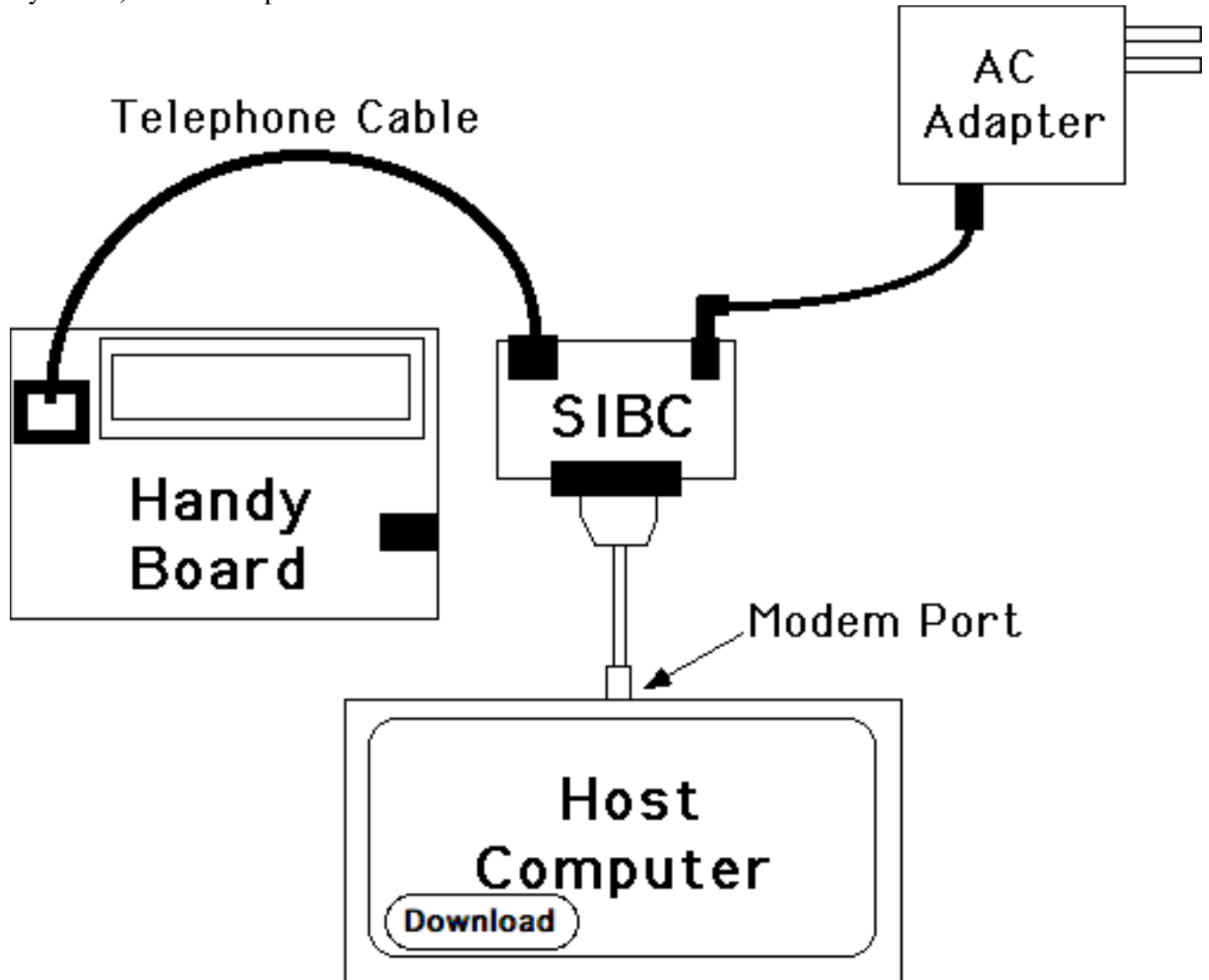


Figure 2 - Connections for downloading programs to the Handy Board