

RobOlympics Programming and Testing Instructions

Programming Instructions

Introduction

The following procedure outlines how to setup and program the RobOlympics PCB and perform the manufacturing test.

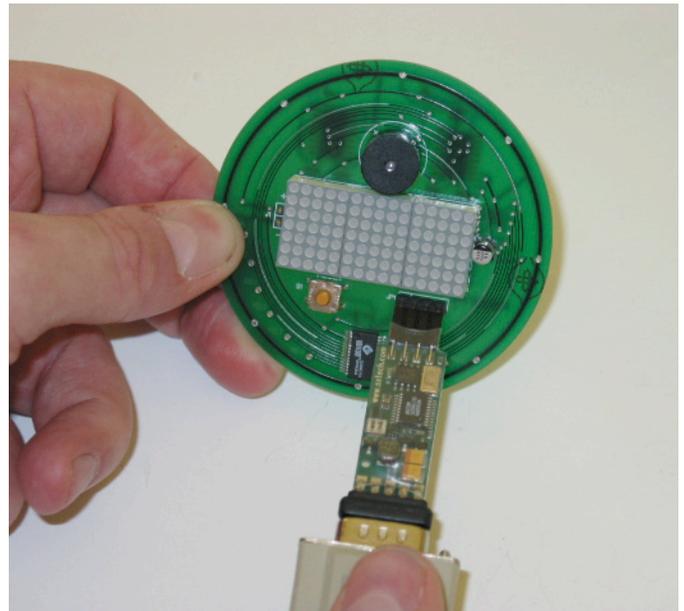
Setting up the Programming Station and Programming

- 1) Unzip the Robo Programming Test zip file to a directory on your hard drive.
- 2) Launch the software called SX-Key.exe in the zip file.
- 3) Click on the 'Run' menu and choose the 'Device' option.
- 4) Click on the 'Load Hex' button.
- 5) Specify the ROBOlympics_REV1.SXH file in the zip file.
- 6) Connect the DB9 – DB9 serial cable to Comm1 of your PC.
- 7) Connect the other end of the serial cable to the SX-Key programmer.
- 8) Install 2 CR123 Batteries into the battery holder on the back of the RobOlympic PCB.
- 9) Turn DC switch (S2) to 'ON'.

- 10) Connect and hold the SX-key programmer to the PCB as shown to the right.

- 11) Click the 'Program' button. When the progress bar is complete, you may remove the SX-Key from the PCB.

- 12) Now the PCB is programmed and ready to be tested. While the batteries are installed, perform the Manufacturing Test Procedure. Once complete go to step 7 to program another unit.



Manufacturing Test Instructions

Introduction

The following procedure outlines how to perform the manufacturing test for the RobOlympics PCB. This section also details what to look for when determining if a PCB is good or bad.

Manufacturing Test Procedure

- 1) Install 2 CR123 Batteries into the battery holder on the back of the RobOlympics PCB.
- 2) Turn the DC switch (S2) to 'ON'. You should hear the PCB generate a tone and the display will start scrolling 'PARALLAX' and the English alphabet.
- 3) Press the reset button. Watch the display to make sure that the letters scrolling across are correct. Look for dots that don't light up and dots that light up when they should not. See the picture below. Also watch the *.AVI in the zip file for more information.



- 4) Remove both CR123 Batteries.
- 5) Congratulations, you have just completed the testing of a RobOlympic PCB.
- 6) Go to step 1 to test another unit.