

Roomba User Manual

Prerequisites

In order to build, make sure you have the following packages:

libcv-dev, libqt4-dev, libhighgui-dev and g++.

To install these use:

```
sudo apt-get install <package>
```

Compiling instructions

Run:

```
./tty-setup.sh
```

```
make
```

Operation instructions

To calibrate the camera, run robot_main while the robot is not plugged in. Then:

- Click on the ball (on a part with a strong colour)
- If required, adjust the sliders for hue and saturation as required, until optimum values for ball detection are achieved.
- Close the window to quit. The calibration settings are saved to a file.

Start the follow program with the robot plugged in and on using:

```
./robot_main
```

And quit with the enter key.

Fun things

If you fancy becoming a robot master, there's also ./robot_cmd Compile with `make robot_cmd`, then type `<direction (l/r/w/f)> <time (ms)>` to control the bot and q to quit. E.g. `f 2000` causes it to move forward for 2 seconds.