

ELE 205 Lab #3

This lab is designed to integrate the LCD display with a photo-detector that can determine heart rate.

1. Develop a circuit for connecting a Cadmium sulfide variable resistor to your Arduino.
2. Develop a software algorithm that detects the fundamental rate of an input signal. Use it to detect the rate of a sensed pulse from the photo-detector (hint: use derivatives)
3. Detect the heart rate from a finger held over the detector and display it on the LCD. Cover the range from 40 to 180 Beats/Min