

Team 08: RC360 Detector
Test Plan Overview
11/22/2015

1. Test PCB
 1. test connections on soldered components, i.e., ground signal is reaching where it's expected to
 2. test power rails
 3. test that programming works reliably
2. Test proximity sensor
 1. LEDs should illuminate in sequence as object gets closer
 2. buzzer should buzz when an object enters the 'danger' region
3. Test the reset button
 1. Test that when the system powers up, it should be in the INIT state, where the motor is not spinning, and all 3 LEDs are illuminated
 2. when the button is pressed, the motor should start spinning, and proximity sensing should begin
 3. when the button is pressed again, the system should go back to the INIT state
4. Test motor rotation
 1. motor spinning should be fast enough to detect objects with useful frequency
 2. proximity sensor should not detect spurious objects, such as the floor, or itself