

S.H.I.E.L.D.

(Stairwell Home & Industrial Emergency Lighting Design)

Team 5



<http://www.instructables.com/id/Automatic-Led-Stairs-Controller>

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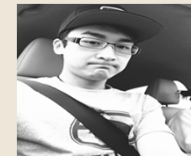
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Description

- Purpose of Product – Provides safety measures in the case of an emergency
- Feature 1 - Automatically illuminates stairwell when Person approaches
- Feature 2 - Counts the number of people above or below the main level for emergency first response
- Feature 3 - Has backup emergency lighting if Main power is lost
- Feature 4 - Intelligent lighting based on ambient light
- Market - USA

Key Requirements

- **Cost**
 - Sales Price: \$275.00, Component Cost: \$140.00, Assembly & Test Costs: \$60.00
- **Environment: Indoor, Stationary**
 - Operating Temperature: 10°C-40°C
 - Operating Humidity Range(0%-80%)
- **Power Inputs:**
 - Residential AC Power(102-132V@60Hz & Max 3.2Amps)
- **Major Functions:**
 - Automatically illuminates stairwell when Person approaches
 - Counts the number of people above or below the main level
 - Has backup emergency lighting if Main power is lost

 - Intelligent lighting based on ambient light

Detailed Block Diagram

