

# Detect Sensor (6A)

---

- Detect Sensor Type
- Detect Sensor Characteristics

Copyright (c) 2009 Young W. Lim.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

Please send corrections (or suggestions) to [youngwlim@hotmail.com](mailto:youngwlim@hotmail.com).

This document was produced by using OpenOffice and Octave.

Y o u n g   W o n   L i m  
1 0 / 8 / 0 9

# Detect Sensors

---

## Occupancy Sensor:

- detect the presence / absence of an object

## Motion Detector:

- detect a moving object

## Contact Type

- micro switch

## Non-contact Type

- photo-electric sensor
- proximity sensor
- IR sensor

# Photo-electric Sensors

---

**Through-beam Photo-electric Sensor**

**Reflex Photo-electric Sensor**

**Diffuse-reflection Photo-electric Sensor**

# Proximity Sensors

---

**Inductive Proximity Sensor**

**Capacitive Proximity Sensor**

**Ultrasonic Proximity Sensor**

**Reed Switch**

# Passive Infrared Motion Detector

---

## **PIR (Passive InfraRed) Motion Detector**

- **Pyro-electric Effect**
- **Detect far IR radiated from human body**

## References

- [1] <http://en.wikipedia.org/>
- [2] Nam Ki Min, Sensor Electronics, Dong-il Press