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**SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING
(INSTRUMENTATION)**

PROJECT REPORT

ON

**INFRA-RED MOVEMENT SENSOR
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ABSTRACT

This project is about Passive InfraRed (PIR) sensor. It can be used to avoid our house from intruder. The device works by sensing a change in radiated heat, caused by movement of human body by the fact that human body emits infra-Red radiation.

It can be divided into two parts. The Interface as a receiver and detector as an input. Interface can accept up to four detectors which we can put in different places.

The sensitivity is also important to make sure that it can just detect a human body.

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PRAYER

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1.0 INTRODUCTION

1.1 General

The Passive-Infra Red (PIR) as the sensor is used in most current model alarms, as it is more reliable way of detecting an intruder without detecting everything else. This project consists of an interface PCB, which can accept up to four PIR detectors. The interface has a relay stage and an integrator to count pulse, minimising false alarms. It also has a voltage regulator and can power all four modules of detector.

The heart of the project is the passive infra-Red sensor (PIR) device. This work by sensing a change in radiated heat, caused by movement of a human body. An important feature is that the unit can be operated from batteries rather than from a main supply, there is no power drawn during stand by and very likely be interfaced into an existing alarm system. So it can be updated rather than replace entire alarm.