

## **ABSTRACT**

Environment security is everyone's needs. A good environment security must start from the smallest and then continuous with a security system large environment. The smallest security environment start from the home security.

High rates of crime especially theft often happens in a residential or office si now makes security a necessity that is absolutely necessary. Besides that human activities in an era of mobile technology like now makes them not have time to do it themselves. One of the way is taken is to hire a security to keep the safety. But this is considered burdensome because the cost enough expensive and considered ineffective because security capabilities is very limited. Depart of this thinking the writer tries to design a system that can detect the movement of person's when the home in an empty condition, left by their owners. This tool has a working principle of detecting the shadow of a a person who passes a certain point

The result showed minimum current specification that can activate the relay and LED 62mA. Also obtained the output voltage of trafo 12,4V, the voltage of rectifier 11,05V, the voltage of regulator 5,03V, the current of laser 33,6mA, the voltage of laser 3V. Overall the tool has been running smoothly and can detect movement of a person and can do the redial telephone number of home owners.

Keywords: security, systems, relays, LED, redial