## **ABSTRACT**

Today many of the problems that are often disturbing the community including fire, theft, and so forth. Therefore we caution against important objects in a room should be improved to avoid such problems, especially theft. To help the security forces in carrying out their duties then be made of a detector (sensor) that works when the security will be theft. This tool is helpful in monitoring security both at home and office. But on this final project created a security tool that will be used in the housing.

In this tool there are so many components, but the most berpaeran for transmission is the Transceiver module. In this tool there are two sets of Transmitter and Receiver. The series made starts Transmitter PIR sensor inputs that are active low as connected with ground. Input will be processed on ATMEGA8535 with BASCOM language and will issue a outputan on TX and RX ports. Kemuidian by transceiver modules will be sent to the receiver circuit. In a series of receivers, the data received by the transceiver module is then processed by ATMEGA8535 and give orders to the circuit load.

At the end of the project the author of "Using the Keypad Door Security System and Wireless Communications" which has been successfully transmits data using RFmodules and can be controlled by the keypad and on the receiving side can produce output that is on the LCD, alarm, and LED. Only humans and animals that canterdektesi by the sensor. The distance record for transmitting data that is 105 meters in LOS conditions.

Key words: RF Tranceiver, Mikrokontroler AVR ATMega8535, BASCOM (Basic Compiler), Sensor PIR.