

## **ABSTRACT**

Nowadays, people feel that safety isn't conducive enough, many robbery and criminality to the motorcycle driver and effect many disadvantage especially in material things that mean really matter to some people. Higher people demands in usage of safety device to their motorcycle, this situation encourage making safety device in motorcycle.

This safety system used infra red as communication media from transmitter to receiver. At transmitter, infra red remote as main key and at receiver is also used keypad as alternative key if at infra red remote can't be used. Control system in transmitter and receiver using AT89C2051 and AT89C51 microcontroller. At infra red remote there are some button that can be used for activate security, lock CDI, and lock the motorcycle. Data transmission Process from infra red remote to receiver use carrier frequency around 39.68 KHz.