

## **ABSTRACT**

Security is very important, security would be achieved if conditions around us are safe and conducive. But now so many things that can make us feel uncomfortable and anxious, because there are many crimes are happening around us, one of which is many motorcycle thefts are happening now.

Therefore, the authors make a device that will be installed on a motorcycle and use to motorcycle security system that aims to reduce the rate of motorcycle theft occurs. The tool made of two pieces of Mobilephone, Detector Dual Tone Multiple Frequency (DTMF), microcontroller circuits, Relay. Mobilephone to interface to motorcycle and user. DTMF detector use to converter DTMF signal into a digital form, Relay as a switch to connect and disconnect the power and the CDI on the bike.

After testing, the device has been realized that can work with an average delay of the system (the command to execute command) about 1.3 to 1.5 seconds for the control system on / off electrical, CDI (Capacitor Discharge Ignition), starter and horn . And the maximum distance on testing around 1.463 KM

**Keyword:** Mobilephone, Microcontroller, Relay, DTMF, CDI