

Kita bisa karena kita mau belajar dan berlatih
Kegagalan pasti ada, namun terus mencoba dan berusaha dengan tidak mengulang
hal yang sama
Untuk mendapatkan hasil baik
Sehingga kepuasan akan kita dapatkan!!!
(Cakra)

**Sebuah karya persembahkan untuk ayah dan ibu serta keluarga yang selalu
hadir untuk menumbuhkan semangat...**

ABSTRACT

Nowadays motorcycle theft in indonesia become more often. Criminality is happened because there is an opportunity to do it. Therefore, most of the theft is because the owner forgets to lock the motorcycle. This is because most of them too busy with their works so when they are in a hurry, they forgets or even too lazy to lock their motorcycle safely.

Because of that, we made motorcycle security system to help the owner not to waste their time to lock the motorcycle. Therefore, motorcycle automatic lock system made easier to be used. The way this system works is when the motorcycle was off, the user only has to press the button then there are several system that work. First, engine be cut off and then gear locked so it make motorcycle can not be moved. The lock can be open by using the RFID card that tagged to the right owner. If using the wrong RFID card, the system in the motorcycle will send a signal to warn the owner, that someone trying to turn the motorcycle on.

This system is using the accu of motorcycle as its power. It consumes ± 15 watt of power for this motorcycle system and then most power used by solenoid and Atmega16. Using RF APC220, the communication of data reach maximum distance $\pm 80m$ in the open field condition and $\pm 40m$ in the blocked by buildings. The system also has delay, 1.9s to lock and 2.63s to open the lock.

Keyword : RFID, Relay, Solenoid, RF APC220