REMOTE CAR STARTER USING RADIO FREQUENCY (RF)

by

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Report submitted in partial fulfillment of the requirements for the degree of Bachelor of Engineering

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This project report titled Remote Car Starter Using Radio Frequency was prepared and submitted by Mohammad Sabry Bin Alias (Matrix Number: 031080583) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering (Computer & Communication Engineering) in University Malaysia Perlis (UniMAP).

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SISTEM KAWALAN PENGHIDUP ENJIN KERETA MENGUNAKAN RADIO FREKUENSI

ABSTRAK

REMOTE CAR STARTER USING RADIO FREQUENCY

ABSTRACT

Nowadays, most of the remote control is a controlling device using infrared transmission method. Unfortunately, it can only control a device one at the time. This proposal discusses about the design and implementation of a “Remote Car Starter Using Radio Frequency”, where this device will allow user to start his/her car from house, office, school etc. The main goal for this project is to set up a good temperature in the car before we start to drive it. This will ensure that the car will be in a good condition for all time being. Radio frequency is been used as a communication path between the receiver and transmitter, where it has its own frequency value in terms of security purpose. Therefore, RF module at 315 MHz is used which it consists a receiver and transmitter path. Once the address is synchronize between the receiver and transmitter module, then the data from encoder can be transmitted by the transmitter to the decoder at the receiver path, where it will be connectted to the output of the receiver circuit. In this case, it will connect to the engine starter and also to the air conditioner button inside a car. The benefits of using a radio frequency as a communication path are because it can transmit the data from a distance and with few barriers along with it. Also, it can control more than one output device at a time, where this save a bit of time for the user. The benefits of having a “remote car starter” are for start and stop the car’s engine from distance, to enter a car where it is not hot during sunny days and also to take care of the car, because it is always better to let the car warm up properly before driving it.