

***Bluetooth Connection Based On/Off Engine Control System Using
Arduino Mega on Electric Vehicle***

by

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ABSTRACT

To make a design so that you can turn on electric vehicles using a smartphone by utilizing the android application and connecting to electric vehicles via Bluetooth so that the on/off of electric vehicles can be controlled via a cellphone. To make this design use Arduino Mega, Bluetooth Module and Relay, in which Arduino Mega functions as a controller that gives orders to the Relay to be active on logic high or low. Than the Bluetooth module functions as a link between the cellphone with electric vehicle. The purpose of this study is to determine the performance of the Bluetooth smartphone response with the device when controlling the engine on/off in electric vehicles. The overall test results that have been carried out, the on/off engine control system based on a Bluetooth connection using arduino mega on electric vehicles it can be concluded that this tool is able to work as expected and function properly marked by a Bluetooth response when controlling the engine on/off application a smartphone with a connected device up to a maximum distance of 12 m and vice versa does not function properly when the Bluetooth response controls the engine on/off at a maximum distance of 15 m and the smartphone application Bluetooth is not connected to the device.

Keywords: *The Engine On/Off, Arduino Mega, Bluetooth*