

***Design Remote Switch On/Off And Starter Motorcycle Based On Android Using
Aduino Uno***

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ABSTRACT

This research focuses on designing a motorcycle remote device using an android smartphone. The purpose of this research is to take advantage of technological advances in the automotive sector. And help make it easier for motorcycle users to start the vehicle remotely. For the design of this Bluetooth controller, it consists of several components, including Arduino Uno ATmega382, Relay 4 Channel and Bluetooth Module HC-05. The Arduino Uno programming process in this study uses the Arduino IDE application. then the remote application on the smartphone uses the Motorcycle Control application created by Azka Electric. The results of the design of the Bluetooth controller in this study the device functions well. The range is quite far up to ± 30 meters in open spaces, and ± 17 meters in rooms with many obstacles. Respondents gave positive responses to this tool, and of course also helped by this tool. The features in this tool are engine On/Off features, engine start features, voice control features and additional safety features. Additional security functions to turn off the motorcycle engine and cannot be turned on again even though the motorcycle lock remains in the ON position. Additional security features on the tool will be very helpful if at any time our motorbike is stolen while in the middle of the trip. For the voice feature on this tool, the way it works is like the Google Assistant. Users only need to press the button with the microphone logo and then say the command to turn on the motor then the motor will turn on. In this study, the authors also conducted research by means of a survey using a questionnaire, to find out how the public responded to this bluetooth controller.

Keyword : *Design of Bluetooth controller, Arduino Uno ATmega382, Arduino IDE*