

ABSTRACT

In this modern era, there are many Android applications using Bluetooth technology. Easiness of using Bluetooth technology is due to its affordable price and it can be controlled from a considerable distance. One of the implementation of Bluetooth application for Android-based devices is the remote control of a vehicle. A vehicle such as electric scooter can be easily controlled from a smart phone or tablet by installing the Bluetooth module then paired it with Android-based device. After successful pairing, the Android-based device can be used to control the electric scooter.

This research designed a remote application which was implemented on Android-based devices such as smartphones or tablets. This application is then used as a remote control for electric Otopad. This study used a microcontroller module ATmega128A as the main controller, and HC-05 Bluetooth module which was planted on electric Otopad as a connecting media between ATmega128A with Android-based devices.

The final result of this research is in the form of application of bluetooth technology on the Android-based device served as a remote function or remote control for electric Otopad. From the test results obtained averaged delay for 0,94678 seconds for the forward movement, 0,94533 seconds to turn right, 0,95616 seconds to turn left, and 1,59555 seconds for the pairing process.

Keywords : Android, Electric Otopad, *Bluetooth*, remote, Microcontroller