

ABSTRACT

Telkom University Dormitory is one of the buildings in the Telkom University which is used as the residence of students. Therefore it takes electricity to help the lighting system to support both academic and non-academic activities. Lamps are a very important need in the lighting system, especially students who live in the Telkom University Dormitory Building. The most common problem is the lack of effectiveness and efficiency in controlling and monitoring the lights in the dorm.

This final task provides solutions how the lighting system can be controlled and monitored effectively and efficiently using the Remote Outlet Switch. Remote Outlet Switch is a tool that can control the lighting system that is accessed using a frequency radio where the user can switch on/off the lights, control and monitor, and obtain information about the lamp conditions through remote Outlet Switch remotely and conditions that can be set using the baudrate and power available. Remote Outlet Switch modulated data through Radio Frequency.

The result of Remote Outlet Switch can serve as a control device and monitor lighting system that is obtained with minimum and affordable price in terms of operational resource efficiency and functional usage effectiveness. With the results of the test obtained, the coverage of the device is able to meet the standards of the University of Telkom dormitory building as the location of the final task with a maximum average delay of 0.26 second using baudrate of 9600 bps in non-LOS (Line of Sight) conditions.

Keywords : Remote Outlet Switch, Baudrate, Radio Frequency, Line of Sight