

ABSTRACT

Visible Light Communication (*VLC*) is a communication system using one of the functions as a carrier of information between devices. Then on the system of applying Visible Light Communication technology this time it is carried out in the room with the data transmission section using LED while data reception uses solar cells and *photodetector* array.

At the Final Project this time, the implementation of an indoor reception system was carried out using a communication system on Visible Light Communication. Where, the *Rx* system is designed as a light detector for receiving information data in the form of images. By using the VLC communication system, the receiver can capture Visible Light Communication from both devices in the form of digital data information signals that are converted into binary or hexadecimal by using USB to TTL that has Realterm software installed.

From the results of testing that has been done in a room of 3x3m² and the angles of 0⁰, 10⁰, 45⁰, 90⁰. So, it can be concluded that for the success test seen from distance, angle, luxmeter and the size of the received image. Whereas, during testing the receiver was carried out using 9600bps baud rate and the largest lux value of 1606 lux in bright conditions.

Keyword : Visible Light Communication, Indoor, Foto Detektor, Receiver.