

ABSTRACT

In the present era many new innovations in the field of technology one of them send data and receive data through a light media called VLC (Visible Light Communication). VLC (Visible Light Communication) is a communication system that utilizes light as a medium in communication between devices. The device used is a VLC module that uses serial communication from visual studio 2015 and a photodiode that functions to convert light waves to analog or digital waves. Communication visible light that will be done is the delivery of digital data in the form of images and text. First of all the data will be transmitted through the transmitter with LED 10 watts, which will then be received at the receiver side with phototransistor. From here it will be placed 1 LED again near the transmitter with variable distance from 1-25 cm. From the test results obtained the success rate displays the files sent by the transmitter of 100%, this is because the files transmitted by the transmitter are all received by the receiver with a distance the maximum between the transmitter and receiver is 15 cm with the maximum number of characters is 32 bits.

Keywords: VLC (Visible Light Communication),LED, Photodiode ,Transmitter, Receiver.