ABSTRACT

In this era many new innovations in the field of technology one of them send data and receive data through the 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 module VLC-based Arduino Uno and a photodiode that serves a modifier of the light wave to wave analog or digital. Receiver built function capturing the light waves emitted by the transmitter, so that data communication delivery in the form of text that is sent using the light media . The text received by the photodiode will be displayed by serial monitor. From the test results obtained the success rate of displaying the text sent by the transmitter at 100%, this is because the text sent by the transmitter everything is received by the receiver with the maximum distance between transmitter and receiver is 15 cm with the maximum number of characters is 32 bits.

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