

ABSTRACT

System VLC (Visible Light Communication) moving at light communication system, which was developed into a Li-Fi communication system for future technological advances. Until today the development of VLC is still not known to the general public, especially for internet communication. VLC systems in use for a stable speed and power that is in use is also less, because the use of LED lights on the system. In this final project designed and realized communication system Li-Fi. VLC communication system designed in this final project consists of a transmitter and receiver blocks. In this scheme simulated communication systems light using LED lights as the sender and recipient. From the test results maximum range is as far as 2cm to time the speed of the average - average minimum and maximum speed time 0.15s 0.78s on each shipment of different characters.

Keywords: Li-Fi, VLC, LEDs, Transmitter, Receiver.