

## ABSTRACT

The medium of transmission of may be divided of various types starts to use cable until without the use of cable. Many new innovations in the medium of transmission of for example use visible light. As that have been known that led now no can only be used a light but also can be used as the medium of transmission of or medium the sending information.

In a project end of this to be realized control system to control the automatic doors cross *Visible Light Communication* as transmission. This device consisting of a lamp as a modifier electric to light, photodiode as a modifier light to electric, and data receiver. Through realization they can be we noticed that data transmission through light can occur, can be used to send data .The data in transmission right the finished project this represents data binary of the output of lights on the transmitter and on receiver a lamp that connect to switch as an engine of cross bar to control system the automatic doors cross.

The result of design they can be prove capable send data binary through visible light to the distance maximum 100 cm. Based on the results of the finished project this found that performance of operations *receiver* work on power maximum  $\geq 2.44$  dBm to voltage input 5 Vpp, the time of the execution process on *receiver* with maximum distance 100 cm have a *delay* 3.92 second, The system works maximally send a signal information between *transmitter* and *receiver* from a  $0^\circ$  s/d  $\leq 10^\circ$ .

***Keyword: Visible Light, Visible Light Communication, Data, Transmission of Light, Transmitter Data, Data Receiver***