FINAL YEAR PROJECT REPORT

DATA COMMUNICATION THROUGH LASER

Project Advisor

Mr. Abu BakarSiddique

Submitted by

Muhammad Ali-091420122

Hafiz RazaIftikhar - 091420151

Muhammad Hussain Abdullah -091420-158

Department of Electrical Engineering

School of Engineering

University of Management and Technology

DATA COMMUNICATION

THROUGH LASER

Project Report submitted to the

Department of Electrical Engineering, University of Management and Technology

In partial fulfillment of the requirements for the degree of

Bachelor of Science

In

Electrical Engineering

Muhammad Ali-091420122

Hafiz RazaIftikhar - 091420151

Muhammad Hussain Abdullah -091420-158

CERTIFICATE OF ORIGINALITY

This is to certify that the project report entitled **Communication throughLaser Light** Submitted to **University of Management & Technology** in partial fulfilment of the requirement For the award of the degree of Bachelor of Sciences (Electrical Engineering)**,** is original work carried out by Mr. Muhammad Ali (091420-122), Mr. Hafiz RazaIftikhar (091420-151), and Mr. Muhammad Hussain Abdullah (091420-158) under my guidance.

The matter embodied in this project is genuine work done by the student and has not been Submitted whether to this University or to any other University/Institute for the fulfilment of the Requirement of any course of study.

Signature of the Students:

Muhammad Ali ....

Hafiz RazaIftikhar ....

Muhammad Hussain Abdullah ....

Signature of Advisor:

....
Mr. ABUBAKAR SIDDIQUE

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Acknowledgement

Our first and foremost thanks are to ALLAH for his countless blessings in enabling us to complete this project. Thanks to our families for providing us the support we needed throughout this period. We would also like to thank the faculty, colleagues, and FYP (Final Year Project) committee members, lab assistants, our advisor Sir ABU BAKAR SIDDIQUE.

ABSTRACT

For remote system, free-space optical correspondence framework can give cost viability, high velocity, simplicity of sending, and enhanced the limit well. This paper addressed the developmental mode and the configuration of the laser transceiver. Laser transceiver plays a role in interchanging information's between two different workstations by means of free space optical connection.

JAVA characterized the serial ports of PCs which are utilized in this extend. A laser pointer is utilized for electrical to optical sign transformations as a optical hotspot for transmitter areas. Optoelectronic transformations performed by the help of phototransistors at the collector area. We utilize Max 232 in order to replace over RS 232 rationale to TTL rationale, further a circuit which works optically for transmittance of information used by the means ofoptically free-space connection. In case of recipient we deal with an optical collector that utilizes the photograph, transistor and a MAX 232 to replace over TTL rationale to RS 232 for the serial port when seems to be getting close machine and appropriates the information. Sought baud rate might be set by utilizing the project.

In order to transmit information the project needs to be run for one time and data available at serial port made transferred to next machine through means of free-space optical connection. At the recipient, system is ready to run to appropriate the information on the serial port. The laser transceiver allows only two workstations with serial 232-RS competing correspondence to impart using a laser pillar.