University Of Barisal

PROJECT PROPOSAL
Laser Security Alarm System

PREPARED FOR

Peripherals & Interfacing Project Exhibition
Supervised by
Sohely Jahan (Lecturer)
Dept. of CSE

PREPARED BY

Sourav Chandra Biswas
16CSE018
Asif Chowdhury
16CSE016
Department of CSE
University of Barisal

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I. OVERVIEW

Laser based Security System is a type of security and alarm system that uses laser light and a light sensor. A security system protects our homes, offices, banks, lockers etc. from intrusion and unauthorized access. There are different types of security systems available and laser based security system is an important and efficient type.

II. PROBLEM/NEEDS

Laser Security System is in use for a long time. This problem requires some basic knowledge of peripherals in order to implement it.

III. GOALS & OBJECTIVES

A Laser security system can acts as a standalone system, which makes some sound or noise when it detects any irregular activity, or can be part of a much bigger security and home automation system, which can send messages, call the owner etc. So our goal is to secure our preciouses from potential threat.

IV. SCOPE OF WORK

With its latest technology features, crime is deterred. Intruders will rather skip or would not prefer to waste time in cracking its code. Also, it imparts fear in their mind.

• Also, it alerts the law enforcement officials via the monitoring system of the alarm.

• Crime detection and control in the area.

• Safety and security to the homeowners.

• It can be tracked when you are not in your home with automatic messaging service to your mobile phones. In other words, during the intrusion, it will send alert to your phone.

• This system work on batteries and not electricity, which is functional even after power cuts.

Hence a lot of scopes are created nowadays on behalf of laser security alarm system.

V. RISKS	
RISK	We have used a laser pointer in this project. Direct exposure of laser light on eyes can be very dangerous. Even though it is a low power laser, avoid direct eye exposure of laser.

VI. CONSTRAINTS

- LM358 (Op – Amp IC)
- NE555 (Timer IC)
- LDR
- 3 x 10 KΩ Resistors (1/4 Watt)
- 220 Ω Resistors (1/4 Watt)
- 10 KΩ Potentiometer
- BC547 (NPN Transistor)
- Small Buzzer
- 100 nF Capacitor (Ceramic Disc Type Capacitor – Code 104)
- Push Button
- Laser Pointer
- 9V Battery
- Connecting Wires
- Breadboard (Prototyping board)

VII. ASSUMPTIONS
We assume to have enough Financial Supports from the department. Because this is a costly project.

APPENDIX

I will take help from some online resource platform in order to make project great. I have listed them below.

DOCUMENT	DESCRIPTION	LOCATION
electronicshub	This is a website where one can learn efficiently.	https://www.electronicshub.org
Google	Search Engine	https://www.google.com
Wiki	Knowledge box	https://en.wikipedia.org

THANK YOU FOR GIVING YOUR TIME ON OUR PROJECT .