LAER LIGHT SECURITY SYSTEM USING ARDUINO WITH ALARAM

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ABSTRACT

This research paper is to analyze, that now a day's security is an important aspect. Technology develops day by day in the world. Now days the crime gang also improves their technology to carry out their operation. So, technology of security should be modern with time to protect the world from crime. We decide to make a security issue as our project. In this project we have used laser beam to cover a large area. We know laser light goes to long distance without scattering effect. It's additionally obvious just at source and occurrence point, in any case invisible. These two properties help us to develop a modern security for today's days system, which may name as "Laser Security System." When any person or object crossover the laser light, automatically the buzzer starts ringing. Laser beam goes through long distance without scattering effect and the ray is almost invisible. The project involves the use of Arduino UNO, Laser light, Buzzer, LDR and a simple program. With this equipment's we can easily set up a security alarm anywhere for unwanted intruders. A Laser Security System goes about as a standalone system, which makes sound or commotion when it distinguishes any sporadic action or can be part of a much bigger security or any other automation system which can alert owner.

Keyword: - *Arduino UNO, Laser Light, Jumping Cables, Buzzer and LDR.*

1.INTRODUCTION

Security is a most important factor in day to day life. Need of security is the basic necessity of every individual. The feeling that we are safe and everything around us is all right is imperative for a peaceful living. Be that as it may, in this unsafe world, when crime, terror and dangers are on their pinnacle, how might one achieve that suspicion of safety? For that Here, laser security system provides us with a solution and for this reason more and more people are installing them in order to stay safe and secure. Different electronic security systems can be utilized at home and other significant working spots for security and safety purposes. Laser Security alarm is a device used for security purposes. It has a wide application in fields of security and defense starting from the security of a simple house hold material to a very high valued material of an organization. They once used to be very expensive solutions for security needs. Owning to cost cutting and fast technological advancements, this form of security system is becoming more affordable. We probably seen an old western movie where the good guys settle down and run a string at ankle height around their camp, tying it to the filled with rocks. When the bad guys try to sneak up in the mid night, they kick the wire and pull over, making a rattle that awakens the sleeping good guys, who win the day. A laser security system works with the same principle. Instead of a string, there's a ray of light surrounding the area, and instead of the rocks, there's an alarm of one sort or another

1.1 OBJECTIVES

The main objective for developing this system is:
1. To provide security for home this is useful.
2. To provide a user-friendly system

3. To provide security for bank lockers
4. To provide a cost-efficient system.
5. To protect a valuable item.
6. To protect the individual from terror
and threat in the unsafe world.
7. To make and study the functions of
laser security system

1.2 COMPONENT OF PROJECT

1. Arduino UNO Board
2. LASER Diode Module KY-008
3. Buzzer
4. LDR
5. Resistors (10k)
6. Push Button Switch
6. Bread Board
7. Connecting Wires

2. WORKING

The project basically works on the principle of interruption. If by any means the LASER light is interrupted the alarm will start unless it is reset with push-button. The laser is a concentrated light source that puts out a straight beam of light of a single color. The LDR is sensitive to light and puts out a voltage when the laser light hits it. When the laser beam is interrupted and can't reach LDR, its voltage output changes, and eventually the alarm will ring.

Circuit Dig
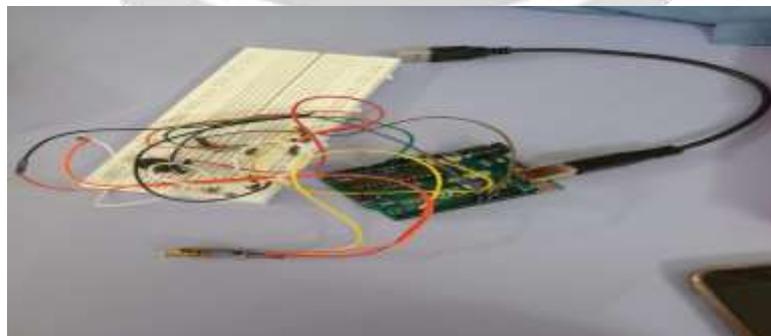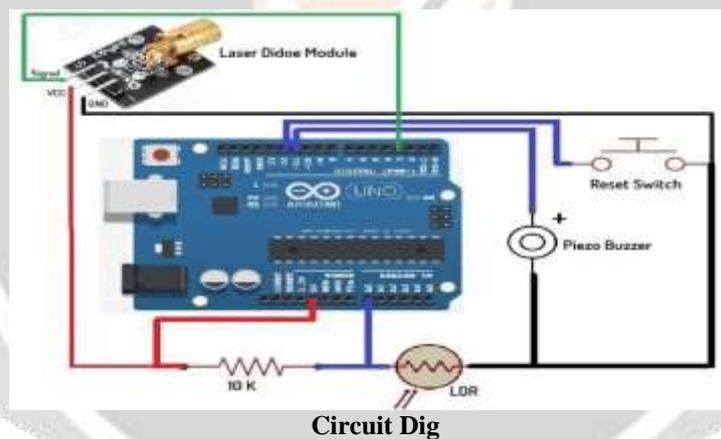
Fig -1: Snapshot

4. CONCLUSIONS

Laser Security System gives us the protection from any crime, theft in our everyday life thus individuals are installing them so as to remain sheltered, secure and sound. Various electronic security systems can be used at

home and other important working places for security and safety purposes. It is one of the best opportunities and source of saving man power contributing no wastage of electricity. The "Laser Security System" is an important and helping system. Using this system robbery, thefts and crime can be avoided to large extent. Avoiding thieves results in the safety of our financial assets and there by their system provides us protection against all. The laser beam and LDR module system is highly sensitive with a great range of working. The system senses the light emitted by the laser falling over the LDR connected with the circuit. Whenever the beam of light is interrupted by any means, it triggers the alarm or siren. This highly reactive approach has low computational requirement therefore it is well suited to surveillance, industrial application and smart environments.

5. ACKNOWLEDGEMENT

6. REFERENCES

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