

Implementation of High Security Electronic EyeAlarm System Using RF

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ABSTRACT

This Electronic eye security control system is called MagicEye. Due to security concern this project "Implementation of High Security Electronic Eye Alarm System Using RF" proposes a super visionary system using WIRELESS TECHNOLOGY which secures from clipping of wires. This system takes both advantages and disadvantages and obtains a better solution. In the existing system if intruder enters house or any other house the sensors senses them and sounds the alarm, it is lagging in security i.e., information is not reached to the owner regarding the theft. In the proposed system when the intruder moves behind the Light Dependent Resistor (LDR) the data will be encoded and transmitted. The Receiver section receives the data and decodes it and rings the alarm.

1. INTRODUCTION

In 21st century all the advanced things in the world are made with electronics. Now a days the world is running with electronic substances. There are few things which are really special to the person, so to protect those things from bad environment we need to install the Alarm System. An alarm system will protect from bad environment which we don't want to face. when we install an alarm system, we can avoid UN suitable situations. These alarm systems can be used as fire alarm and anti- theft alarm device. We can also implement gate alarm for ate control from receiver side. Advanced technology has become the integral part of our life [1]. To satisfy the need of the society, almost in each work, we use the technology [2] [3]. In current era computer science is major subject [4]. It has many real life applications such as cloud computing [5], artificial intelligence [6], remote monitoring [7], Wireless sensor network [8, 9, 10], internet of things [11, 12, 13], Neural network [14, 15], FSPP [16, 17, 18], NSPP [19, 20, 21, 22, 23], TP [24, 25, 26], internet Security [27], uncertainty [28, 29, 30, 31, 32] and so on. Technology is the mode by which user can store, fetch, communicate and utilize the information [33]. So, all the organizations, industries and also every individual are using computer systems to preserve and share the information [34]. The internet security plays a major role in all computer related applications. The internet security appears in many real-life applications, e.g., home security, banking system, education sector, defense system, Railway, and so on. In this manuscript we discuss about the protection of authentication which is a part of internet security.

2. LITERATURE SURVEY

The alarm gives audible or visual signal when there is a problem, often these alarms give siren. When the vibration is received from sound emitter it generates electro motive force, then circuit oscillates and issues the alarm. Some of the papers use IR transmitter and receiver. With this circuit the intruder easily identifies the IR rays and remove them or jump without touching it. As some papers say that whenever the intruder identifies the main door of the house will get shut down and message will be sent to the nearby police station and to the owner of the house. This is risky job. If we are having any person in the house the intruder might cause harm to the persons who are in that house.

Some of the papers say about providing the lock pattern to the house. In these systems it is easy to hack the lock pattern by placing some spy cams. Some of the papers are having the buzzer at the crime side, so that criminal may flee easily when he or she listens the siren. Some of the circuits use wireless technologies to alert the neighbors by using the RF transmitter and receiver like you see in this project. The data will be transmitted and we may use multirole receiver of the same address byte and can install it in the apartments. If you are interested to install the alarm system in number of houses you may use 2[^]8 combination. Number of installations is possible with the great RF 433 MHz transmitter and receiver circuit. Care must be taken that both address and receiver must have the same address.

3. PROPOSED METHODOLOGY

The proposed system consists of RF transmitter and receiver module with encoder and decoder IC. These encoder IC consists of 8 address lines such that we can install that device in eight places. When the intruder passes behind the LIGHT DEPENDENT RESISTOR (LDR) the data will be encoded by the encoder and then

transmitted with antenna. The receiver decodes the received data and amplifies it and given to the 555 Timer and this timer sounds the alarm. The receiver section can be placed within 100 meters and can be increased up to 300 meters by increasing the power supply. This project has various applications in industries, banklockers, homes etc.

3.1 Requirements:

- 9v Battery
- RF transmitter and Receiver
- HT12D Decoder
- HT12E Encoder
- 5555 Timer
- Light Dependent Resistor
- Buzzer

4. APPLICATIONS:

- It is used at bank lockers.
- It is used for child monitoring.
- It is also be used in houses.

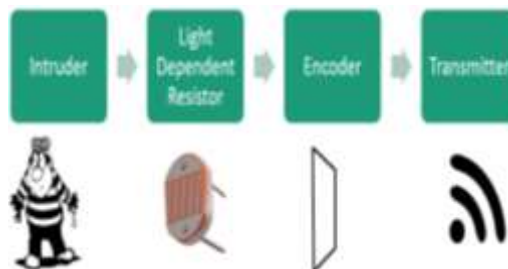


Fig 1. Circuit Diagram of Receiver

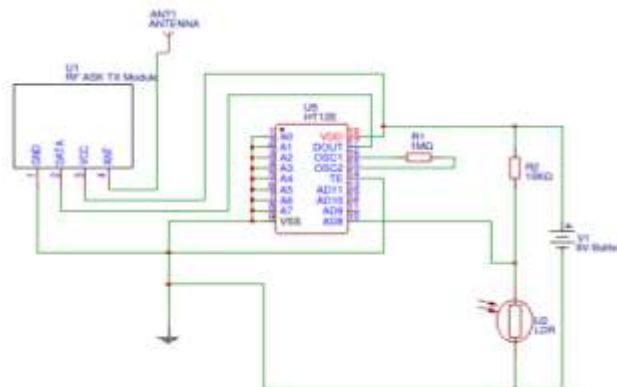


Fig.2 Block diagram of Transmitter

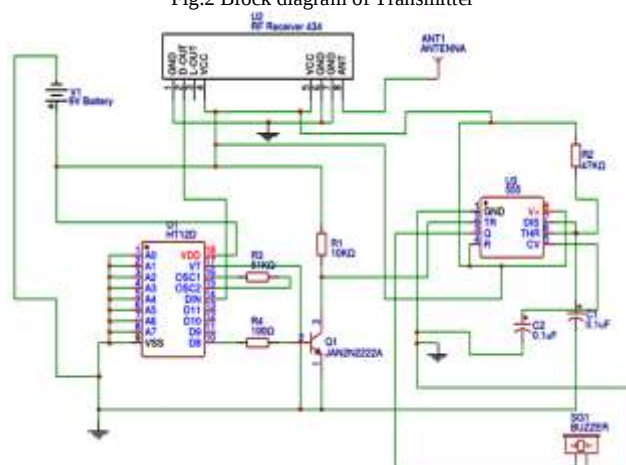


Fig 3. Block Diagram of Receiver

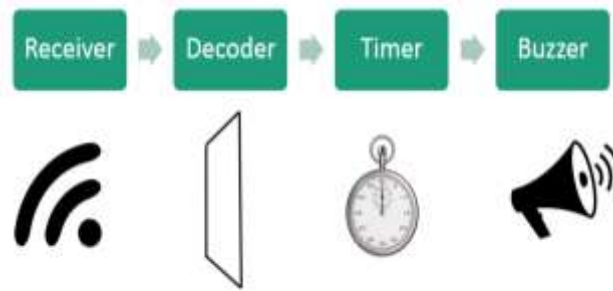


Fig 4. Result

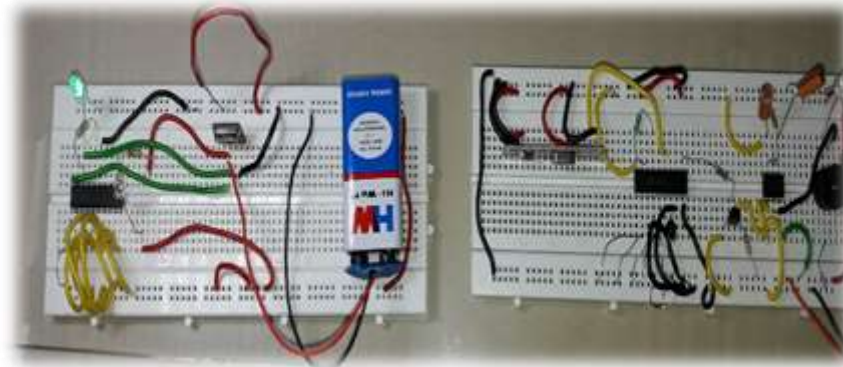


Fig 5. When intruder is not present Alarm & LED doesn't sound, glows

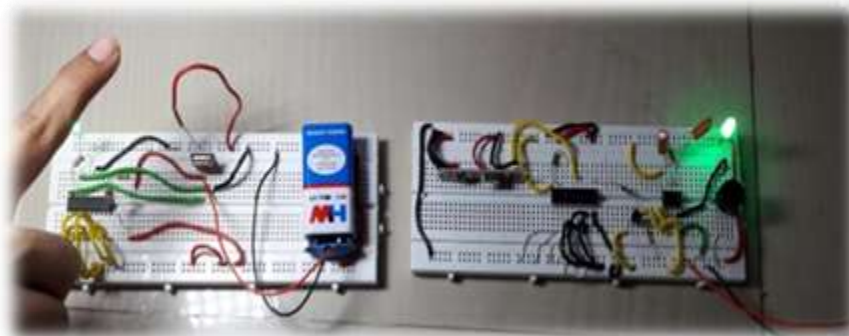


Fig 6. When intruder is present Alarm sounds & LED glows

5. FUTURE SCOPE

In the future we expect that the transmission range will be improved.

5.1 Advantages:

- Low cost
- easy to carry and place

5.2 Limitations:

- Light Dependent Resistor senses very low distance.
- Light Dependent.

6. CONCLUSION

In this project we had overcome two problems, one is clipping of wires and another is blocking the thief in the house. Thus we implemented this project by using wireless technology to replace wires and other is placing the alarm in neighbor's house, so that the thief will not be able to escape from the robbery house because the neighbors will round off the entire house. Thus, we had implemented this project with low power, low cost, highly reliable saving many houses.

7. REFERENCES

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