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# **Alive Persons in War Fields and Azardous Areas**

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*Abstract*— The point of this paper is to build up an implanted human alive recognition framework in war fields by utilizing PIR sensor and GSM as remote innovation. There are numerous PIR sensors being used today however the sensor that is utilized will distinguish the Infrared beams that are produced from the human body. We realize that in war fields there are numerous circumstances that happen like a few people are severely injured, harmed by the shots, some of them can't encourage themselves and a few people can be oblivious (implies they might be as yet alive) there will be no brisk medicinal support of save them and because of the postponement in the therapeutic administration individuals may lose their life at the point when the therapeutic administration is given on time then that individual can be saved from death. In war handle a safeguard individual can't go to every individual to watch that the individual who are alive by the infrared beams discharged by the human body at a specific range. At the point when an alive person is distinguished in the scope of that PIR sensor at that point it sends the flag to the microcontroller and the microcontroller sends the flag to the GSM (worldwide framework for portable correspondence) this GSM sends the message to the protect group the message will be sent as alive human distinguished. The code contains the enrolled portable number of the protect group. At that point the protect activity will be quick in identifying the people who are alive. The safeguard group can give spare numerous individuals life at a quicker rate through this implanted framework.

## Keywords— Microcontroller, PIR sensor, GSM, LCD, Power supply.

## I. INTRODUCTION

The point of this paper is to build up an implanted human alive location framework in war fields by utilizing PIR sensor and GSM as remote innovation. There are numerous PIR sensors being used today yet the sensor that is utilized will recognize the Infrared beams that are radiated from the human body. We realize that in war fields there are numerous circumstances that happen like a few people are severely injured, harmed by the shots, some of them can't encourage themselves and a few people can be oblivious (implies they might be as yet

alive) there will be no speedy restorative support of safeguard them and because of the deferral in the medicinal administration individuals may lose their life at the point when the restorative administration is given on time then that individual can be safeguarded from death. In war handle a safeguard individual can't go to every individual to watch that the individual is alive or dead so in the place of protect individual the PIR senor will do its work by recognizing the individual who are alive by the infrared beams discharged by the human body at a specific range.

At the point when an alive person is recognized in the scope of that PIR sensor at that point it sends the flag to the microcontroller and the microcontroller sends the flag to the GSM (worldwide framework for portable correspondence) this GSM sends the message to the safeguard group the message will be sent as alive human recognized. The code contains the enrolled portable number of the safeguard group. At that point the save activity will be quick in recognizing the people who are alive. The protect group can give spare numerous individuals life at a quicker rate through this installed framework.

## II. RELATED WORK

The goal of the current venture was created as a movement sensor alert in view of PIR sensor module. The nearness of the any items it makes a sudden change in the infrared radiations. In this venture microcontroller screens the yield

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consistently from the sensor module and turns a bell on when it goes dynamic. The sensor is in retriggered mode, the bell remains on as long as the movement is ceaselessly detected. It identifies just the movement. It will identify all articles when it sense close to framework. It just identifies yet does not send any aware message of the save group. It doesn't utilize remote innovation

## III. PROPOSED WORK

This venture is executed on a 8051 based AT89S52 created board joined with PIR sensor, GSM and LCD for show reason. Electromagnetic range has Infrared radiation with the wavelength that is higher than unmistakable light. Infrared radiation can be distinguished however not noticeable to human eye. Articles that create infrared radiation and that question incorporate people whose radiation is most grounded at a wavelength of 9.4µm. The working idea of our task is that the PIR sensor which is associated with our microcontroller implanted board is detected at whatever point a person"s development. In war zones such huge numbers of will be alive. In any case, no one will deal with those. Our venture will be being used at those times. At whatever point an alive individual recognized by the PIR sensor microcontroller offers message to the individual, who is watching.

## **A.Hardware Requirements**

- 1. Micro Controller (AT89S52)
- 2. PIR sensor
- 3. Buzzer
- 4. GSM
- 5. Power supply

## **B.Software Requirements**

1. KEIL is a c compiler.

- 2. Embedded C is extension of C programming.
- 3. RIDE to write code.

## IV. BLOCK DIAGRAM

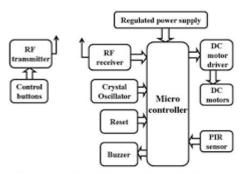


Figure1. Testing data- load current (amperes).

## PIR sensor:

PIR sensor is an passive infrared sensor which estimates the infrared radiations. The term inactive in this case allude to the way that PIR gadgets don't create or transmit any vitality for identification they work altogether by distinguishing the vitality delivered by alternate articles. They don"t recognize or measure warm; rather they recognize the infrared radiation discharged from a protest. The Plastic window covering may have different aspects formed into it, to concentrate the infrared vitality on to the sensor.

Sensitivity: The sensor is intended to modify too gradually to the changing conditions that would happen typically as the day continues and the earth conditions change.



Fig.2

## AT89S52:

The AT89S52 is a high-potential, low-control, CMOS 8-bit microcontroller with 8Kilo bytes of in-framework programming Flash memory. It is made utilizing Atmel"s high-thickness not unpredictable memory innovation and is appropriate with the business standard 80C51 smaller scale controller. The on-chip Flash empowers the program memory to change the program in-framework or by a standard non unstable memory software engineer. By consolidating an adaptable 8-bit CPU with in-framework programming streak one solid chip; the Atmel AT89S52 is a potential miniaturized scale controller, which renders a profoundly adaptable and financially savvy answer for some installed control applications.

## LCD:

A fluid gem show (LCD) has a level showcase and is thin gadget comprising of many shading or monochrome pixels which are situated before a light source or reflector. A program must and ought to give collaboration the outside world through info and yield gadgets that connect straightforwardly with an individual. A standout amongst the most much of the time utilized gadgets are joined to a controller is a LCD show. A standout amongst the most widely recognized LCDs associated with the controllers are 16x2 showcases. This implies 16 characters for every line by 2 lines.

## GSM:

GSM (Global System for Mobile correspondences) is a cell or a versatile system, which implies that cell phones associated with it via hunting down cells in the prompt region. GSM systems will work in 4 different recurrence ranges. Most GSM systems oversee from 900 MHz to 1800 MHz groups. It additionally gives a minimal effort, to the system transport, choice to voice calls, the Short message benefit (SMS, additionally called "content informing"), which is accessible continuously on other regular mobiles too.

## **Power supply:**

The main source of electrical power is Power supply. A device or system that provides electrical or other types of energy to single output load or group of loads is known as power supply unit or PSU. The term is most frequently applied to electrical energy suppliers, less often to machines-driven ones, and hardly to others. This power supply section is required to convert AC signal to DC signal and also to decreases the amplitude of the signal. The obtainable voltage signal from the mains is 230V/50Hz which is in the form of AC voltage, but the demand is for DC voltage (no frequency) with the amplitude of +5V and +12V for various applications.

#### V. CONCLUSION

GSM (Global System for Mobile correspondences) is a cell or a versatile system, which implies that cell phones associated with it via hunting down cells in the prompt region. GSM systems will work in 4 different recurrence ranges. Most GSM systems oversee from 900 MHz to 1800 MHz groups. It additionally gives a minimal effort, to the system transport, choice to voice calls, the Short message benefit (SMS, additionally called "content informing"), which is accessible continuously on other regular mobiles too.

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### REFERENCES

- [1] Kun-Muchen, Yong Huang, Jianping Zhang, Narman A. " Microwave Life-Detection System for searching Human subjects under Earthquake Rubble or behind Barrier", IEEE Transaction, Biomedical Engineering, volume 27, pp 105-114 , January2000.
- [2] Saeed Moradi , "Victim detection with Infrared Camera in a Rescue Robot" IEEE International Conference on Artificial Intelligence System, 2002.
- [3] Miyama S., Imai M., Anzai Y. "Rescue Robot under disaster situation position acquisition with omnidirectional sensor" IEEE International Conference, volume 3, pp 3132-3137, October 2003.

- Vol.6(6), Dec 2018, E-ISSN: 2321-3256
- [4] Marques, c. ,Cristovao , J. ,Lima , P. "RAPOSA- Semi-Autonomous Robot for Rescue Operation" ,IEEE Intelligent Robots and Systems, pp 3988-3993, October 2006.
- [5] Rufaida Shamroukh ,FahedAwad " Detection of Surviving human in destructed environments using a simulated autonomous Robot" IEEE, March 2009.
- [6] Ying -Wen Bai , Li-Sih Shen , Zong -Han Li "Design and implementation of an embedded home surveillance system by use of multiple ultrasonic sensors", Consumer Electronics, IEEETransactions, pp 119-124, 29 March 2010.
- [7] Mr. S.P.Vijayaragavan , Hardeep pal Sharma, "Live Human detecting Robot for Earthquake Rescue operation" International Journal of Buisness Intelligents, volume 2 June 2013.

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