



ADVANCED WOMEN SECURITY SYSTEM

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ABSTRACT—

This project provides a security system for the women. Because “No place is as safe as it used to be. As crime happens in cities across the world.”

In our country, there are many laws has built to save a women from crime, but these are only theoretical and we can't save us with this. So we have to take safety measures to save our self. “Advanced Women Security system” is used to minimize the crime and the rate of rape. This system is composed of a GSM modem, Microcontroller and Shock generating circuit. This is a affordable device which reduces the problem associated with women security. This system allows the user to send the message of HELP through GSM to predefined persons.

Keywords - Microcontroller, GSM, shock generator circuit, security

INTRODUCTION

Now a days when we turn the pages of the newspaper, we come across many headlines reporting cases of rape, sexual harassment, ill treatment of girls, violence against women.

In this paper we described about our system. Section 2 includes the hardware used in detail. Section 3 includes the block diagram of the system. Section 4 gives the actual working of the system. Section 5 shows the conclusion and future scope and section 6 shows the references.

Literature survey

1. Emergency Application for Women . Mr. Mangesh Kumar. Mr. Raj Kumar. M ,March 2012 - Detect the problem by shaking the mobile by the user & the mobile detect the voice which can be recognized & identifies the problem.

2. Smart Girls Security System Prof. Basavaraj Chougula' Archana Naik, Monika Manu ,volume-3, April 2014 ,When the threshold of the pressure sensor crosses the device get activated & the location track by GPS.

3. The Women Employee Security System is using GPS & GSM Based Vehicle Tracking , Poonam Bhilare, Akshay Mohite , January 2015 ,volume, Vehicle Track by the GPS using AVL(Automatic Vehicle Location) .

Problem statement

women security is most important issue in throughout the world. And the women should able to fight against the violence, harassment. Hence we design a system which help her in that situation in which she is helpless.

2. HARDWARE USED

2.1 GSM Modem

Global System for Mobile Communication (GSM) is the modem which accepts the SIM card and it operates just like a mobile phone that is use as wireless technology. These modems are frequently used for sending and receiving SMS. GSM is a modem device with a serial, USB or Bluetooth connection. MAX232 IC is used for the converter.

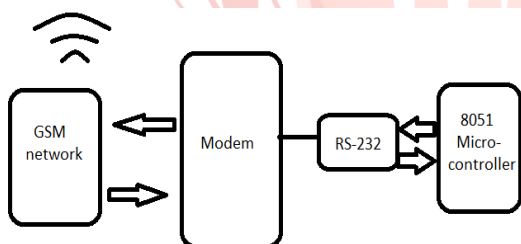


Fig. 2.1. GSM Module

2.2 Generator Circuit

Electric shock generator is an electronic device that produces voltage around 650v & current of 3 to 5 milliamp. Electronic shock generator is fixed into the sandal. Whenever the push button is triggered the shock is generated on to the tip of the sandal. In shock generator circuit the concept of mosquito bat is used. It consists of AC to DC converter, oscillator. Multiplier circuitry is also used for boosting the DC voltage which charges the capacitor to high voltage.



Fig 2.2- shock generating circuit

2.3 RS232

It is a standard of serial communication transmission of data in the two devices. RS232 IC is used to convert TTL/CMOS logic levels to RS232 logic levels. The controller operates at TTL logic level (0-5v) where as the serial communication in GPS & GSM works on RS232 standards (-25v to +25v). Thus to convert TTL logic levels to RS232 logic levels. Thus, the intermediate link is provided through RS232.

3. Block Diagram

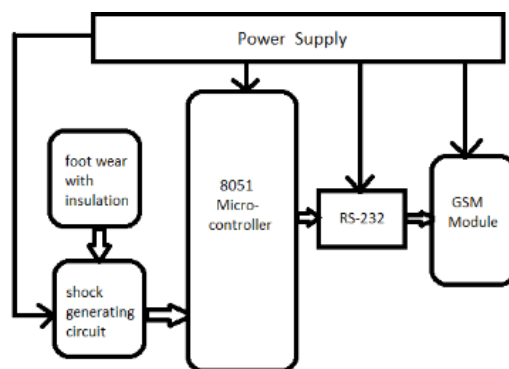


Fig 3.1- Block diagram of GSM module

4. Working of circuit

As this is the portable system, the shock generator circuit is placed in the sandal. That is as shown in figure below all remaining circuit is placed in a side bag. If someone will try to harass the woman, the woman will trigger the push button switch. As soon as the button is pressed it sends a message of help to predefined contact.

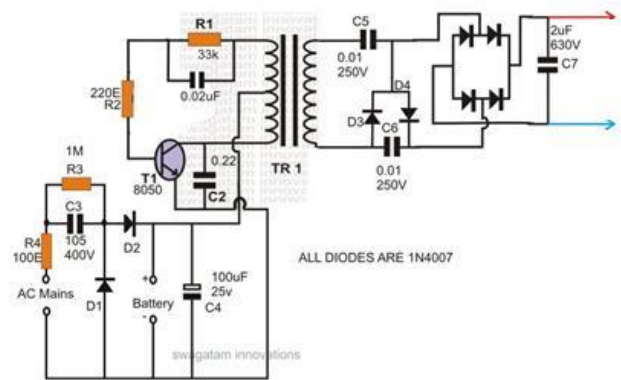


Fig 4.3- circuit diagram of shock generator



Fig 4.1- Battery fitted in sandal

We used a 4.5v battery and high voltage capacitor for the generation of current. R1 and C1 are used for determining the frequency of oscillation. Rectifier converts AC to DC which charges the battery up to 4.5v. The transistor is used to switching purpose and transformer steps up the voltage. Multiplier network pulls the 200V from transformer to about 600v. Which is suitable to generate a flying spark at output terminal.

Applications-

- Used for the safety of women.
- We Can use as a message for a legal evidence against the crime.

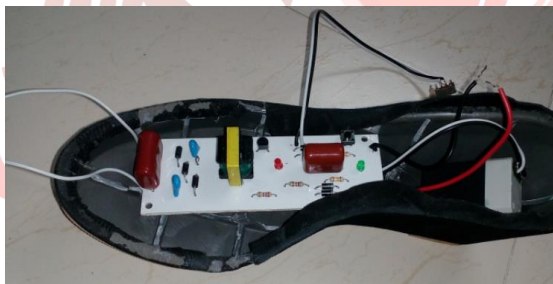


Fig 4.2- Shock generating circuit fitted in sandal

Advantages-

- Safety device which can be easily carry by everyone.
- Wireless connectivity.
- Fast battery charging capacity.
- Fast response.
- Compact in size.

Circuit diagram -

5. Conclusion -

In this paper, we have provided a security system and discussed how easily the women can be protected from harassment and rapes which are increasing day-by-day in all cities. As this system is a wireless system, so easy to carry out every day by working women.

Future Scope-

For costing purpose, we just use GSM to send the message for help but in future GPS can also be added to track the location of a women, and it becomes easy to help her.

References-

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