

Bomb Detection Robotics Using Embedded Controller with GSM & GPS

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Abstract— This paper presents the development of bomb detection robotics using embedded controller with GPS and GSM module. Now-a-days robotic systems have less manual operations, flexibility, dependability and accurate, detect the bomb by transfer the robot to the particular place. A person can work the system from personal computer during wireless RF controller. Aims at designing and execute the bomb fire and obstacle exposure. The IR sensor is a pair sensors has a beneficiary and a transmitter sensor.in the current scenario of war situations. Unmanned system plays very main role to minimize human losses. This robot is fitted with motors. A microcontroller is used to manage all operations the robot will operate as individuals in program. Whenever any fire is detected the BUZZER will ON.

Keywords: Bomb Detection, IR Sensor, Robotics, Web Server

I. INTRODUCTION

In this present day scenario we are facing many threats by bomb blasts.so our Moto is to prepare a unmanned vehicles which will detect the bomb, it will not only detect the bomb but also position of bomb by using GPS module and the position of bomb will intimated to the specific person by message through GSM module.

We are interfacing LCD and buzzer to ARM processor will give us acknowledgement here we are using metal detector to detect the bomb because we know that any bomb contains some concentration or percentage of metal det

II. FEATURE EXTRACTION:

With advancement of technology things are becoming simpler and easier for us.it is most advanced technology.it is of low cost. By using this technology we can detect the bomb as early as possible and dismanual in easily, so that we can easily save the life of the human beings. The project was realized.

III. BLOCK DIAGRAM:

The project was designed and implemented using top to bottom design method just as shown in the block diagram in figure The system starts form the following units:-

- GSM module unit
- Microcontroller
- Power Supply
- RF Receiver , RF Transmitter , RF Encoder , RF Decoder
- Metal Detector
- LCD

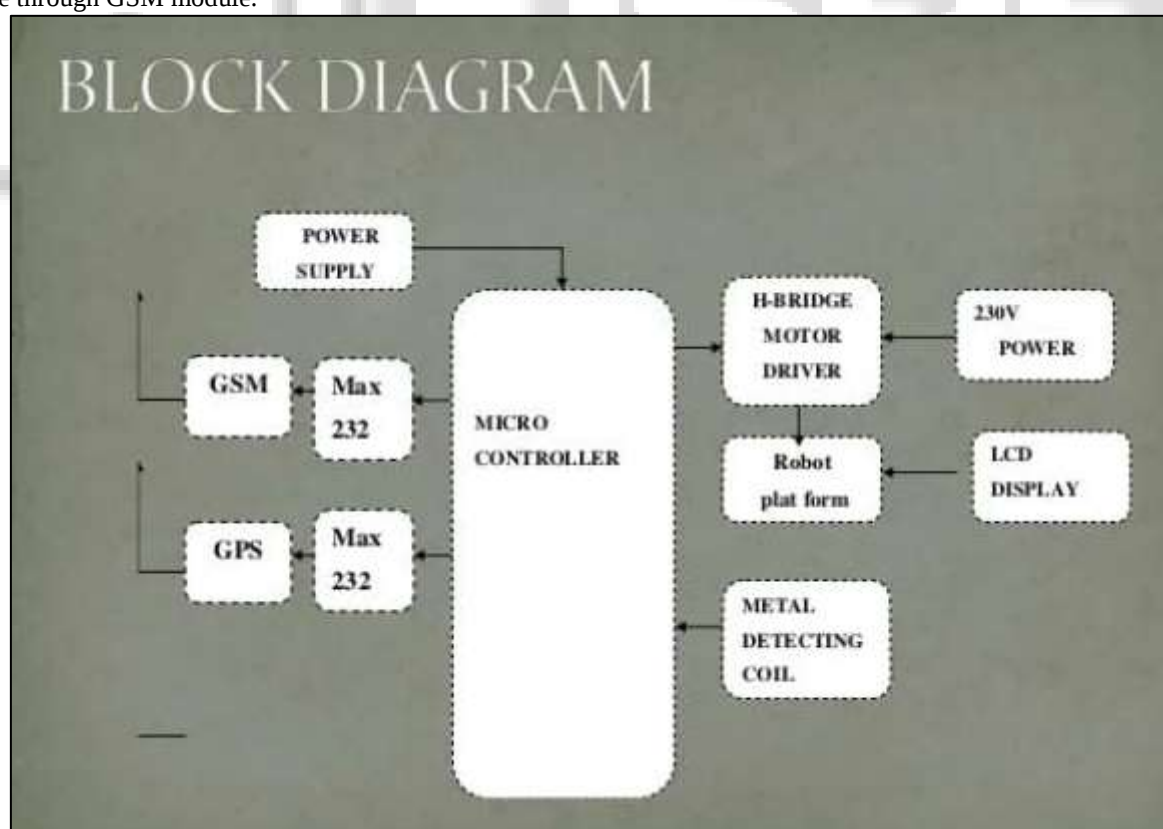


Fig. 2: Block diagram figure

IV. METAL DETECTOR:

It is an instrument that detects the presence of metal. nearby metal detectors are useful for finding metal inclusions hidden

within objects or metal .object buried underground .they often consist of a hand held unit with a sensor probe which can be swept over the ground or the objects.



V. WORKING PROGRESS:



Fig. 3: Practical Assembly

VI. CONCLUSION:

This document presents the bomb robot has been designed in such a way that it can cater to the needs of the bomb squad the military ,the police and also for the personal who handle radioactive materials it has countless applications and can be used in different environments and scenarios.

ACKNOWLEDGEMENT:

The author would like to thanks for and gratitude towards Assistant Professor Kulkarni S.S. for his valuable guidance throughout the project.

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