
BANK SAFETY & SECURITY SYSTEM WITH VOICE ALERT & CALL ALERT TO POLICE STATION THROUGH GSM

ABSTRACT

The aim of the project is to design a system using which various physical parameters such as fire, person detect through the IR of an bank can be monitored and gives voice alert.

In this competitive world and busy schedule human can't spare more time to perform daily activities manually. It is very easy to control devices through PC instead of controlling devices manually. To communicate any device to pc needs HyperTerminal which is understand only by technical people. But it is better to have any extra communication in between PC and device. So that we have tool called as "front ends". These front ends are very good and which are very easy. Non technical people easily interact with device from PC easily. These front end tools are designed by C# .net application. Communication has good visibility and good interaction in front ends (These front ends may vary from project to project).

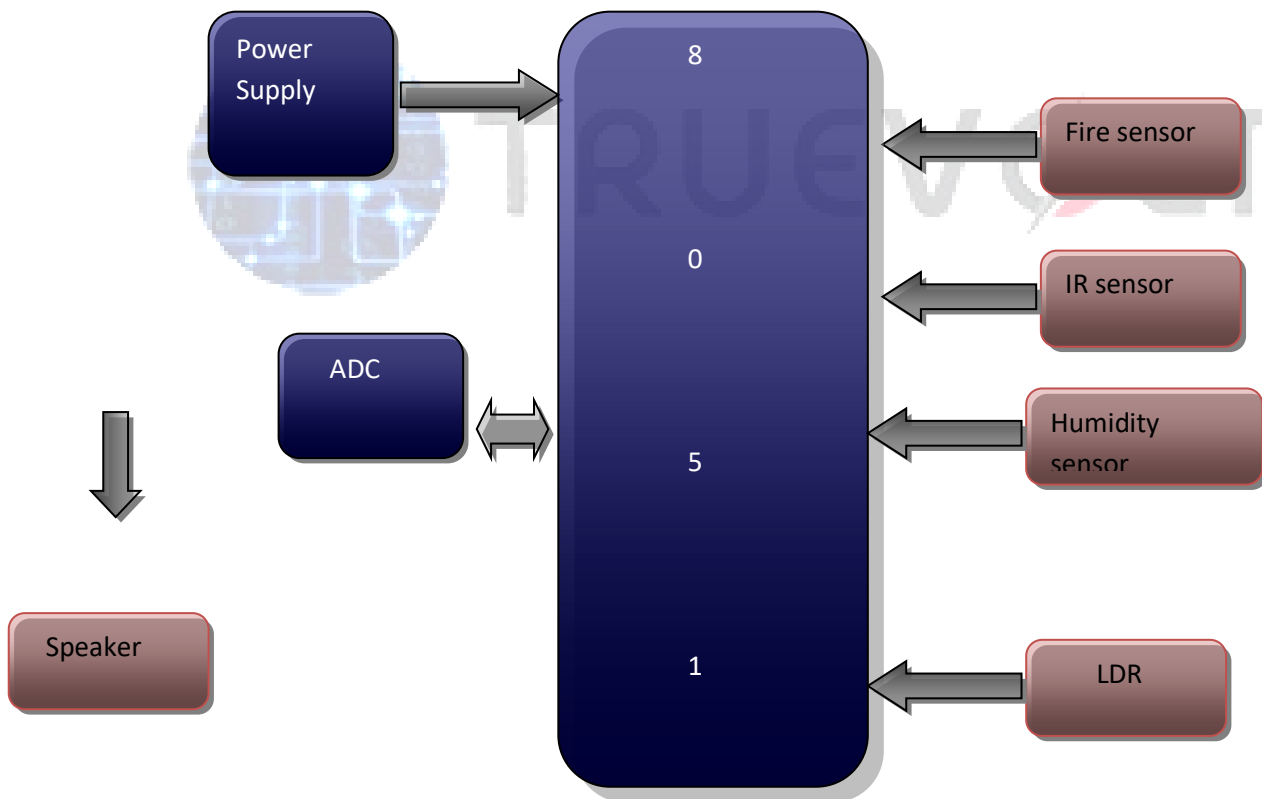
This project is very useful in industries and is designed in such a way that the controller is interfaced to PC using serial communication technique. Serial communication is often used either to control or to receive data from an embedded microprocessor. In serial communication the data is sent as one bit at a time. Serial communication is a form of I/O in which the bits of a byte being transferred appear one after the other in a timed sequence on a single wire. Serial communication is commonly used in applications such as industrial automation systems, scientific analysis and certain consumer products. Here the communication is established between the PC and the controller by a line driver IC max232 which acts as a voltage converter. And the sensors such as IR sensor, humidity sensor, fire sensor and an LDR which detect the obstacle, humidity, fire and light respectively are interfaced to the controller through the operational amplifier IC LM358. So the controller continuously monitors the status of the sensors and sends the related data to the serial port. C# application always interact with serial port and continuously receives the updates from the sensors ,according to that it gives the voice output through the speakers of the PC.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

APPLICATIONS:

- Industrial applications
- Automatic control systems
- Industrial parameters announcement system

BLOCK DIAGRAM:



POWER SUPPLY BLOCK DIAGRAM:

