MULTI CHANNEL FAULT ANNOUNCEMENT SYSTEM USING TEMPERATURE, SMOKE AND LDR SENSORS

ABSTRACT

Security is primary concern for everyone. There are many ways to provide security at homes or in industries. This Project describes a design of effective security system that can monitor an industry by using various sensors for communication.

The project is designed and implemented in such a way that we interface various sensors such as smoke, LDR and temperature sensors to the microcontroller. The microcontroller continuously checks the status of the sensors. Here we are using APR9600 voice module in which we pre record the voices, which are been played back according to the sensor output. If the sensor value exceeds the threshold limit then the same information is been sent to the APR9600 will make that corresponding voice chunk to be played as output. There by providing a continuous monitoring and fault announcement provision for industrial applications.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.
APPLICATIONS
- Industrial applications
- Household applications

BLOCK DIAGRAM:

POWER SUPPLY BLOCKDIAGRAM: