ALCOHOL DETECTOR SYSTEM FOR SURVEILLANCE COPS ON HIGHWAYS

ABSTRACT

The main aim of the project is to design an alcoholic detector system to detect a person whether he is conscious or not by the alcoholic consumption which is very much useful for surveillance cops on high ways and to prevent the accidents.

The 8051 microcontroller is the heart of this project. The project is designed in such a way that the controller is interfaced with alcohol sensor through digital lines. It gives digital output according to physical parameter existence. This alcohol sensor built with operational amplifier. When the sensor detects the presence of alcohol the corresponding signal will be passed to the microcontroller, we also interface an LCD to the controller which is used to display the status of the system. A buzzer is also provided in our project which provides audio alarm output.

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:

- Highway patrol
- Interrogation
BLOCK DIAGRAM:

Power Supply → 8 → Buzzer

Alcoholic Sensor → 0 → 16X2 LCD

Step down Transformer → Bridge Rectifier → Filter → Regulator → Output

POWER SUPPLY BLOCKDIAGRAM: