Driver Assistant System

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Project Aim

To develop an Driver assistant system for vehicles that can be used for real-time application.

Project description:

Nowadays, accidents are becoming a common occurrence on the roads due to negligence or excess speed. If we can avoid, it means we can save many lives. The main objective of our Driver Assistant System project is to develop an anti-collision system for vehicles that can be used for real-time application.

The application is based on ultrasonic sensors to detect the main features of the ultrasonic sensor distance projector and the control circuit power supply.

Approach:

1. This Driver Assistant System controls the distance between the car and other vehicles or obstacles to come. 89S52 microcontroller performs all operations.
2. The obstacle distance is displayed on the 16 * 2 LCD screen. If the obstacle is in the sensing zone call ring sounds to give a warning.
3. Measuring the distance of an object in the way a stationary or mobile person, structure or vehicle is used in many applications such as motion control robots, vehicle control, blind stick, medical applications, etc.
4. Measurement with ultrasonic sensors is one of the cheapest among the various options.
5. In this measurement application of the distance of an obstacle using a digital ultrasonic transmitter, the receiver module and a microcontroller are. The experimental apparatus and the results are described and explained. The ultrasound view shown here is suitable for measuring the distance between 20mm and 4000mm (4m).