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Design and Implementation of Automated Car Anti-Collision System Device Using Distance Sensor

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Abstract : Automated car anti-collision system is a trending technology of science. A car anti-collision system is an automobile safety system. The aim of this paper was to describe designing a car anti-collision system device to reduce the severity of an accident. The purpose of this device is to prevent collision among cars and objects to reduce the accidental death of human. This project gives an overview of secure & smooth journey of car as well as the certainty of human life. This system is controlled by microcontroller PIC. Sharp distance sensor is used to detect any object within the danger range. A crystal oscillator is used to produce the oscillation and generates the clock pulse of the microcontroller. An LCD is used to give information about the safe distance and a buzzer is used as alarm. An actuator is used as automatic break and inside the actuator; there is a motor driver that runs the actuator. For coding 'microC PRO for PIC' was used and 'Proteus Design Suite version 8 Software' was used for simulation.

Keywords : sharp distance sensor, microcontroller, MicroC PRO for PIC, proteus, actuator, automobile anti-collision system
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