



BELGAUM – 590014

“AUTOMATIC SPEED LIMITER AND RELIEVER FOR AUTOMOBILES”

**A project report submitted to Visvesvaraya Technological University in partial
fulfillment of requirement for the award of degree of Bachelor of Engineering in
Electronics and Communication Engineering**

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ABSTRACT

Our aim is to design a project for Automotives such that to provide LOCKING facility for the speed automatically in the vehicle itself for restricted areas(cities, govt.. residential quarters etc) and Remove (UNLOCK) the Speed Limitation after restricted area is completed such as in City outskirts, Restricted Zones and College, Hospital areas etc. This Technology uses Microcontroller 8051 as a CPU, Relays, IR sensors and Motors. In this Project for presentation purpose all vehicles are operated using RF based wireless remotes.

The **Speed Limiter** Circuit is used to provide a Non Exceeding Speed level in the vehicle itself instead of using Speed Breakers, Toll gates, Speed detecting Cameras, Patrolling jeeps etc. That is the vehicles will travel with the Maximum speed of 40kmh automatically in the restricted zones.

The **Reliever** Circuit Designed in this project will allow the vehicles to travel with their required speed after the **Restricted** zone is completed. That is the vehicles built-in Speed Limiting circuit will be freed i.e. the drivers can drive the vehicles with more than 40kmh limited speed in Highways or Freeways as Usual so that to save time and reach destination early as the vehicle is on 4 lane NATIONAL HIGHWAYS Road.

Parking assistance circuit in this project is used to protect the vehicle from physical accidents or dents (scratches) which happen to the vehicle during parking or driving in Small streets, Toll booths or in Forest areas. i.e., a sensor has been placed in the rear panel of vehicle which keeps on measuring the distance from the vehicle at back side such that if the vehicle is nearing towards a wall or any substance then it produces an buzzer signal which means to stop or do not drive back while REVERSING the vehicle. This circuit also works as an **ANTI-COLLISION** device in the vehicle.