

CHAPTER 1

INTRODUCTION

The vehicle accident is a major public problem in many countries, particularly India. Despite awareness campaign, this problem is still increasing due to rider's poor behaviors such as speed driving, drunk driving, riding without sufficient sleep, etc. The numbers of death and disability are very high because of late assistance to people who got the accident. These cause huge social and economic burdens to people involved. Therefore, several research group and major motorcycle manufacturers have developed safety devices to protect riders from accidental injuries. However, good safety device for vehicles is difficult to implement and very expensive. On the roadway driver usually keep a safety distance from one another. On the other hand, due to the driver's interruption, long-time driving tiredness, or a sudden break applied by another car, a serious collision may occur. Even though the driver is in a conscious mind, he cannot respond immediately to control his/her vehicle. Sometimes crash may occurs due to bad weather situations as mist, vapor, fog and so on. Therefore, with the help of obstacle detection and distance measurement sensor, a front end collision warning system is developed to prevent vehicle from the collision is named as VVCAU. Many cases remain pending due to unknown reason of an accident. To avoid these problems, a design is proposed to enhance on-board recording device (i.e. Black Box). Car black box is a digital electronic device, which records and store vehicle speed, real time and vehicle's other status information. It helps to discover and to analyze the reason of an accident easily and to settle many disputes related to car accident such as crash litigation, insurance settlements.