ABSTRACT

At this moment, Indonesia train's company had being intensively reform because of the increases of consumers train's user services. The increased of volume of train departures is more dense, so it needs to be minimized the traffic disruption trains moreover by an accident. To minimize accidents while on the trip can be done by adding an additional locomotive as accident detector and its run far in front of the train which will be maintained. Thus, when there is an accident the train may have time to stop before the accident. This final project aims to make train travel safety devices based on train (locomotive) guarding in front of the train were escorted to measure the distance that has been taken as the separation distance between the locomotive. Because the train braking distance is a large number, then the communications that is used is radio.

Key words: Optocuopler, rotary encoder, accelerometer.