Train Location Information Provider Software
Using Optocoupler Sensor and Microcontroller

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Abstract

Public transportations nowadays have become Indonesian’s favourite. In Indonesia, the public transportation services have a wide variety of choices, starting from aeroplane, public bus, and one of them is public train service. Public train service is one of the people’s favourite choices of transportation, because of its price which can be afforded by them. But in other hand, one of the disadvantages of this public transportation is that PT KAI never informs the passengers about the current location of the train, inside the train itself.

Departing from it, this system is made in order to dismiss the passenger’s perplexity while traveling within the train. This system is also made to inform the passengers about the destination their train is heading to, how far is it from the current location, precisely and accurately.

This system will also provide announcements at some large-sized stations that the train has arrived, so the passengers won’t be confused of their whereabouts. In addition, they can also estimate their time of arrival and prepare their luggages.

The result of the test in the system can be known that the system can work well. The test was taken from voice notification train simulation will begin to leave, train simulation while the distance less than one kilometer longer, and while the train arrive. The system can also show the name of the station and
station distance from LCD and sensor to calculate each round railway wheels.

Key words: Train, Microcontroller, Optocoupler Senso