

DESIGN MODELS OF AUTOMATIC RAILWAYS CROSSINGS

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Abstract

Train is a land transportation which is be one of favorite public transportation in Indonesia. It is because of its price was very cheap, and also has human and baggage's carry capacity in large size. In another side, amount of train accident which is happened was high. One of cause which make an accident is there aren't high awareness from public which is walked on cross railways crossings. In another hand, cross railways crossings system was still not good. Because of that, it is needed automatically cross railways crossings system. To get automatically cross railways crossings system, we have to know about the manually mechanism of cross railways crossings and how to operate it, know about the signaling system, from the station or between railways of the train.

To get a target which is wanted, so it is needed to design electronics component such as microcontroller ATmega8535, LED ,seven segment, motor DC, limits switch, buzzer, and design for prototype from the automatically cross railways crossings system. Implementation of this last project generally begins from field study which is talked about the manual cross railways crossings system, taking data about the speech of train and signaling system. After that, we have to design for prototype about automatically cross railways crossings system. Based on the result which is got from it, then it is made for conclusion and suggest for implementation of this last project.

From this observation result, it is got prototype about cross railways crossings system which can decrease amount of accident that is happened cause of cross railways crossings system manually, and also be a reference in PT.KAI

Kata Kunci : signal system, mikrokontroller, ATMega 8535, LED, seven segment, DC motor, driver motor, limit switch, buzzer, prototype, automatic, cross railways crossings, train



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