

TRAFFIC LIGHT CONTROLLED BY PLC

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ABSTRACT

Traffic lights, also known as traffic signals, traffic lamps, signal lights, stop lights and robots, are signaling devices positioned at road intersections, pedestrian crossings and other locations to control competing flows of traffic. Traffic lights were first installed in 1868 in London and are now used all over the world.

In Malaysia, the traffic lights for vehicles commonly have three main lights, a red light that means stop, a green light that mean go and yellow that means ready to stop. However for the pedestrians, there have only two lights, a red light and a green light that mean stop and go respectively. The traffic lights have given many benefits to all road users. Besides reducing the number of accidents, it made the traffic flow smoothly and possibly could save people time.

As the name suggests, Traffic Light controlled by PLC is that controlled by programmable Logic Controlled is a digitally operated electronic apparatus which uses a programmable memory for the internal storage of instructions for implementing specific functions such as logic, sequencing, timing, counting, and arithmetic to control, through digital or analog input/output modules, various types of machines or processes.

In this project, a PLC (Programmable Logic Controller) performs the functional of conventional relays, timers, and counters. There are also have several advantages are more flexibility, less space, more compact, higher reliability (less mechanical parts), and can be easily connected to computer systems and to hardware.