

Demand Controlled Pedestrian Crossing Traffic Light System (Pelican Crossing System)

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Demand controlled pedestrian crossing traffic lights (pelican crossings) are wanted in a domain of fairly high vehicular and pedestrian flows. Also, in many developing countries like Sri Lanka, where the road user behaviour is poor, the simpler form of pedestrian crossing like 'zebra crossings' is of little use without adequate police enforcement. However, studies have revealed that traffic light pedestrian crossing is a better and safer form of crossing even of developing countries.

A criterion was developed for the design of a traffic controller after carrying traffic studies and determine available control systems in Sri Lanka. The signal phasing was designed incorporating the processor and the colour sequence generation unit was designed including a control waveform generation circuitry. A traffic flow rate measurement unit was designed and incorporated to the system so that both pedestrian and vehicular arrivals are recorded in it to obtain the maximum benefits.

Incorporating all the above factors the most suitable processor unit was chosen using a Read Only Memory (ROM) and associated circuitry. This unit was assembled at University of Moratuwa and the suitability of it in the field was checked.