DEVELOPMENT OF A COMPUTERISED FIRE ALARM PANEL MODEL

Thesis is presented to fulfil the requirement of Advanced Diploma in Electrical Engineering of MARA Institute of Technology

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ABSTRACT

This project is concerned on the development of a PC based fire alarm panel model that could later be developed into a high technology based fire alarm panel. The study incorporates refabrication of the existing fire alarm panel circuits interfaced into a computer. Circuits are constructed modular in nature so as to provide a base for continuous development.

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1.0 INTRODUCTION

Over the years, fire has continuously caused injury, loss of lives and destruction of properties as well as creating misery and hardship to the people. Burning synthetic materials also help to create harmful atmosphere and pollute the surrounding air. The more notable fire that destroy large building and properties such as the fire at the Kuala Lumpur Airport terminal in 1993 where our government has lost alot of foreign revenue due to the inability of the airport to handle the vast number of the air traffic cargoes due to the fire. It is therefore very important to provide a fire alarm system that could provide the following:

- To enhance the safety of the occupants, by enabling an alarm of fire to be given to the persons in the buildings so that they escape to safety and to enable other emergency actions to be taken.
- 2. To reduce the loss of properties in a fire by the early detection of fire and by summoning aids or activating fire-fighting resources. A fire alarm system, although it can do nothing to reduce the incidence of fire, can help to reduce the resultant loss by reducing the delay between the ignition and the start of fire-fighting action. The longest delay is likely when no people are present in the early stage of the fire. In