THE PROTOTYPE OF SECURITY SYSTEMS CONNECTED TO THE SECURITY POST USING PIR CENSOR AND SIEMENS C45 MOBILE BASED MICROCONTROLLER ATMEGA 16

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ABSTRACT

Purpose of making the prototype of secutity sistems connected to the security post using pir censor and siemens c45 mobile based microcontroller ATmega 16 is to create a tool that can directly send information to a security post during a robbery, so that security officers can immediately find out where the robbery took place.

The prototype of security systems connected to the security post using pir censor and siemens c45 mobile based microcontroller ATmega 16 designed specifically for the simulation of the home security system connected to a security post. this tool will work when the panic button is pressed or the pir sensor detects human movement, which automatically sends a message to a security post that is displayed on the LCD and the buzzer as the alarm when there is an incoming message. The method used in the manufacture prototype of security systems connected to the security post using pir censor and siemens c45 mobile based microcontroller ATmega 16 is experimental. This method consists of several stages: (1) Identification of needs, (2) Analysis of needs, (3) The design of hardware and software, (4) Preparation of equipment, (5) Testing of equipment and (6) Operation of equipment. the hardware consists of (1) The minimum ATmega16 as the main controller, (2) HP siemens c45 mobile as sender and recipient information, (3) Buzzer as a alarm of an incoming message, and (4) LCD as a viewer that shows the address of event messages.

Based on the test results can be concluded that this prototype works in accordance with the principle of work designed. It is shown from the system starts up, from the existing LCD will display a security post in writing to indicate the presence or absence events. Currently there is no occurrence of ALARM OFF LCD display and LCD during the incident scene will show the address.

Keywords: PIR Sensor, ATmega16, Siemens C45