ABSTRACT

An empty house is an easy target for criminals to break the house. Therefore, it is necessary to have a solution to overcome them. Prevention through early warning systems and checks remotely (remote sensing) as well as to take further action is one of the solutions.

In this final project was designed and realized a system of sensors in some parts of the house that might pass the house breaker such as doors, windows and fence. Sensor part consists of an infrared transmitter and receiver. Sensor output is processed by a microcontroller which is then used to give commands to the SMS Gateway (which is realized by mobile phone) to send home the message according to the attached sensors. SMS is sent to the house owner's mobile phone number so that house owners can immediately check by accessing the streaming video broadcast by IP cameras are installed at certain places. Thus, homeowners can observe the situation around the house from where she was.

The results of this final project produced a prototype of the home security devices such as those described above, with the average time between the occurrence of changes in the system response to sensor inputs receiving SMS mobile home owners at rush hour is over 7 seconds, and the clock is not busy for 4 seconds. While in testing video monitoring has a delay of 5 seconds. So, this system can overcome the problems left behind an empty house owner / occupant.

Keywords : remote sensing, microcontroller, SMS Gateway, video streaming