

DEVELOPMENT OF SPEED TRIGGERED CAMERA SYSTEM

An Investigation

Project Report Submitted by:

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ABSTRACT

This project is an investigation into target movement sensing. This includes, construction of appropriate circuit for investigation into ultrasonics and selection of equipment for investigation into electromagnetic waves. Furthermore, an experiment investigation is performed and a suggestion in exploiting the findings in μP based systems is carried out.

In order to fulfill the purpose of this project among others, a set of ultrasonic transmitter and receiver has been constructed and used.

The project is based on the fact that when a moving target is found within the area, that an ultrasonic or electromagnetic system covers, this target causes a small disturbance which is sensed and a voltage change is observed at the receiver's output.

The construction was restricted by the fact that all the components must be available in the local market and furthermore, the project as a whole must be kept to a minimum cost. These (the availability in the local market and the low cost) reduced the operating distance and sensitivity of the construction limiting in this way its applications.

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