FINAL YEAR PROJECT REPORT

ULTRASONIC SPEED GUN

A PROJECT REPORT

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ABSTRACT

Ultrasonic waves with frequencies high about human hearing and short wave lengths are sound waves. They have frequencies about 20,000Hz to 100,000Hz. They have the only fact that human cannot hear them. The upper limit of frequency is because of limitation of middle ear. Human sensing system requires no contact with the target. An Ultrasonic wave induces frequency of 40,000 Hz which humans cannot listen and when it transmit signal and receive it back it measured distance and calculate speed from the help of 16F887A. A GSM received signal from Microcontroller and forward a text message to the near police officer if the speed of object was increased the highway limit. So, we had made a device called, “GSM Based Ultrasonic Speed Gun” which generates frequency to calculate the speed of object. The idea is quite simple. Firstly, there was a frequency generator which was called Ultrasonic sensor, it used PIC microcontroller to calculate speed of object. That ultrasonic waves, according to above phenomenon, calculate the speed.

TABLE OF CONTENTS

LIST OF FIGURES