VISVESVARAYA TECHNOLOGICAL UNIVERSITY
Gnana Sangama, Belgaum – 590002, Karnataka

A
PROJECT WORK ON

"COST EFFECTIVE IMPLEMENTATION OF STROBOSCOPE"
Carried out

By

NAGACHETHANA V : 1KS10EC066

NAGENDRA B M : 1KS10EC068

NANDINI J N : 1KS10EC069

NISCHITHA C : 1KS10EC073

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Under the guidance of

Mrs. JAYAGOWRI R

ASSOCIATE PROFESSOR

Dept of ECE, KSIT

K. S. INSTITUTE OF TECHNOLOGY
#14, Raghuvanahalli, Kanakapura main road,

Bangalore – 560062

ABSTRACT

This project presents a low cost implementation of stroboscope for determining the resonant frequency of any vibrating material.

Stroboscope is a device used to make a moving object appear to be slow moving or stationary. The principle is used for the study of rotating, reciprocating, oscillating or vibrating objects. Here in our instrument, an array of LED lights called as strobe light is designed such that its frequency of on and off (blinking) is controlled with external circuit. A testing material of determined size is vibrated using a shaker. When the testing material reaches its Resonant frequency the vibrating material appears to be still or stagnant in the presence of strobe light. This frequency is noted as resonant frequency. The behavior of the object at its resonant frequency can be visualized and analyzed.

As an end result, the main idea of this project is to reduce the cost and to find out the resonant frequency, but for a limited frequency range.