

APPENDIX A

The purpose of this exercise is to study and familiarize user with the oscilloscope and its importance today.

APPARATUS

The Oscilloscope

Coaxial cables

Function Generator

Probe

DISCUSSION

The oscilloscope is an electronic instrument that allows the user to view electric signals as a function of time: with the vertical axis as the signal and horizontal axis as the time. The oscilloscope serves a good number of purposes for the user. It helps determine the period and frequency of an oscillating signal. It helps determine peak-to-peak voltage and rms voltage values and time of a signal.

There are three main parts of an oscilloscope; the vertical system, horizontal system and then the trigger sections. An oscilloscope works by applying voltage being measured to an electron beam moving across the Cathode Ray Tube (CRT). The voltage makes the beam move up and down proportionally following the waveform on the screen; with positive voltage making the beam move up and negative causing it to move down. The horizontal system also moves the glowing dot across the screen from left to right within a specific time interval. The graph of a signal on a screen is therefore due to horizontal