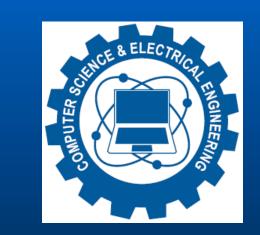
# Oscilloscope



## What is an oscilloscope?

- electronic test equipment that allows observation of constantly varying voltages, as a twodimensional graph of one or more voltages using the vertical or y-axis and plotted as a function of time (horizontal or x-axis).
- used to observe the exact wave shape of an electrical signal to allow for the measurement of peak-to-peak voltage of a waveform, the frequency of periodic signals, the time between pulses, the time taken for a signal to rise to full amplitude (rise time), and relative timing of several related signals.

#### **Controls**



### **Control Descriptions**

- Power button: turns the device on/off
- Focus knob: sharpens the image on screen
- Intensity knob: brightens/dims the screen
- Time/Div switch: calibrates the internal horizontal sweep to the external waveform for visual measurement.
- Horizontal Positioning knob: positions the image horizontally.
- Horizontal Trigger Mode switch: sets the triggering mode.

# **Control Descriptions**

- Horizontal Trigger Source switch: selects the trigger source.
- Horizontal Trigger Level knob: selects when the trigger will occur when in trigger source is external.
- Ch1 <u>Input</u> Port: input voltage connection for Ch1
- Ch1 <u>Volts/Div</u> knob: calibrates the internal vertical sweep to the external waveform for visual measurement.
- Vertical Positioning knob: positions the image vertically.

# **Control Descriptions**

- AC/DC coupling switch: selects AC or DC.
- Mode knob: selects which channel will be displayed.
- > <u>INT TRIG</u> (Internal Trigger Source) switch : selects which channel will trigger the vertical sweep.