

IV-E592 To Determine The Wavelength Of Diode Laser Using Diffraction Grating



- Wavelength of LASER Experiment is an Optical Setup to understand the working of Diffraction Grating and Single Slit. It determines the wavelength of LASER Light. Here the LASER is used as a Monochromatic light source and a Diffraction grating/Single Slit for getting a diffraction pattern.
- Interference and Diffraction are the two main phenomenons which demonstrate the wave nature of light.
- Diffraction grating allows a beam of light to resolve into different colures. It usually consists of thousands of narrow, closely spaced parallel slits. With the help of this setup we can find the wavelength of any intense Monochromatic light.

Experiment:

- Determination of Wavelength of LASER using Diffraction Grating/ Single and Double Slit
- Apparatus Supply
- Diode Laser Wavelength: 630nm, Output: 5mW
- Diffraction Grating: 500L /Inch
- Single Slit
- Double Slit
- Optical Bench Rail Type/Rod Type
- Optical White Screen
- Photo Detector Unit Readout
- Photo Sensor Unit