



There are, in general, a number of types of optical instruments that produce optical interference. These instruments are grouped under the generic name of interferometers. The Michelson interferometer causes interference by splitting a beam of light into two parts. Each part is made to travel a different path and brought back together where they interfere according to their path length difference. You will use the Michelson interferometer to observe the interference of two light sources: a HeNe laser and a sodium lamp. You will study interference patterns quantitatively to determine the wavelengths and splitting of the Na D lines empirically. You will use the HeNe laser interference spectrum to calibrate the interferometer. The Michelson interferometer is a device that produces interference between two beams of light. The basic operation of the interferometer is as follows. Light from a light source is split into two parts. One part of the light travels a different path length than the other. After traversing these different path lengths, the two parts of the light are brought together to interfere with each other. The interference pattern can be seen on a screen.

SPECIFICATIONS :

- Mirrors : 2no. surface coated
- : One movable with three knurled heads for adjusting Mirror
- : One Fixed with three knurled heads for adjusting mirror,

- Compensator : 1no. parallel to other mirror
- Beam Spiltter : 1no.
- Lead Screw : well grounded with pitch 1mm
- Pin hole disc : 1no.
- Condenser Unit : 1no. Adjustable
- Eyepiece : 1no. Adjustable
- Main Scale : Viewing Window to read main scale
- Telescope : 1no. universal adjustable with cross line graticule
- Diffused glass Screen
- With pin hole holder : 1no. (For sodium light expt)
- Main Knob : Least count 0.1mm for moving Mirror M1
- Slow motion drum : Least count 0.0001mm for moving M2
- Pin hole adjustment : 2no
- : one screw with nut and spring to adjust view of pin hole in Horizontal Position
- : one screw with nut and spring to adjust view of pin hole in vertical position
- Base : Machined Heavy duty MS casted

Optional

- A) Sodium lamp with box & transformer
- B) He-Ne laser/Diode laser
- C) Beam Expander : 4x for expanding laser light
- Screen with stand : 1no. for viewing Fringes on screen (to be use with laser)

Photographs are for reference only final product may vary

MANUFACTURED BY:

SATISH BROTHERS

#4309/20,Marble house,Punjabi Mohalla,

Ambala Cantt -133001(hry.)

Tel: 0171-2642617,4008617

E-mail: info@sibaindia.com

AUTH. DEALER