



**55932** Malus Law Apparatus dedicated to elucidate students to understand the wave nature of light. LED is used as a source of unpolarized light. With the help of this apparatus the basic law of polarization, Brewster's law and Malus law can be verified. Polarization can be studied by direct vision as well as by reading the variation of intensity through a digital ammeter connected across a photo detector. The verification of Malus law can be done in two different ways using two coaxial polarized and a combination of glass plate and Polaroid. All the above experiments can also be performed using unpolarized laser as the source of light.

### Features

1. Comprises of fixed lamp arm, central circular glass plate movable analyzer arm and photo detector arm
2. Holders with adjustable height and circular scale plates
3. Digital ammeter for precise loading
4. Graduated circular scale of analyzer from 0 to 360°

### Object

1. Study of Polarization of light by reflection and thus verify Brewster's law
2. Study and verify Malus law using a plain glass plate and a Polaroid
3. Study and verify Malus law using two Polaroids

### Technical Specifications

#### Digital Ammeter

Range	: 0-2mA
Power supply	: 230V $\pm$ 10%, 50Hz
Detector	: Phototransistor

#### Polaroid

Diameter	: 18mm
Type	: Nitrocellulose Polymer

#### Film

#### Light Source

Type	: LED
Wattage	: 1W
Measuring Scale	: 0-360°

Note: Specifications are subject to change.