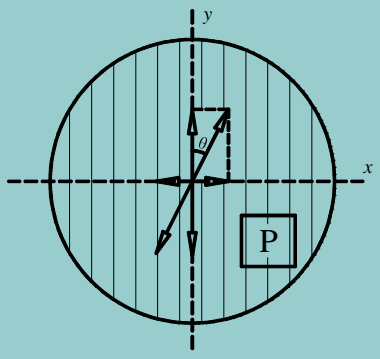
LEOI-40
Experimental System for Polarized Light

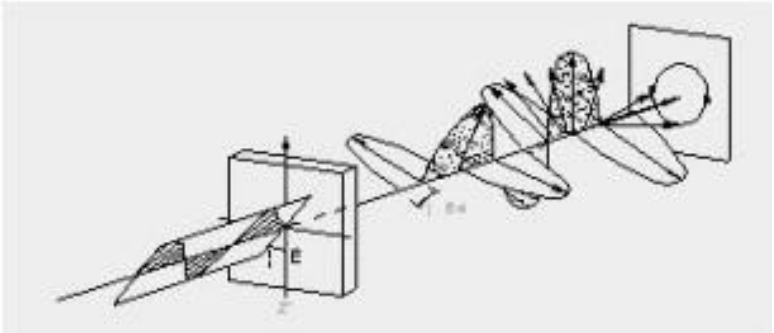
- *Highly stable*
- *Easy operation*
- *Effective educational tool*
- *Competitive price*

Compared with other important properties of light such as interference and diffraction, polarization is more abstract and relatively hard to understand. Without special equipment, human eyes or even optical detectors cannot recognize polarization phenomena.

The LEOI-40 system has been developed to help students grasp the concept and mechanism of polarization. It allows the student to measure different types of polarization and the working parameters of the optical elements involved.

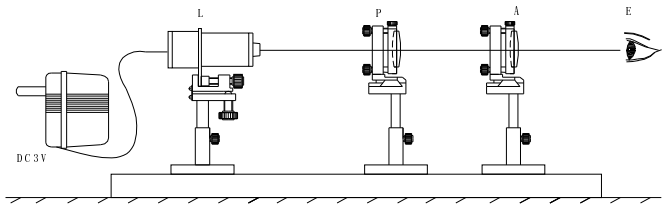
The system is also designed to be operated manually and can improve students' hands-on ability and consolidate the knowledge and skills they have learned. Experiment results collected can be graphed to schematically illustrate the theory of polarization. Students should acquire a fundamental understanding of polarization and learn to explain the mechanism involved in polarization elements.





Experiment Examples

- Polarized reflection
- Measurement of Brewster angle
- Verification of Malus' law



Observation of the intensity variation of a transmitted light

Parts Included

Description	Part#/Specs	Qty
Optical rail	Duralumin, 1m	1
Carriers	X-Y transverse adjustable	5
Lens holder	LEPO-9	1
Plate holder	LEPO-13	1
Adaptor Piece	LEPO-10	1
Optical Goniometer	LEPO-49	1
Polaroid holder	LEPO-52	3
Single-sided slit	Slit width: 0 to 5mm, slit tilt-able: ±5°	1
Polaroid	Φ20mm with holder	2
1/2 Wave plate	Φ10, λ = 632.8nm, quartz	1
1/4 Wave plate	Φ10, λ = 632.8nm, quartz	1
Lens	*f* = 150mm	1
Black glass	50×27 mm	1
Beam splitter	*f* = 4.5mm	1
He-Ne laser	With Brewster window, 1.5mW@632.8nm	1
Laser holder	LEPO-44	1
Small light source	High brightness LED	1
Photocurrent amplifier	LEPO-60	1



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