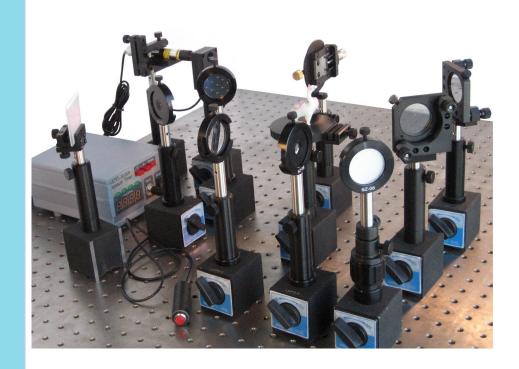


Construct, Conduct & Comprehend Physics Experiments

LEOK-64 Holography Under Room Light



- Room-light operation
- White-light reconstruction
- Photopolymer plate for easy and fast developing
- Rainbow hologram
- 40-mW semiconductor laser as light source
- Digital display with manual or remote controlled operation
- Detailed instruction manual

Holography under room light is referred to as hologram recording and developing under room light using a photopolymer plate. By contrast, a conventional silver salt plate must be operated (exposing, developing, and fixing) in a darkroom. The advantage of room-light holography with white-light reconstruction is the convenience of operation with a high diffraction efficiency, so that the image of the object can be reconstructed very well.

This kit can be used to conduct the following experiments:

- 1. Fresnel (transmissive) holography
- 2. Reflective holography
- 3. Image plane holography
- 4. Two-step rainbow holography
- 5. One-step rainbow holography

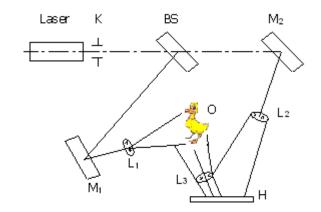


Specifications

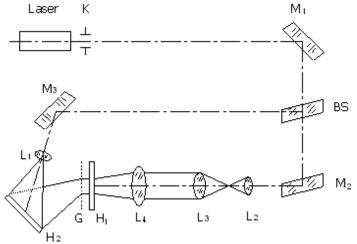
| Semiconductor Laser | Center Wavelength: 650 nm |
|--------------------------------|--|
| | Bandwidth < 0.2 nm |
| | Power: 40 mW |
| Exposure Shutter and Timer | 0.1 ~ 999.9 s |
| | Mode: B-Gate, T-Gate, Timing, and Open |
| | Operation: Manual Control |
| Continuous Ratio Beam Splitter | T/R Ratio Continuously Adjustable |
| Fixed Ratio Beam Splitter | 5:5 and 7:3 |
| Holographic Plate | Red Sensitive Photopolymer Plate |

Part List

| Semiconductor laser (LLL-1) | 1 |
|---|--------|
| Semiconductor laser Holder | 1 |
| Exposure shutter and timer (LEPO-30) | 1 |
| Fixed ratio beam splitter (5:5 & 7:3) | 1 each |
| Photopolymer plate (10 pcs of 9x24 cm/pc) | 1 box |
| Plate holder (SZ-12 & SZ-12B) | 1 each |
| Tri-color safety lamp | 1 |
| Lens (f=4.5 (x1), 6.2 (x1), 150 (x2) | 4 |
| Plane mirror | 3 |
| Universal base (SZ-04) | 10 |
| Continuously variable beam splitter | 1 |
| Lens holder (SZ-08) | 2 |
| Two-axis adjustable holder (SZ-07) | 6 |
| Sample stage (SZ-20) | 1 |
| Small object | 1 |
| Electric blower | 1 |
| Ground glass | 1 |
| Small white screen | 1 |
| Height adjustable holder (SZ-03) | 2 |
| Two-axis translation base (SZ-02) | 1 |
| Illuminometer | 1 |
| Slit screen | 1 |
| | |



Schematic of image plane hologram recording



Schematic of two-step hologram recording

Note: above product information is subject to change without notice.

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