



# LEOK-46

# **Experiment Kit of Optical Image Differentiation**



## Description

This experiment kit employs an optical correlation method for the spatial differentiation of an optical image, so that the image contour can be outlined with an enhanced contrast. Through this kit, students can get a better understanding of the principles of optical image differentiation, Fourier spatial light filtering, and 4f optical systems.

#### **Feathure**

Understand principle of optical image differentiation Understand Fourier spatial light filtering Acknowledge structure and principle of 4f optical system Detailed instruction manual

#### **Specification**

He-Ne Laser	632.8 nm, >1.0 mW
Composite Grating	100 and 102 L/mm
Optical Rail	1 m





#### Part list

Description	Qty
He-Ne laser (LLL-2)	1
Beam expander (f=4.5 mm)	1
Optical rail (LEPO-54-1)	1
Carrier (LEPO-54-2/3/4)	7
Lens holder (LEPO-9)	3
Composite grating	1
Plate holder (LEPO-13)	2
Lens (f=150 mm)	3
White screen (LEPO-14)	1
Laser carrier	1
Two-axis adjustable holder	1
(LEPO-22)	1
Small aperture screen	1

### **Examplies:**

