

STUDENT EXPERIMENT KIT SYSTEM KRÖNCKE OPTICAL SYSTEM



> CONTENTS:

- 1 Optical Lamp
- 1 Transformer 12 V, 25 VA
- 1 Optical Bench, 1000 mm
- 6 Optical Slides
- 2 Clamps
- 2 Converging Lenses, $f = 50$ mm
- 2 Converging Lenses, $f = 100$ mm
- 2 Converging Lenses, $f = 150$ mm
- 1 Converging Lens, $f = 300$ mm
- 1 Converging Lens, $f = 500$ mm
- 1 Diverging Lens, $f = -100$ mm
- 1 Diverging Lens, $f = -500$ mm
- 1 Diaphragm with 1 Slit
- 1 Diaphragm with 3 Slits
- 1 Photograph in Slide Frame
- 1 Transparent Screen
- 1 White Screen
- 1 Set of 4 Color Filters
- 1 Ruler, 15 mm
- 1 Set of Holes arranged to form the Number "1"
- 1 Pinhole Aperture, $d = 1$ mm
- 1 Pinhole Aperture, $d = 6$ mm

> CD-ROM CONTAINING ALL DIFFERENT SETS OF INSTRUCTIONS IS INCLUDED!

BASIC SET FOR KRÖNCKE OPTICAL SYSTEM

The Kröncke optical system provides robust reliability that has been tried and tested for decades and offers all the precision needed for student exercises and practical courses in numerous experiments on ray and wave optics. The experiments are carried out in traditional fashion using the white light of an incandescent lamp, the filament of which can be projected through an adjustable slit to observe interference in particular.

All optical components are mounted in diaphragms with no stems and can easily be adjusted vertically and with precision into the optical light path when mounted on optical riders. Optical riders can freely move on the U-profile rail of an optical bench and can be attached with a minimum of force.

RAY OPTICS:

- Pinhole camera
- Imaging with converging lenses
- Image aberrations
- Images in the eye (eye model)
- Correction of vision
- Magnifying glasses
- Microscopes
- Astronomical telescopes
- Terrestrial telescopes
- Slide projectors

Equipment ray optics:

- 1009932 Basic Set for Kröncke Optical System (230 V, 50/60 Hz)
- or
- 1009931 Basic Set for Kröncke Optical System (115 V, 50/60 Hz)

POLARIZATION:

- Polarization of transverse waves
- Polarizer and analyzer
- Visibility of polarized light in turbid water
- Double refraction
- Rotation of planes of polarization by a sugar solution

Equipment polarization:

- 1009932 Basic Set for Kröncke Optical System (230 V, 50/60 Hz)
- or
- 1009931 Basic Set for Kröncke Optical System (115 V, 50/60 Hz)
- 1009701 Supplementary Set for Polarization

SUPPLEMENTARY SET FOR POLARIZATION

Supplementary set to the Kröncke optics basic set (1009932 resp. 1009931) for carrying out student experiments on the polarization of light waves.

Contents:

- 1 Pair of polarising filters
- 1 Pinhole aperture, 10 mm
- 1 Rectangular cuvette
- 1009701

INTERFERENCES:

- Fresnel mirror
- Diffraction by small openings and plates
- Diffraction by an air gap
- Diffraction by the wire
- Diffraction by multiple slits
- Diffraction by the grating
- Optical resolution
- Determining the wavelength of light

Equipment interference:

- 1009932 Basic Set for Kröncke Optical System (230 V, 50/60 Hz)
- or
- 1009931 Basic Set for Kröncke Optical System (115 V, 50/60 Hz)
- 1009700 Supplementary Set for Interference

SUPPLEMENTARY SET FOR INTERFERENCE

Supplementary set to the Kröncke optics basic set (1009932 resp. 1009931) for carrying out student experiments on the interference of light waves.

Contents:

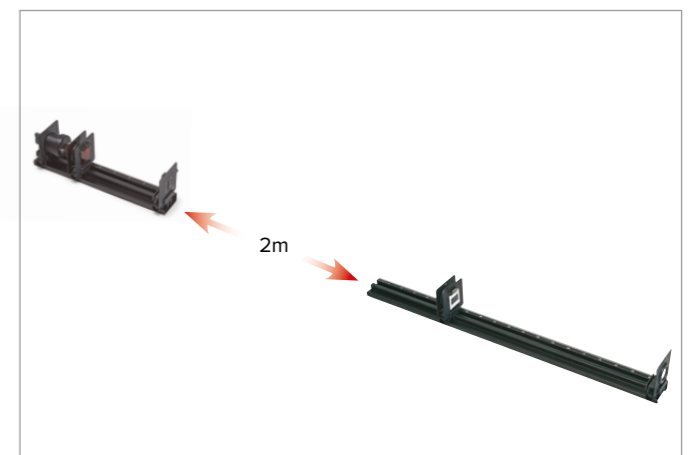
- 1 Optical bench, 500 mm
- 1 Adjustable slit
- 1 Diaphragm with 9 circular discs
- 1 Diaphragm with 9 circular holes
- 1 Diaphragm with 3 individual slits and 1 double slit
- 1 Diaphragm with 4 multiple slits and grating
- 1 Diaphragm with 3 ruled gratings
- 1 Micrometer screw
- 1 Fresnel mirror
- 1009700



Visibility of polarized light in turbid water



Slide projectors



Diffraction by a multiple slit

PLEASE ASK FOR QUANTITY DISCOUNTS ON CLASS SETS OF 8 PIECES OR MORE.