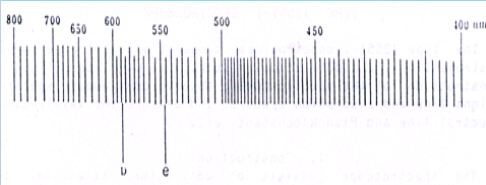
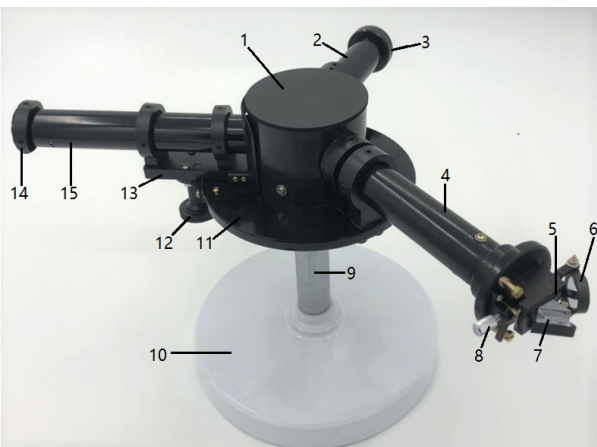


LEOI-96 Kirchhoff Bunsen Spectroscope



This basic spectrometer is an experimental instrument, consisting of collimator, telescope, prism, wavelength calibrated drum, and stand. It provides a high quality optical system and an easy-to-read scale, allowing to measure discrete atomic spectral lines. It can be used to illustrate the construction of a spectroscope, observe and measure the wavelengths of spectral lines, and verify the Planck's constant.

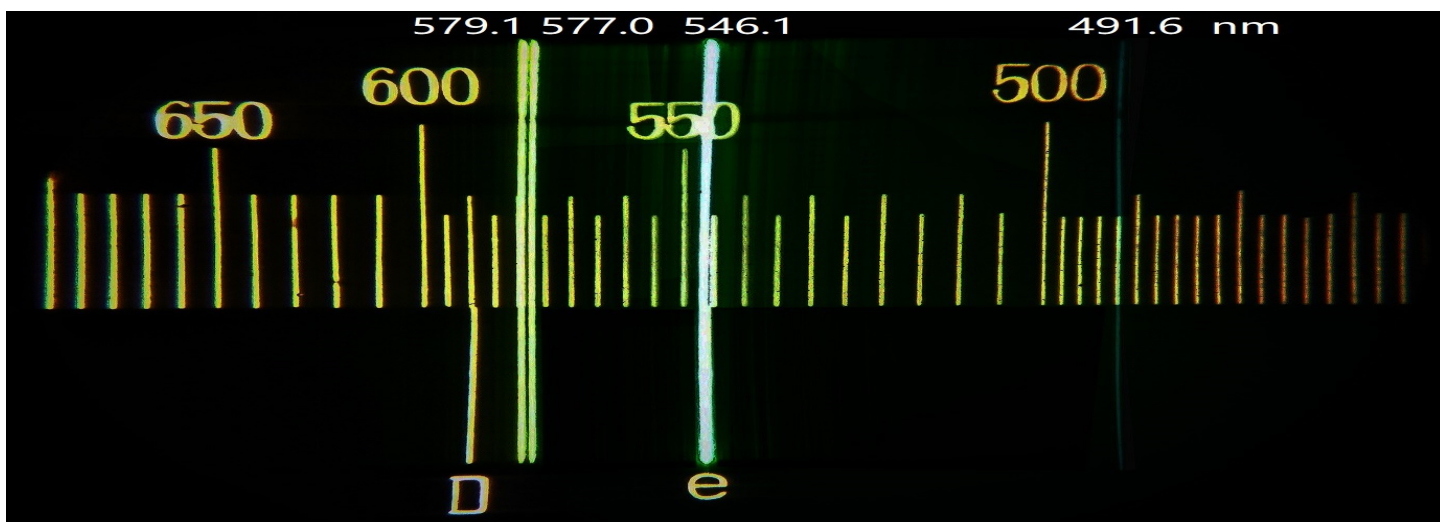


Configuration of Kirchhoff Bunsen spectroscope

1. Prism chamber, 2. Wavelength graduation tube, 3. Wavelength scale adjust screw, 4. Collimator, 5. Narrow slit, 6. Plane mirror, 7. Right angle prism, 8. Slit width adjust screw, 9. Post, 10. Base, 11. Supporting stage, 12. Hand wheel, 13. Telescope support plate, 14. Eyepiece, 15. Telescope

Specifications

Wavelength range	400 ~ 800 nm
Collimator focal length	Objective: 150 mm
Telescope focal length	Objective: 150 mm
	Eyepiece: 25 mm (low power); 12.5 mm (high power)
Wavelength calibration tube	Objective focal length 100 mm
Minimum graduation of wavelength scale	400 - 500 nm: 2 nm
	500 - 600 nm: 5 nm
	600 - 700 nm: 10 nm
	700 - 800 nm: 20 nm
Dispersion prism	Angle 60°
	Side length: > 32 mm
Resolving power	Mercury doublet 577 nm and 579 nm using low-power eyepiece
	Sodium doublet 589 nm and 589.6 nm using high-power eyepiece
Dispersion power	Distance between spectral lines 656.3 nm and 434 nm of hydrogen atom is 9 mm at the focal plane of the telescope. Average line dispersion power is 24.7 nm/mm.



A photo of Mercury spectrum taken from eyepiece

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