SODIUM LAMP & POWER SUPPLY

Cat: CH3792-125 Sodium Lamp for 'AA' experiments 240V.AC.

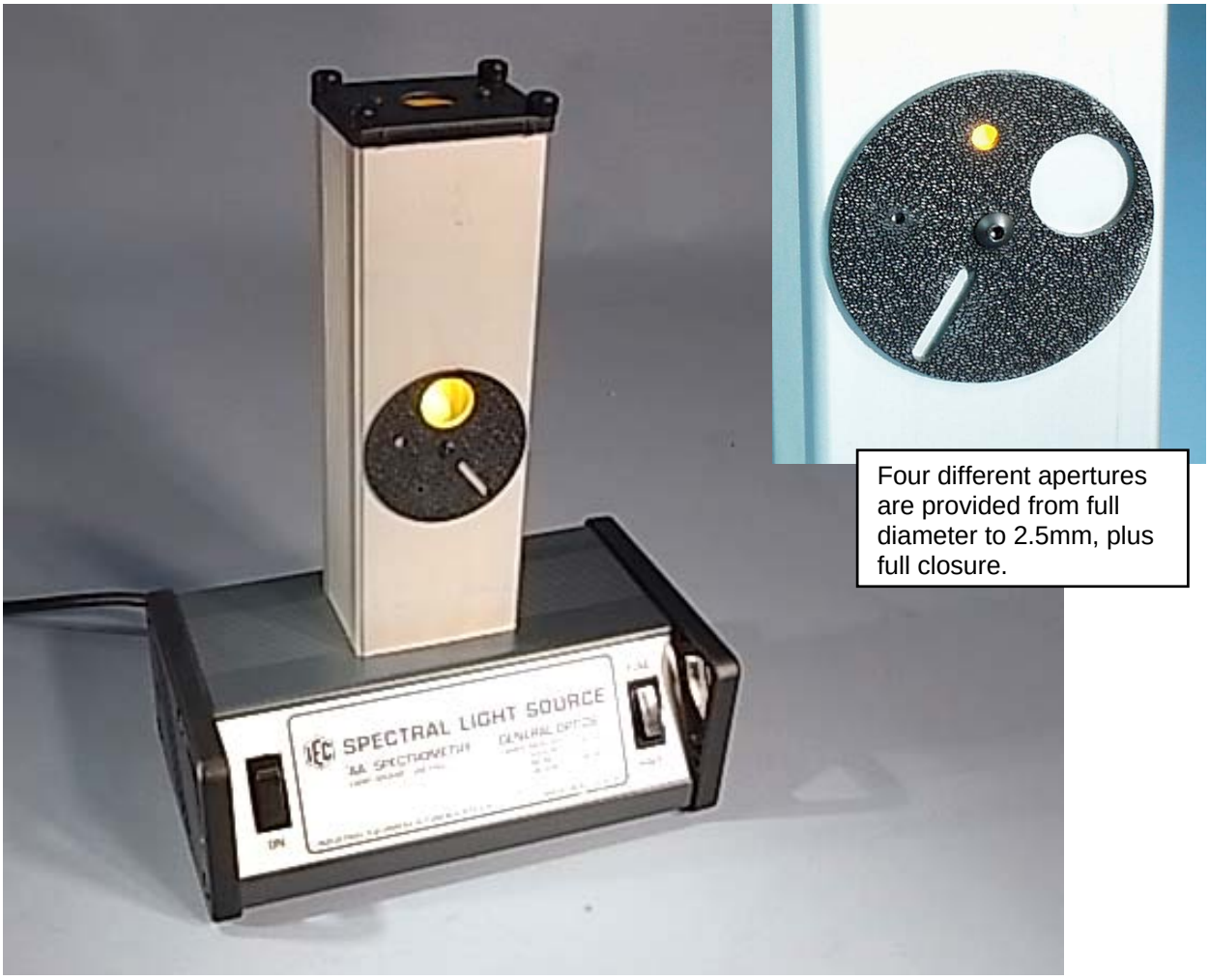
Cat: HL3794-101 Spectral Lamp Power Supply (NO LAMP) 240V.AC.

DESCRIPTION:

This low cost IEC Sodium Lamp & Power Supply is a compact and self contained instrument for operating Spectral Lamps used for optical work. Also an excellent Sodium light source for the IEC Spectrometer when doing 'AA' experiments.

The ventilated top cap can be removed to allow the rear face of the 'chimney' to slide from the chimney. The spectral lamp plugs into a socket for easy replacement. A manually adjusted shutter is provided on the front of the chimney to select the aperture. This can be a long slot, a large hole, a 4.5mm hole, a 2.5mm hole or complete closure.

CH3792-125 (SODIUM lamp included) & HL3794-101 (NO LAMP included)



Four different apertures are provided from full diameter to 2.5mm, plus full closure.

Physical size: 171x130x275mm LxDxH **Weight: 2.0 kg**

The IEC Sodium Lamp & Power Supply is specially designed for use in the classroom. It is powered from 220/240V.AC. 50/60Hz mains with a removable mains cable.

EXPLANATIONS: Spectral lamps are special discharge lamps which, during manufacture, are filled with certain specific gases. When electric current is passed through the gas, the discharge glows and a certain single wavelength or set of known wavelengths of light is emitted. This light of exactly known wavelength can be used for many optical experiments. The voltage required to force the gas to conduct electric current is high but, once conduction begins, the power supply provides a much lower voltage to maintain the current flow.

The brightness of the discharge depends on the type of gas used and the temperature of the gas. As the gas heats, the discharge generally glows brighter.

Rear label provides basic useful information for the user.

removal to change a lamp from one type to another.

This lamp unit is designed to be used either as a general purpose Spectral Lamp for optical experiments using Sodium, Mercury, Helium or Neon discharge, or as a Sodium Lamp source to be used with the IEC Flame Spectrometer as an “AA” light source. The front panel of the instrument makes this clear to the user.

INFORMATION:

NOTE: If the power is turned off the lamp when it has already heated its gas, the lamp may not re-start until the gas temperature cools again to be closer to ambient temperature.

This special power supply provides the special electrical characteristics required to operate spectral lamps.

Features of the IEC Sodium Lamp & Power Supply:

- SAFE: Designed to proper engineering standards of electrical safety.
- COMPACT: The attractive unit takes very little space in the lab.
- PROTECTED: The tube is always protected from damage inside the 'chimney'.
- EASY TO USE: Power is applied by a single illuminated rocker switch on the rear panel. There is no separate lamp holder because the lamp plugs directly into the top of the power supply. No need for retort stands or clamps. Easy to change the aperture.
- EASY TO CHANGE A TUBE: Simply remove the 4x finger screws on the top cap and slide the rear panel from the chimney. Carefully hold the tube firmly and move slightly from side to side while extracting vertically from the socket.
- COMPATIBLE with the IEC SPECTROMETER: The unit is designed to be compatible with the IEC Flame & 'AA' Spectrometer (CH3792-001) and the height of the light apertures match the height of the Spectrometer's viewing tube.

LOW COST SPARE LAMP: For low cost Sodium spectral lamps, refer to the IEC 'PA' listing in the catalogue for the various lamps available. These 8 pin (octal base) tubes also fit the separate lamp holder as used in catalogue number HL3795-120 Power Supply with the HL3796-101 holder.

Mercury lamp: PA3797-101

Sodium lamp: PA3797-102

Neon lamp: PA3797-103

Helium lamp: PA3797-104

Designed and manufactured in Australia