3B SCIENTIFIC® PHYSICS



U40120 Single-beam lamp U40121 Magnet holder

Operating instructions

1/03 ALF



The single-beam lamp is used in experiments to demonstrate geometric optics on magnetic boards (U14600).

1. Safety instructions

- Caution: Lamps heat up during extended periods of operation.
- Do not touch the glass bulb of the lamp with your bare hands when changing the bulb, for example. Lamp bulbs are clouded by fat deposits on the skin.

2. Description, technical data

Enclosed in a round metal housing, this lamp has a rotating mount and an adjustable aperture for producing narrow light beams or light cones.

Lamp:	12V, 35W
Power cable:	1.5 m long with a 4-mm plug
Dimensions:	120 mm x 70 mm Ø
Weight:	0.25 kg

2.1 Accessories:

Magnet holder U40121 for mounting the single-beam lamp U40120.

Diameter: 65 mm

Spare bulb U40122 for the single-beam lamp U40120.

3. Procedure

- 3.1 Setting a narrow light beam
- Attach the magnet holder to the board.
- Fit the single-beam lamp on the magnet holder.

- (1) Protective cover for the lamp socket
- (2) Knurled screw for adjusting the aperture
- ③ Magnet holder
- (4) Aperture with lens
- 5 Handle

- Plug the lamp into a power supply unit, for instance, U11735.
- Loosen the knurled screw.
- Enlarge or reduce the aperture to achieve the required beam thickness.
- Tighten the knurled screw firmly.

3.2 Setting a light cone

- Attach the magnet holder to the board.
- Fit the single-beam lamp on the magnet holder.
- Plug the lamp into a power supply unit, for instance, U11735.
- Loosen the knurled screw.
- Enlarge or reduce the aperture to obtain the required light cone.
- Tighten the knurled screw firmly.
- 3.3 Bulb replacement
- Loosen the
- screws (A).
 Remove the protective
- cover (B).Change the bulb.
- Do not touch the
- Do not touch the bulb with your bare fingers when changing it.
- Install the protective cover (B) over the lamp and tighten the screws (A).