# **3B SCIENTIFIC<sup>®</sup> PHYSICS**



## Single-Beam Lamp 1000682

### **Operating instructions**

06/18 ALF



- 1 Protective cover for the lamp socket
- 2 Knurled screw for adjusting the aperture
- 3 Magnet holder (not included)
- 4 Aperture with lens
- 5 Handle

### 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

The single-beam lamp is used in experiments to demonstrate geometric optics on magnetic boards (1000604).

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

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

# 4. Accessories

Magnet holder for moun		
single-beam lamp		1003323
Diameter:	65 mm	
Spare bulb for the single-beam lamp		1003324

### 5. Operation

#### 5.1 Setting a narrow light beam

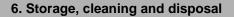
- Attach the magnet holder to the board.
- Fit the single-beam lamp on the magnet holder.
- Plug the lamp into a power supply unit.
- Loosen the knurled screw.
- Enlarge or reduce the aperture to achieve the required beam thickness.
- Tighten the knurled screw firmly.

### 5.2 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.
- Loosen the knurled screw.
- Enlarge or reduce the aperture to obtain the required light cone.
- Tighten the knurled screw firmly.

### 5.3 Bulb replacement

- Loosen the screws (A).
- Remove the protective cover (B).
- Change the bulb.
- 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).



- Keep the lamp in a clean, dry and dust-free place.
- Before cleaning the lamp, disconnect it from its power supply.
- Do not use any aggressive cleaning agents or solvents to clean the equipment.
- Use a soft, damp cloth for cleaning.
- The packaging should be disposed of at local recycling points.
- Should you need to dispose of the lamp itself, never throw it away in normal domestic waste. If being used in private households it can be disposed of at the local public waste disposal authority.



• Comply with the applicable regulations for the disposal of electrical equipment.



Fig. 1 Bulb replacement A Screws (3x) B Protective cover