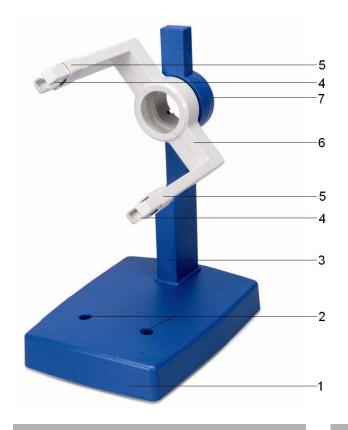
### 3B SCIENTIFIC® PHYSICS



### Tube Holder D 1008507

#### Instruction sheet

07/12 ALF



- 1 Base plate
- 2 Holes for inserting Helmholtz coils
- 3 Stanchion
- 4 Clamping jaws for tubes
- 5 Retaining slider
- 6 Fork
- 7 Stock for tubes and optical analogue equipment

#### 1. Safety instructions

When operating tubes, the terminals may be live to high voltages that are dangerous to touch.

- Do not modify circuits unless all power supplies are turned off.
- Do not mount or remove tubes unless all power supplies are turned off.

#### 2. Description

The tube holder accommodates all tubes of the series D and their accessories, such as the Helmholtz Coils D (100644) and Auxiliary Coil (100645) plus the Optical Analogue equipment (1000656).

The tube holder consists of a robust base plate with an upright stanchion and a fork-shaped holder for hot cathode tubes that can be rotated by 360° and is made of heat-resistant, highly insulating plastic. The tubes are secured into sprung clamps with retaining sliders. Two holes are bored in the base plate to accommodate a pair of Helmholtz coils at the "Helmholtz separation distance" for generating a uniform magnetic field. The tube holder rests on three non-slip rubber feet.

#### 3. Technical data

Dimensions: 230x175x320 mm<sup>3</sup> approx.

Separation of

holes for coils: 76 mm approx. Weight: 1.5 kg approx.

#### 4. Operation

## 4.1 Setting up and removing hot cathode tubes

- Tubes should not be mounted or removed unless all power supplies are disconnected.
- Push the jaw clamp sliders on the stanchion of the tube holder right back so that the jaws open.
- Push the bosses of the tube into the jaws.
- Push the jaw clamps forward on the stanchions to secure the tube within the jaws.
- To remove the tube, push the jaw clamps right back again and take the tube out of the jaws.

#### 4.2 Setting up the Helmholtz coils D (100644)

- Place the tube in the holder as described above.
- Insert the Helmholtz tubes into the holes with the connections facing outwards. Push the sleeves on the rod upwards and insert the rod at an angle.
- Push the sleeves into the holes to secure the coils.

#### 4.3 Setting up the auxiliary coil (1000645)

- Place the coil on the upper fork.
- Push the retaining slider over the lip of the auxiliary coil to secure the coil in place.

# 4.4 Setting up the optical analogue equipment (1000656)

 Insert the aluminium disc with the grating into the stanchion from behind.

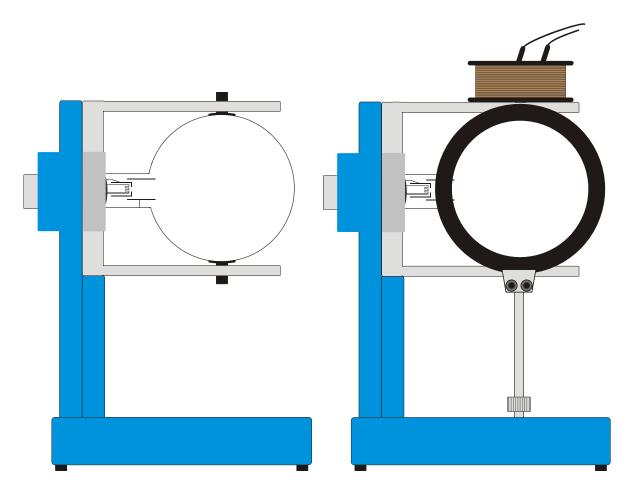


Fig. 1 Setting up a tube (left), a tube, the Helmholtz coils and the auxiliary coil (right)