# **3B SCIENTIFIC® PHYSICS**



# Control Unit for Spectrum Lamps 230V 1021409

Instruction manual

06/20 GH/SD



# 1. Safety instructions

The Control Unit for Spectrum Lamps corresponds to the safety regulations for electrical measuring, control and laboratory equipment according to DIN EN 61010 section 1 and is designed in accordance with safety class I. It was designed for operation in dry rooms, suitable for electrical equipment.

When operated properly and according to instructions, safety is ensured when working with the equipment. However, safety is not guaranteed if the equipment is operated incorrectly or handled carelessly.

If there is reason to assume that safe operation is no longer possible (e.g. visible damage), the apparatus must be taken out of operation immediately.

In schools and training centres, operation of the apparatus is to be monitored by trained personnel.

• Prior to putting the unit into initial operation check whether the value for the mains supply voltage printed on the back of the housing meets the local requirements.

- Prior to putting into operation, examine the housing and the mains power line for any damage and if any operating disturbances arise or visible damage occurs to the equipment, take it out of operation and secure it from being put back into operation inadvertently.
- Only connect the device to sockets with an earthed protective conductor.
- Only replace a defective fuse with a fuse having the same value as the original (see rear side of the housing).
- Pull the mains power plug prior to changing a fuse.
- Never short-circuit a fuse or a fuse holder.
- Always leave ventilation slots on the housing free to ensure sufficient air circulation to cool the internal components. Do not stack the unit.
- Only permit the apparatus to be opened by a qualified electrician.

# 2. Description

Control unit for the high-pressure mercury lamp 1000852 and the spectral lamps 1003537 -1003546 including lamp housing on a tripod rod. The device itself provides the necessary ignition voltage with max. 1000 V for the starting process and limits the output current for the lamp to max. 1 A.

A second lamp housing can be clamped and connected on the back of the stable metal housing on a tripod rod. With a switch on the front the right or left spectral lamp can be switched on.

# 3. Delivery scope

1x control unit for spectral lamps

1x lamp housing on tripod rod with lamp socket Pico 9

1x power cable with earthed plug type B1 2x fixing screw

#### 4. Technical data

Mains voltage: 230 V, 50/ 60 Hz

Fuse: F2.5A, 250 V, 5x20 mm

Lamp socket: Pico 9 (in lamp housing)

Lamp connections: 2x sockets 7 poles (Amphenol Eco-Mate) on the back

Ignition voltage: max. 1000 V

Output current: max. 1A

Size (just control unit): 220 x 210 x 120 mm

Weight (just control unit): 4,5 kg

Tripod rod length: 300 mm

Tripod rod diameter: 10 mm

# 5. Operation

#### 5.1 Spectral lamps 1003537 - 1003546

- Switch off the unit and pull out the mains plug!
- Lamp replacement / lamp installation may only be carried out with the mains plug disconnected!

- Mount the lamp housing on tripod rod with the screw on the left or right holder provided at the desired height.
- Loosen the small knurled screw of the lamp housing cylinder. Remove the housing cylinder and carefully insert the spectral lamp into the socket.
- It is essential to pay attention to the mechanical coding of the plug pins!
- Put the housing cylinder back on and tighten the knurled screw slightly.
- Connect the lamp cable to the left or right input of the control unit.
- Connect the control unit to the mains supply and use the switch to turn on the lamp connected to the right or left input.

### 5.2 High pressure mercury lamp 1000852

- Switch off the unit and pull out the mains plug!
- Lamp replacement / lamp installation may only be carried out with the mains plug disconnected!
- Mount the high-pressure mercury lamp instead of the lamp housing or on the second holder. Alternatively, the lamp can be placed in a barrel foot.
- Connect the cable of the lamp to the respective input.
- Connect the control gear to the mains supply and use the switch to turn on the lamp connected to the right or left connector.

#### 5.3 Fuse replacement

- Switch off the control unit and make sure to disconnect the mains plug.
- Use a flat object (e.g. screwdriver) to remove the fuse holder on the rear of the power supply unit.
- Replace the fuse and reinsert the holder.

#### 6. Disposal

- Dispose of the package at a local recycling depot.
- If the device itself is to be scrapped, it does not belong in normal household waste. The local regulations for the disposal of electrical waste must be observed.

