3B SCIENTIFIC® PHYSICS



Connector Box

1009954 (115 V, 50/60 Hz) 1009955 (230 V, 50/60 Hz)

Instruction sheet

10/15 SD



- 1 8-pin miniDIN socket
- 2 Analogue output 2
- 3 Analogue output 1
- 4 Socket for plug-in power supply

1. Safety instructions

The connector box conforms to all safety regulations for electrical measuring, control, monitoring and laboratory equipment, as specified under DIN EN 61010, Section 1. It is intended for operation in a dry environment, suitable for the operation of electrical equipment and systems.

Safe operation of the equipment is guaranteed, provided it is used correctly. However, there is no guarantee of safety if the equipment is used in an improper or careless manner.

If it may be assumed for any reason that nonhazardous operation will not be possible (e.g. visible damage), the equipment should be switched off immediately and secured against any unintended use.

Only use this equipment in dry rooms.

- Do not apply any external voltage to the output sockets (2 + 3).
- Only use with the supplied plug-in power supply

2. Description

The connector is designed to connect the photo gate (1000563) or laser reflection sensor (1001034) to digital counters equipped not with 8-pin miniDIN sockets but with 4-mm-input sockets.

When used with the photo gate (1000563) or laser reflection sensor, the counter should be connected to the connector box with the black

socket wired to Output 2 (ground) and the red socket to Output 1, i.e. crossed over.

Apart from the two digital sensors already mentioned, it is also possible to connect other analogue sensor boxes, such as magnetic field sensors (1000558 or 1009941) or the barometer (1000549), with the values they measure being recorded via peripheral devices. The measurements are then output in the form of an analogue voltage at Analogue output 1 via the blue and red sockets. Analogue output 2 is intended for sensor boxes which detect two measurements at once, such as the blood pressure sensor (1000578). In that case, the Korotkov signal can be read from Output 2.

When connecting analogue sensor boxes, it should be noted that the output voltage is not calibrated and there is no automatic matching of measurement curves.

3. Contents

- 1 Connector box
- 1 8-pin miniDIN connecting cable, length 60 cm
- 1 Plug-in power supply 12 V AC / 500 mA 1009954: 115 V AC, 50/60 Hz, US plug 1009955: 230 V AC, 50/60 Hz, Euro plug
- 1 Instruction sheet

4. Technical data

Analogue outputs: 4 mm safety sockets
Sensor input: 8-pin miniDIN socket
Power supply terminal: Coaxial power con-

nector, 5.5 x 2.1 mm

Power supply: 12 V AC, 500 mA plug-in power supply

Dimensions: 90x30x40 mm³

Weight: 0.4 kg

5. Operation

- Sensors such as the photo gate or laser reflection sensor are connected to the connector box via miniDIN cables.
- Use the plug-in power supply to supply power to the connector box.
- Connect the counter to the black socket (ground) of Output 2 and the red socket of Output 1 via experiment leads.

6. Sample experiment

Connecting a counter to the photo gate and measuring the results

Required apparatus:

1 Photo gate 1000563 1 Connector box @230 V 1009955 or

1 Connector box @115 V

1009954

1 Counter

2 Safety experiment leads

Stand equipment

- Connect the photo gate and counter to the connector box as described in section 5.
- Carry out the measurements you need.

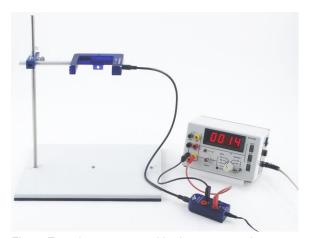


Fig. 1 Experiment set-up with photo gate and counter

7. Disposal

Should the equipment need to be scrapped, it must not be disposed of in normal household waste.

 Packaging and components should be disposed of at local recycling centres.

