3B SCIENTIFIC® PHYSICS

Relay U11368

Instruction sheet

02/09 Hh

1. Safety instructions

- Do not exceed the maximal values specified for the switching voltage, switching current and the power rating specified in the technical data section.

This constitutes a fire hazard.

- Do not connect this relay to high voltage since this might break down the potential isolation.

2. Scope of delivery

1 Relay

1 Mini DIN connecting lead 8-pin, 60 cm length

3. Description

The relay is an event-triggered switch for switching on or off components that are electrically isolated from the experiment set-up. Examples of such components include light bulbs, small to medium-sized electrical motors, holding magnets and electromagnetically operated valves.

The power relay box is equipped with a set of contacts (1 N/C contact, 1 N/O contact, 1 change-over contact) with printed labels so that can be used as an N/C or an N/O switch.

When the relay coil is inactive (when no current is flowing), the N/C contact is closed.

The switch contacts consist of high-grade silver alloy and are connected to 4-mm safety sockets.

The relay is equipped with safe potential isolation between the coil and the contacts in conformance with the VDE 160 standard.

4. Technical data

Switching voltage:	250 V AC 220V DC max.
Switching current:	6A AC 0.12 A DC max.
Power rating:	1500 VA max. 1 mW min.

5. Operation

- Connect the relay to the "Digital Outputs" socket of the 3B NET*log*™ equipment using the supplied mini DIN lead. It responds to digital output A.
- Preferably use 4-mm safety leads for the remaining electrical connections to the experiment set-up.

6. Sample experiment

Measuring the discharge of a capacitor with the basic experiment board

1 3B NET*log*™	U11300
1 Relay	U11368
1 Basic experiment board	U11380

Various experiment leads with 2-mm and 4-mm plugs

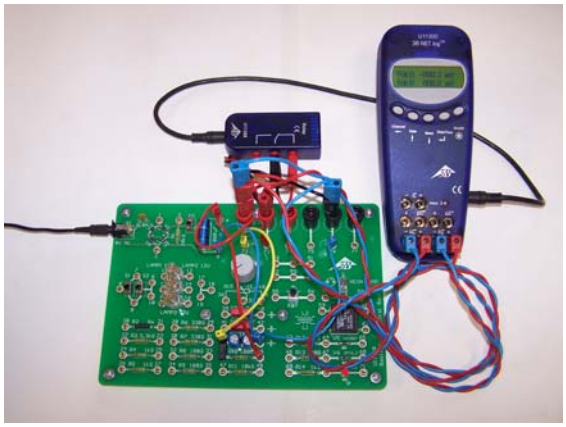

Fig. 1: Measuring the discharge of a capacitor

- Consult the instructions for the basic experiment board U11380 for the electrical connections between the relay and the experiment.
- Select one of the analog inputs (A or B) on the 3B NET*log*™ module and follow the instructions for the board regarding the experiment on capacitor discharge. All necessary output value settings are specified here.
- Conduct and analyse the experiment.

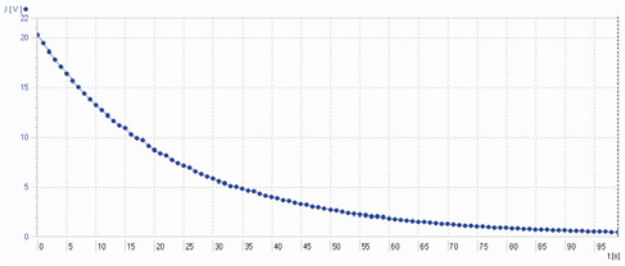

Fig. 2: Discharge curve of a capacitor

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