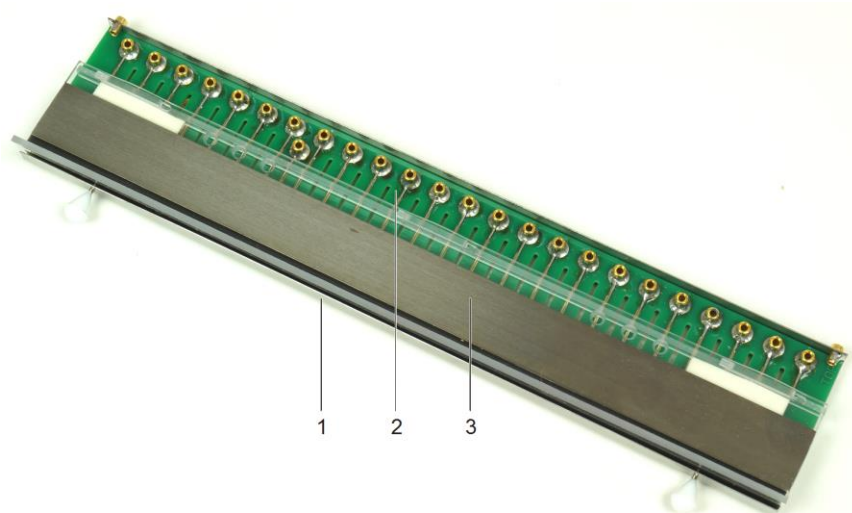


## Earthworm Experiment Chamber 1020601

### Instruction Sheet

07/17 MH/JS



- 1 Chamber floor
- 2 Experiment board
- 3 Cover

### 1. Description

The earthworm experiment chamber is used in neurophysiological experiments on intact earthworms. Here, the earthworm is electrically or tactilely stimulated and its action potentials are measured. It remains unhurt in the process and can be released back into its habitat when finished.

A simple cover with drilled holes is used to hold the earthworm in place in the lateral direction, and two interchangeable longitudinal restraints prevent its longitudinal movement. In order to create a contact, the earthworm lies on a long series of electrodes that are connected to the Bio-Amplifier (1020599/600) or to the stimulus generator of the Bio-Interface (1020602) via 2 mm jacks using special cables. The tactile stimulus can be administered through the drilled holes in the cover.

Once the experiment has finished, the experiment chamber can be quickly and easily disassembled for cleaning.

### 2. Safety instructions

The earthworm experiment chamber is intended for use in dry areas.

When it is used as intended, the safe operation of the device is guaranteed. The safety of the device is, however, not guaranteed if it is operated incorrectly or handled carelessly.

If it is suspected that it is no longer possible to operate the device safely (e.g. in the event of visible damage), the device must be taken out of service without delay.

In schools and training facilities, the use of the device must be supervised by suitably trained staff.

- Before using the device, read the operating instructions carefully and completely.

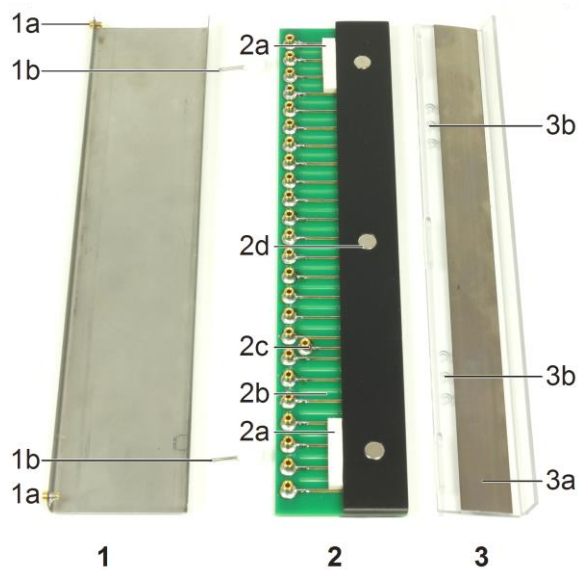
### 3. Technical data

Terminals:	2 mm jacks
Dimensions:	Approx. 250x55x20 mm <sup>3</sup>
Mass:	Approx. 192 g

#### 4. Contents

- 1 Chamber floor
- 1 Experiment board
- 1 Cover
- 1 20 cm longitudinal restraint, can be cut off
- 1 Adapter cable 2/4 mm jack, 15 cm, black
- 1 Magnet cable
- 1 2 mm connector lead, 15 cm, black
- 2 2 mm connector leads, 7.5 cm, black
- 3 Measuring leads for earthworm experiment

#### 5. Components

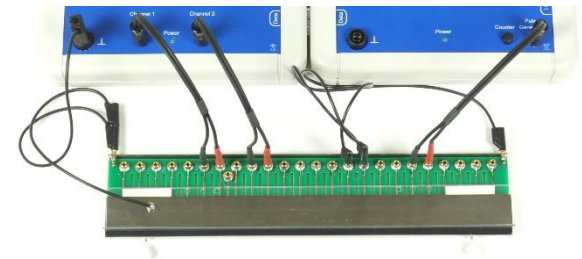
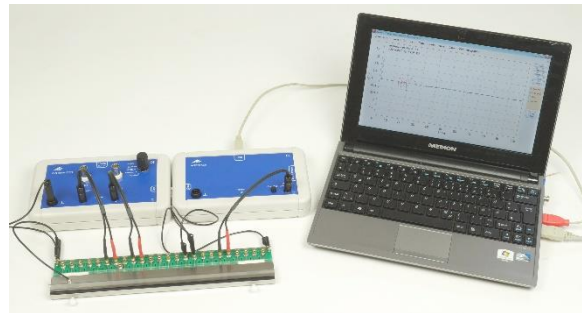
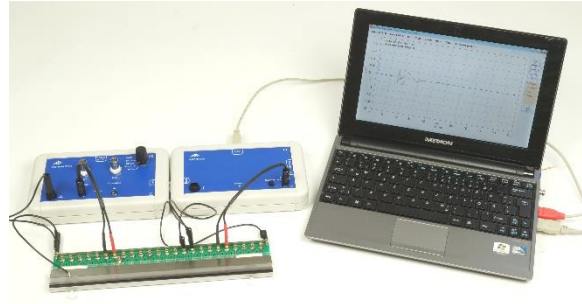


- 1 Chamber floor**
  - 1a Ground jack, 2 mm (2x)
  - 1b Retaining pin for experiment board (2x)
- 2 Experiment board**
  - 2a Longitudinal restraint (2x)
  - 2b Electrodes with 2 mm jack (24x)
  - 2c Short electrode with 2 mm jack
  - 2d Retaining magnet (3x)
- 3 Cover**
  - 3a Magnetic retaining strips
  - 3b Drilled holes (3x)

#### 6. Operation

- Mount the experiment board in the chamber floor with the aid of the retaining pins.
- Fit the replaceable longitudinal restraints.
- Lay the earthworm inside, then put the cover on and carefully move it so as to restrain the earthworm in the lateral direction.

#### One or two-channel derivative during electrical stimulation:



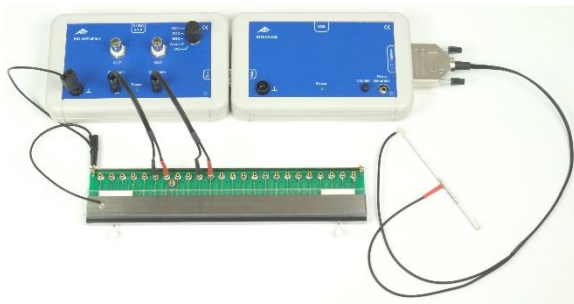
#### Equipment list:

- 1 Earthworm experiment chamber (1020601)
- 1 Bio-Amplifier (1020599/1020600)
- 1 Bio-Interface (1020602)

#### Additionally required:

- Earthworms (e.g. Canadian Crawlers from angling accessories)
- Computer with Windows XP, 2007, 2008 or 2010

### One or two-channel derivative during tactile stimulation:



#### Equipment list:

- 1 Earthworm experiment chamber (1020601)
- 1 Stimulator for earthworm experiments (1020603)
- 1 Bio-Amplifier (1020599/1020600)
- 1 Bio-Interface (1020602)

#### Additionally required:

Earthworms (e.g. Canadian Crawlers from angling accessories)  
Computer with Windows XP, 2007, 2008 or 2010

The experiment results are transferred in conjunction with the Bio-Interface (1020602) to a computer and displayed with the appropriate software. All further information can be found in the booklet or the experiment instructions in the respective measurement software (Elphys.exe).

## 7. Cleaning

After removing an earthworm:

- Remove the experiment board and all of the components, especially the electrodes, clean them thoroughly and carefully with water, and then let them dry.

## 8. Disposal

- Dispose of the packaging at the local recycling points.
- When the time comes for the device itself is to be scrapped, it does not belong in the normal domestic waste. If the device is used in private households, it may be disposed of at the local public disposal facilities.
- Observe the applicable regulations for the disposal of electronic waste.

