

# **User Manual**

# 1068 Fixed Resistance Box

Version 1.2 9-22

#### **Time Electronics Ltd**

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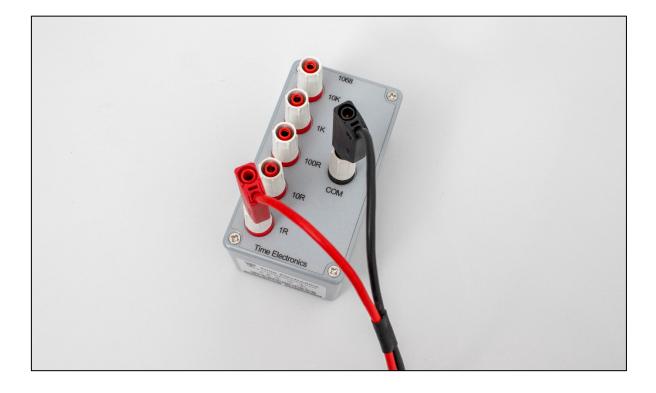
This manual provides operating and safety instructions for the Time Electronics product. To ensure correct operation and safety, please follow the instructions in this manual.

Time Electronics reserves the right to change the contents, specifications and other information contained in this manual without notice.

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### 1 Introduction



A compact 5 fixed value resistance box designed for industrial, general laboratory, and education requirements. Housed in a robust case the 1068 is easily portable and takes up minimal bench space. Being a low cost and simple operation instrument, it is a popular model for physics and electronics laboratories in universities and schools.

The high accuracy obtained in the 1068 is achieved by the use of precision resistors. To select a value simply connect test leads to one of the fixed value resistors;  $1\Omega$ ,  $10\Omega$ ,  $100\Omega$ ,  $1k\Omega$ , or  $10k\Omega$ .

Connection to the box is via safety terminals that are compatible with 4 mm shrouded plugs, as well as standard plugs, bare wires, and spade terminals. The resistance values are clearly indicated beside each terminal.

### Features

- 5 fixed resistance ranges
- High accuracy
- Clear visual indication
- Portable and compact
- Simple operation
- Robust casing
- Ideal for education

# 2 Specifications

**5 Fixed Resistance Ranges**.... 1  $\Omega$ , 10  $\Omega$ , 100  $\Omega$ , 1 k $\Omega$ , 10 k $\Omega$ 

Accuracy	1 Ω ± 1 mΩ 10 Ω ± 5 mΩ 100 Ω ± 10 mΩ 1 kΩ ± 100 mΩ
	10 kΩ ± 1 Ω
Voltage Rating	. Maximum 250 V DC/AC RMS
Power Rating	0.33 watt per resistor
Dimensions	L 115 x W 65 x H 86 mm (including terminals)
Weight	0.29 kg
Options	. Calibration certificates: Traceable (factory) and accredited (ISO 17025).
Country of Origin	. United Kingdom

# 3 Operation

### 3.1 Safety Precautions



Observe proper safety operational guidelines when working with high voltages. To minimize shock hazard connect the case terminal to an electrical ground. Always take precautions to avoid and prevent contact with live components. Handle the unit with care and use as per the instructions in this manual.

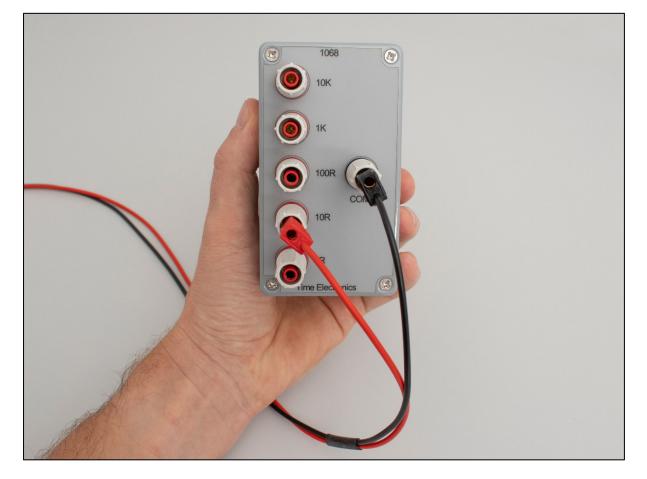
### 3.2 Operating Instructions

Connection to the box is via 4 mm safety terminal posts, using 4 mm shrouded or standard plugs. Alternatively, crocodile clips or stripped wire connections can be used.

Whatever method is used, the connection must be tight to the terminal posts to avoid introducing unwanted additional resistance.

The red terminals connect to the resistors with the common black negative.

To use the box simply connect to the resistor you require.



# 4 Warranty and Servicing

### Warranty

Time Electronics products carry a one-year manufacturer's warranty as standard.

Time Electronics products are designed and manufactured to the highest standards and specifications to assure the quality and performance required by all sectors of industry. Time Electronics products are fully guaranteed against faulty materials and workmanship.

Should this product be found to be defective, please contact us using the below details. Inform us of the product type, serial number, and details of any fault and/or the service required. Please retain the supplier invoice as proof of purchase.

This warranty does not apply to defects resulting from action of the user such as misuse, operation outside of specification, improper maintenance or repair, or unauthorized modification. Time Electronics' total liability is limited to repair or replacement of the product. Note that if Time Electronics determine that the fault on a returned product has been caused by the user, we will contact the customer before proceeding with any repair.

### **Product Registration**

You can register your product at: <u>www.timeelectronics.com/contact/product-registration</u>. Registering your product will enable us to maintain a record of purchase for your warranty. You can also use the web form to provide feedback about our products and services.

### Calibration and Repair Services

Time Electronics offers repair and calibration services for all the products we make and sell. Routine maintenance by the manufacturer ensures optimal performance and condition of the product. Periodic traceable or accredited calibration is available.

### **Contacting Time Electronics**

#### Online:

Please visit <u>www.timeelectronics.com</u> and select Technical Support from the Contact links. From this page you will be able to send information to the Time Electronics service team who will help and support you.

#### By phone:

+44 (0) 1732 355993

By email: mail@timeelectronics.co.uk

#### **Returning Instruments**

Prior to returning your product please contact Time Electronics. We will issue a return merchandise authorization (RMA) number that is to accompany the goods returning. Further instructions will also be issued prior to shipment. When returning instruments, please ensure that they have been adequately packed, preferably in the original packing supplied. **Time Electronics Ltd will not accept responsibility for units returned damaged.** Please ensure that all units have details of the service required and all relevant paperwork.

Send the instrument, shipping charges paid to:

#### **Time Electronics Ltd**

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Tel: +44(0)1732 355993 Fax: +44(0)1732 350198

Email: mail@timeelectronics.co.uk Web Site: www.timeelectronics.com

#### Disposal of your old equipment



- 1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
- 2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- 3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- 4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or return to Time Electronics.