



***Time Electronics***

## **1065 Power Resistance Decade Box**

### **Technical Manual**



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*All Time Electronics' instruments are subject to continuous development and improvement and in consequence may incorporate minor detail changes from the information contained herein.*

## 1. Specification

<b>Resistance Range:</b>	0.1Ω to 120kΩ
<b>Accuracy:</b>	0.1Ω decade = ±5% 1Ω - 120kΩ decades = ± 1%
<b>Number of Decades:</b>	6
<b>Increment:</b>	0.1Ω steps
<b>Power Rating:</b>	10 watt per resistor
<b>Voltage Rating:</b>	Maximum 500V DC/AC RMS
<b>Temperature Coefficient:</b>	200ppm/°C
<b>Residual Resistance:</b>	Less than 20mΩ
<b>Connections:</b>	4 mm terminals. A third terminal is to enable the case to be earthed or connected to either output.
<b>Dimensions:</b>	W390 x H60 x D150mm
<b>Weight:</b>	2kg
<b>Features:</b>	Ventilated robust metal case and multi-wafer switches for low switch contact resistance
<b>Optional Extras:</b>	Calibration certificates traceable to NPL and UKAS (ISO 17025).



If voltages above 70V DC or 30V AC (RMS) are present the optional terminal shroud kit (Part No. 9723) must be fitted.

## 2. Operation

The 1065 Power Decade Resistance Box is designed to meet the standard required for educational, industrial and research & design applications.

Housed in a well ventilated, all-metal case, its compact construction makes it easily transportable and when in use it takes up a minimum of bench space.

Switch contact resistance has been kept to a minimum by the use of multi-wafer switches, each with four parallel, silver plated, self-wiping contacts. The six in-line dials give a clear numerical readout of the selected resistance.



Resistance is selected by dialing the value required using the rotary switches. This enables precise setting with a clear unambiguous indication.

For example - to select 3k83:

- set the 1k $\Omega$  bank to 3
- the 100 $\Omega$  bank to 8
- and the 10 $\Omega$  bank to 3

The 1065 has low thermal 4mm binding posts allowing connection via 4mm banana plugs, spades, or bare wires. Two connections red and black connect to the resistance and the green terminal connects to the case for screening purposes.



**Note:** Remember that all resistance boxes have a residual resistance, i.e. when the dials are set to zero a small resistance remains. If you are making precision measurements or recalibrating the instrument, this residual value must be subtracted from all measurements.

### 3. Guarantee & Servicing

#### Guarantee Period

This unit is guaranteed against defects in materials and workmanship for a period of **one year** from its delivery to the customer.

We maintain comprehensive after sales facilities and the unit can, if necessary be returned to us for servicing. During this period, Time Electronics Ltd will, at its discretion, repair or replace the defective items. For servicing under guarantee, the instrument type and serial number must always be quoted, together with details of any fault and the service required. The purchaser of the instrument must prepay all shipping charges. Time Electronics Ltd will pay return shipping charges.

This guarantee is void if servicing has been attempted by an unauthorised person or agent. If, during the guarantee period, failure is due to misuse or abuse of the unit, the repair will be put in hand without delay and charged unless other instructions are received.

Please note that if you require a new UKAS Certificate during the warranty period, this will be charged at the current rate on our price list.

#### Service After Guarantee Period

Even after the guarantee period has expired, Time Electronics Ltd., can still service your instrument. As the manufacturer, we have the specialised knowledge needed to keep your instrument in peak condition and we also maintain a comprehensive spare parts service.

Please enclose details of the service required and your full company details including a contact name when returning for servicing.

#### Returning Instruments

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:-

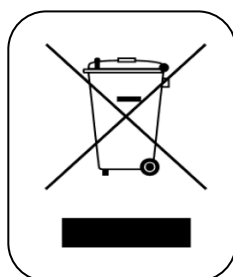
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#### **Disposal of your old equipment**

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.