



Time Electronics
Calibration, Test and Measurement

User Manual

9764

Oscilloscope Current Probe Adaptor

Version 1.1
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Nothing from this manual may be multiplied, or made public in any form or manner, either electronically or hard copy, without prior written consent from Time Electronics Ltd.

This also applies to any schematics, drawings and diagrams contained herein.

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



The 9764 current probe adaptor converts the amplitude output of an oscilloscope calibrator to a square-wave current in the wire loop of one of three interchangeable heads. The adaptor can be used with the 5045 scope calibrator, or 5025 / 5051 models with scope calibration options fitted.

Set up is simple, with the oscilloscope current probe to be calibrated being clamped round the wire loop.

Features

- Calibrate oscilloscope current probes
- For use with the 5045 scope calibrator
- Compatible with 5025/5051 models (with scope option)
- Drive current 0.1 mA to 100 mA pk-pk
- 0.5 % accuracy
- Three interchangeable heads supplied
- Compact design (142 x 78 x 50 mm)
- Battery powered (4 x AA/LR6 cells)

2 Operation

Power

The unit is battery powered, if the battery OK indicator fails to light when the unit is switched on, replace the batteries. Batteries must be 4 x AA/LR6 cells alkaline. Do not use rechargeable Nicad or NiMH types. Switch off immediately after use.

Calibrator Connection

The adaptor is supplied from the amplitude output of the oscilloscope calibrator with a 1 kHz square wave of 0 to 1 V pk-pk.



Head Connection

Three heads are supplied with voltage to current conversion ratios of:

- 100 mA / V
- 1 A/V
- 10 A/V

Insert the required head into the adaptor

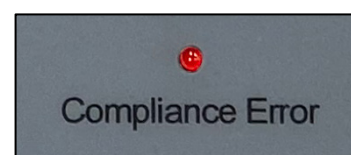


Then clamp the probe from the oscilloscope to the coil of the head to calibrate.

Waveform

The current square wave has slow rounded rising and falling edges to permit the unit to drive inductive loads without overshoot or ringing.

If the current probe being calibrated introduces excessive inductance the adaptor compliance limit may be exceeded, in which case the compliance error light will come on.



3 Specifications

Head	Ratio	Min current	Max current	Accuracy
1 turn	100 mA/V	10 mA	100 mA	0.5 % of value
10 turn	1 A/V	100 mA	1 A	0.5 % of value
100 turn	10 A/V	1 A	10 A	0.5 % of value

Power..... 4 x AA / LR6 alkaline. Do not use rechargeable Nicad or NiMH types.
Switch off immediately after use.

Dimensions / Weight..... 142 x 78 x 50 mm / 0.6 Kg.

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: www.timeelectronics.com/contact/product-registration
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 www.timeelectronics.com 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

Unit 5, TON Business Park, 2-8 Morley Road,
Tonbridge, Kent, TN9 1RA.
United Kingdom.

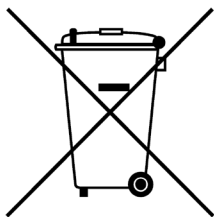
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Web Site: www.timeelectronics.com

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.