

# DET4TD2 and DET4TR2

## Digital Ground Testers



- IP54 rated
- 2, 3 and 4 point testing
- Selectable 25 V or 50 V output
- Dry cell or rechargeable versions
- Simple one button operation
- Robust carry case
- Delivered with calibration certificate

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### DESCRIPTION

Megger's DET4 family of ground testing instruments offers a unique solution to your ground rod and soil resistivity testing needs. The basic kit option comprises, the instrument, test leads, stakes, batteries and calibration certificate delivered in a tough polypropylene carry case - everything you need to start testing in one kit.

The ground testers are rated to IP54 making it truly an outdoor instrument. The ground tester has been designed to be easy to use, a large selector switch makes selection of 2 pole, 3 pole or 4 pole test easy with gloved hands - and the design makes the fitting of shorting links to perform 2 pole tests a thing of the past. A large, clear, easy to read LCD display and thumb sized test button again makes the instrument particularly suited to the outdoor conditions of ground testing.

In addition to this ease of use the ground tester also automatically checks the connection and condition of the P spike and the C spike, indicating the status on the display. The instrument also includes a voltmeter to allow you to measure the ground voltage. The ground tester can measure resistance from 0.01  $\Omega$  through to 20 k $\Omega$  and earth voltages up to 100 V. To allow testing in noisy environments the instrument is capable of rejecting noise of up to 40 V peak to peak.

The DET4TD2 digital ground tester is powered from 8 AA batteries which are widely available and deliver excellent testing time. The DET4TR2 is powered from rechargeable AA cells. The battery charger is built in and the instrument is supplied with an AC/DC adaptor. For both instruments, the battery status is displayed using a bar-graph.

The Megger ground testers comply with stringent safety standards and are rated to 100 V CAT IV. They also have selectable 25 V or 50 V output for compliance with IEC 61557-5.

## ELECTRICAL SPECIFICATIONS

### Ingress protection:

IP54

### C spike, P stake and noise check:

Automatic

### Noise rejection:

40 V peak to peak

### 2-wire, 3-wire test, 4-wire test:

Yes, no shorting links required

### Instrument output:

Voltage:  $\pm 25$  V or  $\pm 50$  V at 128 Hz

Current: 4.5 mA or 0.45 mA

### Resistance range:

0.01  $\Omega$  to 20 k $\Omega$

### Earth voltage range:

0 - 100 V

### Resistance accuracy

2P measurements: 2%  $\pm 3$  digits

3P measurements: 2%  $\pm 3$  digits

4P measurements: 2%  $\pm 3$  digits

### Maximum probe resistance:

R<sub>p</sub> limit: 100 k $\Omega$  (50 V output voltage)

R<sub>c</sub> limit: 100 k $\Omega$  (50 V output voltage)

Limits reduced to 50 k $\Omega$  for 25 V output voltage

Limits reduced to 5 k $\Omega$  for 0.01  $\Omega$  resolution

### Ground voltage range:

0 to 100 V a.c.

### Ground voltage accuracy:

2%  $\pm 2$  V

### Display:

3 ½ high contrast liquid crystal

### Battery type:

DET4TD2 8 off AA (LR6) cells

DET4TR2 8 off AA (LR6) NiMH rechargeable cells

### Operating temperature range:

-15 to +55°C / 5°F to 131°F

### Storage temperature range:

-40 to +70°C / -40°F to 158°F

### Safety:

Complies with the requirements of EN61010-1

100 V CAT IV between terminal pairs.

### EMC

In accordance with IEC61326 including amendment No. 1

### Standards Compliance

Complies with the requirements of KEMA K85B.

Complies with the following parts of EN61557, "Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. - Equipment for testing, measuring or monitoring of protective measures".

Part 1 - General requirements

Part 5 - Resistance to earth

**Dimensions:** 203 x 148 x 78 mm (8 x 5.8 x 3 inches)

**Weight:** 1 kg (2.2lb)

## ORDERING INFORMATION

Item (Qty)	Order Code	Item (Qty)	Order Code
DET4TD2 Basic kit	1000-347	<b>Accessories</b>	
DET4TR2 Basic kit (rechargeable)	1000-324	Replacement hard carry case	5410-429
<b>"Basic kit" Included Accessories</b>		Replacement ground test stakes (x2) for included kit 200mm, 8mm dia.)	6220-804
Hard carry case		Replacement ground test leads (x4) for included kit (15m, 10m, 10m, 3m)	6220-806
Stake and wire kit (15m, 10m, 3m)		Replacement external AC/DC charger (DET4TR2 only)	6280-370
External AC/DC charger (rechargeable version only)		Calibration check box (25 ohm)	6220-824
DET4TD2 + adaptors	1000-360	Right angle terminal adaptor set	6220-803
DET4TR2 + adaptors (rechargeable)	1000-401	Black crocodile clip (1)	6220-850
<b>"+ adaptors" included accessories</b>		Professional ground testing kit (2 x 50m, 2 x 30m, 4 auger stakes, tape measure, in hard carry case)	6320-245
Hard carry case		Vehicle 12 V socket charger (rechargeable versions only)	6280-375
Right angled terminal adaptors (to connect bare wires to terminals)		'Getting down to earth' A Megger guide to earth testing	21500-072
External AC/DC charger (rechargeable version only)			

### UK

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 F (0) 1 304 207342

### UNITED STATES

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 Dallas, TX 75237-1019 USA  
 T 1 800 723 2861  
 T 1 214 333 3201  
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### OTHER TECHNICAL SALES OFFICES

Norristown USA, Sydney AUSTRALIA,  
 Toronto CANADA, Trappes FRANCE,  
 Kingdom of BAHRAIN, Mumbai  
 INDIA, Johannesburg SOUTH AFRICA  
 and Conjure THAILAND

### ISO STATEMENT

Registered to ISO 9001:2000 Cert. no. Q 09250  
 Registered to ISO 14001-1996 Cert. no. EMS 61597  
**DET4TD2\_DET4TR2\_DS\_en\_V05**  
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