

# 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 standard instrument comes with, test leads, stakes, terminal adaptors for bare wire, 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:**

 Rp limit: 100 k $\Omega$  (50 V output voltage)

 Rc 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 1/2 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 IEC61010-1

100 V CAT IV between terminal pairs.\*

\* The CAT IV 100 V is dependant on the use of a leadset of at least this rating, for example the optional two wire leadset part number 1001-858.

**EMC**

In accordance with IEC61326-1

**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	1000-347	Right angle terminal adaptor set	6220-803
DET4TR2 (rechargeable)	1000-324	Black crocodile clip (1)	6220-850
<b>Included Accessories</b>			
Hard carry case		Professional ground testing kit (2 x 50m, 2 x 30m, 4 auger stakes, tape measure, in hard carry case)	6320-245
Stake and wire kit (15m, 10m, 3m)		Vehicle 12 V socket charger (rechargeable versions only)	6280-375
Right angle 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)		Leadset	1001-858
<b>Accessories</b>			
Replacement hard carry case	5410-429		
Replacement ground test stakes (x2) for included kit 200mm, 8mm dia.)	6220-804		
Replacement ground test leads (x4) for included kit (15m, 10m, 10m, 3m)	6220-806		
Replacement external AC/DC charger (DET4TR2 only)	6280-370		
Calibration check box (25 ohm)	1000-435		

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**ISO STATEMENT**  
 Registered to ISO 9001:2008 Cert. no. Q 09250  
 Registered to ISO 14001-2004 Cert. no. EMS 61597  
**DET4TD2\_DET4TR2\_DS\_en\_V09**  
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