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**

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 Ω through to 20 kΩ 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: ±25 V or ± 50 V at 128 Hz
Current: 4.5 mA or 0.45 mA

Resistance range:
0.01 Ω to 20 kΩ

Earth voltage range:
0 - 100 V

Resistance accuracy
2P measurements: 2% ±3 digits
3P measurements: 2% ±3 digits
4P measurements: 2% ±3 digits

Maximum probe resistance:
Rp limit: 100 kΩ (50 V output voltage)
Rc limit: 100 kΩ (50 V output voltage)
Limits reduced to 50 kΩ for 25 V output voltage
Limits reduced to 5 kΩ for 0.01 Ω resolution

Ground voltage range:
0 to 100 V a.c.

Ground voltage accuracy:
2 % ±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 ºC / 5 ºF to 131 ºF

Storage temperature range:
-40 to +70ºC / -40 ºF to 158 ºF

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
DET4TD2	1000-347
DET4TR2 (rechargeable)	1000-324
Included Accessories	
Hard carry case	
Stake and wire kit (15m, 10m, 3m)	
Right angle terminal adaptors (to connect bare wires to terminals)	
External AC/DC charger (rechargeable version only)	
Accessories	
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

Item (Qty)	Order Code
Right angle terminal adaptor set	6220-803
Black crocodile clip (1)	6220-850
Professional ground testing kit (2 x 50m, 2 x 30m, 4 auger stakes, tape measure, in hard carry case	6320-245
Vehicle 12 V socket charger (rechargeable versions only)	6280-375
'Getting down to earth' A Megger guide to earth testing	21500-072
Leadset	1001-858

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ISO STATEMENT
Registered to ISO 9001:2008 Cert. no. Q 09250
Registered to ISO 14001-2004 Cert. no. EMS 61597

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