Megger®

TDR2010
Advanced Dual Channel TDR

- **Trace tagging function**
- **Comprehensive dual channel capability with dual aspect display**
- **AUTO set up mode for instant use**
- **Ultra fast pulse for near end fault identification**
- **Xpert guidance to potential fault**
- **IP54 rating offers real life working**
- **Designed for use on all metallic paired cables**

DESCRIPTION

The Megger® TDR2010 is a state of the art, dual channel, high resolution, compact Time Domain Reflectometer with a color screen for locating faults on paired metallic cables.

The TDR2010 has a minimum resolution of 0.3 ft /0.1 m and a 60 kft/20 km maximum range depending on the velocity factor selected and the cable type.

Five output impedances are available (25, 50, 75, 100, 125 ohms) and an auto impedance matching feature. The velocity factor can be set between 0.2 and 0.99 to meet any cable test requirements.

FEATURES AND BENEFITS

The TDR2010 has a large, high resolution, color, WVGA display with easy set up features. Directional control buttons, together with soft keys, provide intuitive and easy operation for the user.

An AUTO selection option ensures that the most effective parameters are selected depending on the range required, aiding rapid diagnosis of the TDR trace. The ability to manually override the auto function allows fine tuning to enable identification of hard to determine faults.

Dual trace and dual cursor capabilities allow full flexibility, giving the operator full control and instant indication of distance between two points.

A trace comparison feature also allows close examination between trace conditions. Extra high resolution together with a white-light backlight, user definable tones and color give the graphical display a vibrance, aiding the user in identifying key events on the trace.

Trace Tagging

The addition of the trace tagging function allows the user to maintain accurate records of circuit details against every saved result. This is retrieved into the TraceExpert software for inclusion in the master record and for use on reports.

Trace Storage

100 internal trace memories provide for the storage and recall of test results. The traces can be recalled to the display for analysis or compared with an active display to aid in fault location.

Alternatively the stored results can be downloaded to a computer, via the USB port, using the TraceXpert software and USB lead provided.

Fault identification

Megger's own built-in Xpert mode allows for speedy identification of faults. One press of the Xpert key automatically adjusts the range and gain, and positions the cursor to the first major event on the cable. Press the Xpert key again and the TDR2010 will jump to the next detected disturbance.

For those who wish to maintain manual control, manual operation allows full override access to refine the response for easy fault identification.

TraceXpert PC software

The TDR2010 comes complete with the Megger TraceXpert software which gives full control over downloading, reporting and uploading of saved trace results. Designed around a database and programmed for ease of use and simplicity, TraceXpert offers the ideal application for all your data processing requirements.

ADDITIONAL FEATURES

- Backlit graphics color LCD (800x480)

- Adjustable display contrast

- Resolution to 0.1 m

- Trace Xpert guide to potential fault location

- 100 trace on board memory

- USB connection to PC allowing upload and download of traces

- "TraceXpert" PC software analysis tool

- For use on Telecom TNV-3 circuit, or 150V CAT IV power circuits

- Power blocking filter built-in

- Environmental protection to IP54

- Selectable output impedance (25, 50, 75,100 and 125 Ω)

- 2ns pulse for near end fault location

- AUTO option selecting gain and pulse for each range

- AUTO option matches output impedance to cable

- Display distance in metres or feet

- Li-ion rechargeable battery (12 hours typical life)

SPECIFICATION

Except where otherwise stated, this specification applies at an ambient temperature of 68 ºF (20 ºC).

General

Range: Up to 20,000 m with a minimum resolution of 0.1 m

m	ft	ns
10	30	125
25	75	250
50	150	500
100	300	1000
250	750	2500
500	1,500	5000
1,000	3,000	10,000
2,500	7,500	25,000
5,000	15,000	50,000
10,000	30,000	100,000
20,000	60,000	200,000

Accuracy: ±1% of range ± 1 pixel at 0.67 VF
[Note- The measurement accuracy is for the indicated cursor position only and is conditional on the velocity factor being correct.]

Resolution: 1% of range

Input Protection: This instrument complies with IEC61010-1 to protect the user in the event of connection to live systems up to 150 V CAT IV. This instrument is designed for use on de-energized systems but fused leads must be used if the potential voltage between terminals could exceed 300 V.

Output pulse: Up to 20 volts peak to peak into open circuit. Pulse widths determined by range and cable

Gain: Set for each range with user selectable steps (in Manual operating mode)

Velocity Factor: Variable from 0.2 to 0.99 in steps of 0.01

TX Null: Automatic

Power Down: User programmable auto power off timer 1, 5, 10 mins or off

Batteries: Li-ion rechargeable battery with 12 hours typical life

Safety: This instrument complies with IEC61010-1 for connection to live systems up to 150 V CAT IV.

Fuse leads must be used if the voltage between the terminals exceeds 300 V. Compliant with EN60950-1, EN61010-3, UN38.3 and EN62133.

EMC: Complies with Electromagnetic Compatibility Specifications (Light industrial) BS EN 61326-1, with a minimum performance of 'B' for all immunity tests

Mechanical: The instrument is designed for use indoors or outdoors and is rated to IP54.

Case Dimensions: 11.4 in. x 7.5 in. x 2.2 in (290 mm x 190 mm x 55 mm)

Weight: 3.8 lbs (1.7kg)

Case material: ABS

Connectors: Four 4mm-safety terminals and two F connectors. Other standard push on adapters will fit the TDR2010

Test Leads: 1.5 m long consists of 2 x 4 mm shrouded connector to miniature crocodile clips

Display: 800 x 480 pixel WVGA color graphics LCD, viewable in external environments. User selectable color schemes

Environmental

Operational Temperature: 5 ºF to 122 ºF (-15 ºC to 50 ºC)

Charging Temperature: 32 ºF to 104 ºF (0 ºC to 40 ºC)

Storage Temperature: -4 ºF to 158 ºF (-20 ºC to 70 ºC)

ORDERING INFORMATION

Item (Qty)	Cat. No.	Item (Qty)	Cat. No.
TDR2010	1005-449	Optional accessories	
Included Accessories		Terminal adaptor kit	1003-218
2 x miniature clip test lead set	6231-654	Single pair mini-clamp test leads	6231-652
Download kit	1003-353	Single pair fused test leads	1002-015
Carry case	1003-217	AC power lead	25970-002
Bed of nails test leads	6231-655	Replacement battery	1002-552
User guide CD	2003-074		
AC-DC charger	1003-352		