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TDR2000/3
Advanced Dual Channel TDR

- **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® TDR2000/3 is a state of the art, dual channel, high resolution, compact Time Domain Reflectometer with a colour screen for locating faults on paired metallic cables.

The TDR2000/3 has a minimum resolution of 0.1m/0.3ft and a 20km/60kft 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 TDR2000 has a large, high resolution, colour, 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 colour give the graphical display a vibrance, aiding the user in identifying key events on the trace.

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 TDR2000/3 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 TDR2000/3 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.

Megger

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MODELS

The TDR2000/3 is available in two models.

TDR2000/3	A fully featured high resolution TDR with backlit colour display and powered by Li-ion rechargeable battery batteries. This model comes complete with 2 pairs of mini-clip Test Leads.
TDR2000/3P	The same as the TDR2000/3 but with Dual fused test leads replacing the mini-clip leads

BENEFITS

- Backlit graphics colour 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 125Ω)
- 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 20ºC.

General

Ranges:	Up to 20000m with a minimum resolution of 0.1m
Accuracy:	±1% of range ± 1 pixel at 0.67VF [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 for connection to live systems up to 150 V CAT IV. Fused leads must be used if the voltage between the terminals exceeds 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 or 300 V CAT III. Fused 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:	290 mm (11.4 in) x 190 mm (7.5 inches) x 55 mm (2.2 inches)
Instrument weight:	1.7kg (3.8lbs)
Case material:	ABS
Connectors:	Four 4mm-safety terminals and two F connectors. Other standard push on adapters will fit the TDR2000/3
Test Leads:	2 metres long consisting of 2 x 4mm shrouded connector to miniature crocodile clips (TDR2000/3) or Bed-of-Nails lead set (CFL535G) or .5 metre fused leads (TDR2000/3P)
Display:	800 x 480 pixel WVGA colour graphics LCD, viewable in external environments. User selectable colour schemes

Environmental

Operational Temperature:	-15ºC to 50ºC (5ºF to 122ºF)
Charging Temperature:	0ºC to 40ºC
Storage Temperature:	-20ºC to 70ºC (-4ºF to 158ºF)

ORDERING INFORMATION

Item (Qty)	Cat. No.
TDR2000/3 UK Time Domain Reflectometer	1003-336
TDR2000/3P UK Time Domain Reflectometer	1003-337
TDR2000/3 EU Time Domain Reflectometer	1003-339
TDR2000/3P EU Time Domain Reflectometer	1003-342
TDR2000/3 US Time Domain Reflectometer	1003-334
TDR2000/3P US Time Domain Reflectometer	1003-341
Included Accessories	
Download Kit	1003-353
Dual mini-clamp test leads (TDR2000/3)	6231-654
Carry Case	1003-217
Dual Fused test leads (TDR2000/3P)	1002-136

Item (Qty)	Cat. No.
Replacement Battery	1002-552
User Guide CD	2003-074
AC-DC Charger	1003-352
Optional accessories	
Terminal Adaptor Kit	1003-218
Single pair mini-clamp test leads	6231-652
Single pair Fused test leads	1002-015
AC power lead UK	25970-028
AC power lead EU	6180-334
AC power lead US	25970-002