

Data Sheet

VIAVI

DSP TDR

Quick, accurate cable break/fault location

In the event of a cable break or fault, the DSP TDR enables cable service provider maintenance teams and contractors to quickly find the location to get service back online as soon as possible. Since a cable break likely means an outage, pin-pointing it quickly is very important. Length measurement accuracy is also critically important, as often the cable is underground and must be dug out to make the splice. A lack of precision in this measurement means a bigger hole must be dug. A TDR is needed to find breaks and faults, to keep the operator from paying for unnecessary span replacements.

The DSP TDR is designed for field use and has step technology, which enables it to show smaller faults, has no blind spot, and maintains accuracy for detecting impedance over the entire length of the cable. Automatic impedance matching allows for faster trace results without pulse width adjustments. In addition to the ability to find faults closer to the TDR (no blind spot) the TDR has a resolution of less than 1 foot (0.3m). The higher energy step TDR has an improved signal-to-noise ratio and digital averaging, eliminating noise interference, and producing a much more detailed cable image than available with a pulse TDR.

In most cases it's desirable to document the test results for reporting to management or clients. When new cable spans are installed the cable length and performance must be verified and documented. A TDR chart is typically included in documentation for construction to show that an installed span is good. The DSP TDR has WiFi or ethernet connectivity, and data can be uploaded to the cloud-based StrataSync asset and data management database, so no PC software is required. This gives management instant access to the information for better, quicker decision making and, in the case of the contractor, faster payment for services rendered.

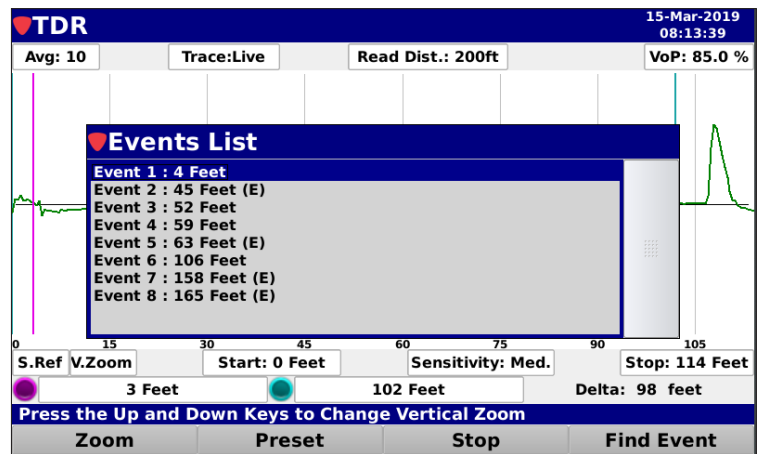
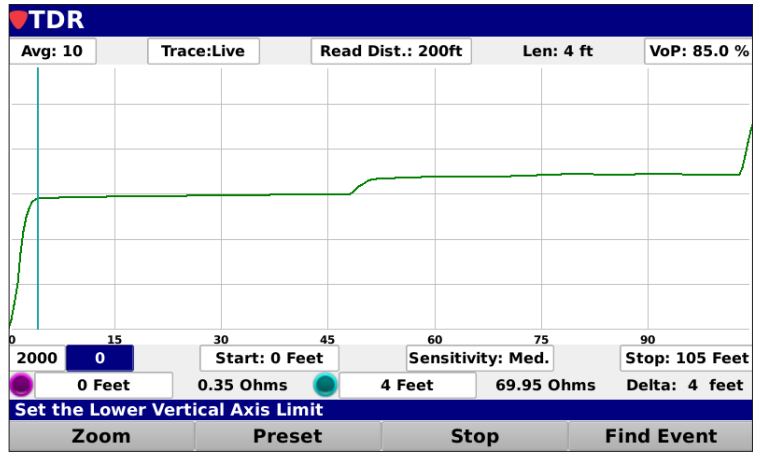
Benefits

- Reduce outage and line problem troubleshooting time
- Features fast, complete, and precise measurements without blind spots
- Data upload and retention with StrataSync
- Built to last design for use in the real environment of Network Technicians
- Long battery life

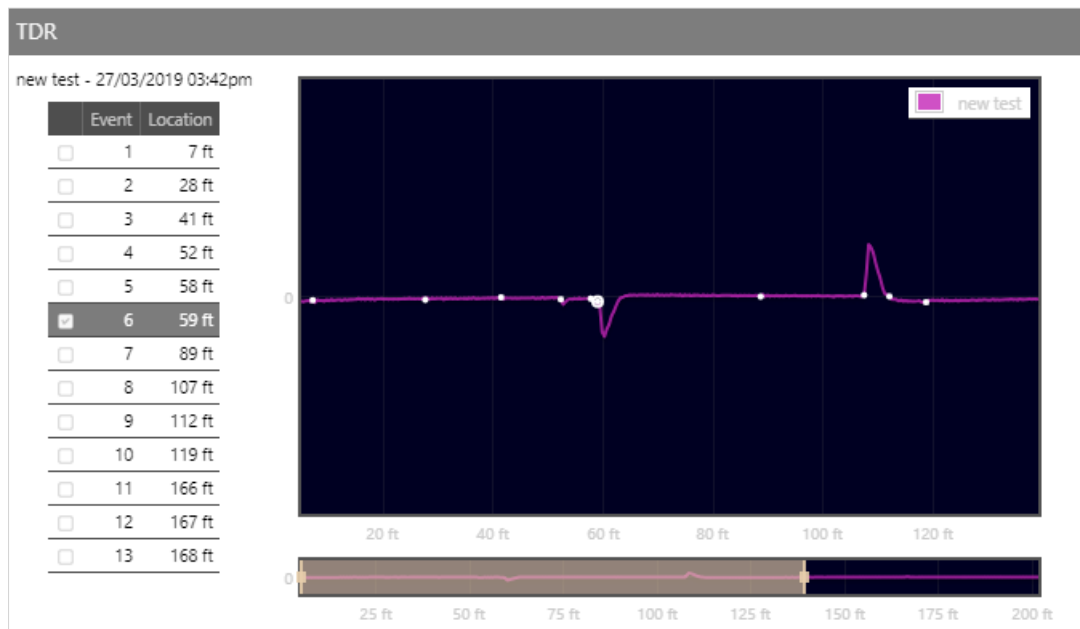


Step Technology

- Transmitter sends signals continuously while the receiver listens simultaneously for reflected signals
- Eliminates the "Dead Zone" limitation of pulse technology
- Allows the receiver to measure the entire cable
- The constant step signal detects information including impedance along the entire length of the cable
- The higher energy of the step signal TDR improves the signal to noise ratio and with digital averaging, effectively eliminates interfering noise which degrades the received signal



Event table is viewable from function menu



Events listed with trace in StrataSync

Specifications

TDR Measurements	
Maximum Distance	15954ft (4862m)
Distance Accuracy	<1ft (0.3m)
Noise Filter / AVG	1 to 100 samples
Measurement Time	<2 Seconds
VoP (Velocity of Propagation) Range	60-99%
Storage	>1,000 measurement sets
Physical	
Construction	Rubber over-molded plastic housing
Control	Glow in the dark keypad and LCD touchscreen and/or via a wireless connection to a mobile device such as a laptop, tablet, iPad® or iPhone®, or Android® handset
Display	Color LCD touchscreen, 800 x 480 pixels (approx 4.5" x 2.75")
Annunciators	Audible annunciator for key strokes
Dimensions w/o Case (H x W x D)	8.6 x 6.1 x 2.00 in (21.84 x 15.94 x 5.08 cm)
Dimensions w/ Case (H x W x D)	9.6 x 7.1 x 3.00 in (24.38 x 18.03 x 7.62 cm)
Weight w/o Case	3.75 lbs (1.70 Kg)
Weight w/ Case	4.75 lbs (2.15 Kg)
Interface Types	
TDR Test Port	75 Ohm Replaceable F-Type Connector
Ethernet	RJ45 (10/100 Mbps)
WiFi	802.11 b/g/n 2.4/5 GHz WiFi Adapter
USB	USB 2.0 Type-A Standard Port
Battery and Power	
Operating Time	12 hours plus, dependent on use
Charge Time	4 hours
Battery	Three 2600 mAh batteries
Power Adapter	Input: 100 to 240 VAC ~ 50 to 60 Hz, 1.2A Max; Output: 15 VDC, 3.34A
Environmental	
Storage and Operating Temperature	-18° to +50° C (0° to 122° F)

Ordering Information

Description	Catalog Number	
DSP TDR Base Package without WiFi	DSP-TDR-BASE	
DSP TDR Base Package with WiFi	DSP-TDR-BASE-WIFI	
Optional Accessories	Description	Part Number
MP-80A	USB Optical Power Meter	MP-80A
P5000i USB Fiber Scope	DSP TDR Base Package with WiFi	FBP-P5000i
Replacement fitted case		TRI-DSP-1G-CASE-REPL
Replacement Shoulder Strap		TRI-DSP-STRAP-REPL
Replacement Charger (no power cord)		TRI-DSP-PWR-ADPT-NEW



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