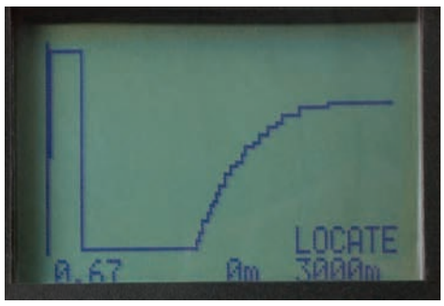
T2550T - TDR Cable Fault Locator

- Time domain reflectometer
- Range 3000m
- Accuracy 1%
- User friendly
- Auto / fixed ranging
- LED back lighting
- Variable Gain
- Variable Output Impedance
- No 'Dead' zones



Display viewed at actual size

Operating Principle

The principle of operation is that a test pulse, transmitted down a faulty cable, is reflected by a fault such as an open or short circuit. The time between the test pulse being transmitted and the reflected pulse being received at the instrument is proportional to the distance to the fault, and by lining up the break point of the reflected pulse with a cursor, this time is then determined. As the velocity of the test pulse depends on the cable dielectric, a velocity factor setting compensates for this so that the distance to the fault can be measured in metres.

Applications

The TDR's are suitable for accurately measuring the length of cable, and locating a variety of faults and cable conditions such as metallic shorts; metallic sheaths; crosses; metallic opens; resistive joints or splices; open sheaths; splits and resplits; water ingress; bridge taps and load coils.

Technical Specification

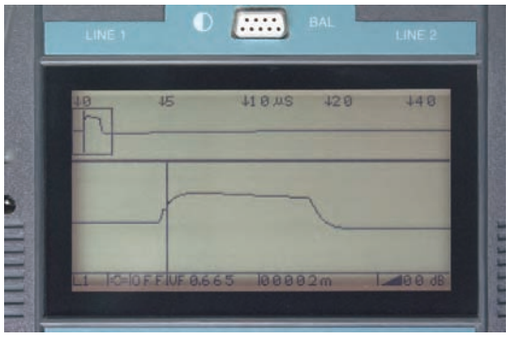
Application	Telecommunication Cables
Range (Metres)	10 / 30 / 100 / 300 / 1000 / 3000 / Auto
ELECTRICAL	
Accuracy	±1% of range
Resolution	1% of range
Gain	Set for range & cable type selected + 4 user selectable steps
Velocity Factor	Variable from 0.01 to 0.99 in steps of 0.01
OUTPUT PULSE	
Amplitude	5 volts peak to peak into open circuit
Impedance	25Ω 50Ω 75Ω 100Ω
Pulse Width	Automatically varied by software for range & output selected
Update Rate	Once per second for 5 minutes after last key depression
Power Down	Automatic after 5 minutes with no key depression
MECHANICAL	
Display	128 x 64 Graphic LCD
ENVIROMENTAL	
Temperature Range	0°C to + 45°C
Humidity	0 to 93% RH at 40°C

Model Specification

Dimensions (mm)	190(L) x 90(W) x 54(H)
Power Source	6 x AA Batteries
Weight	600g

E2770 - TDR Cable Fault Locator

- Time domain reflectometer
- Range 16 000m
- 200 and 400m ranges for close-in fault location
- Large LCD display
- Dual input (line comparison)
- 15 memories
- Dual WaveForm
- Trace down-loadable to printer or computer (RS232C)
- Zoom window trace expansion



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DESCRIPTION

The E27 series TDR's are similar in operation to the E25 series.

The E2770 has 15 memory locations which can be used to store waveforms which have been connected to the tester by using the SAVE function. These waveforms may be stored simply for future analysis or to be down loaded to the Library and Enhancement Software package. The most useful feature of the memory storage however is that it can be used to greatly simplify the fault and diagnosis procedure.

A TDR software package is available to support the Spirent Communications instrument family of time domain reflectometer band cable fault locators.

Technical Specification

ELECTRICAL	
Ranges	16000m (Vel factor = 0.67)
Accuracy	±0.1% ±10 Nano-seconds with respect to time
Resolution	1 metre 0-1km, 2 metres 1-2km, 4 metres 2-4km
Gain	Variable from 0-54dB in steps of 6dB
Velocity Factor	Variable from 0.01 to 0.999 in steps of 0.001
OUTPUT PULSE	
Amplitude	8 volts peak to peak into open circuit, 4 volts peak into 120Ω
Impedance	Balanced 120Ω
Pulse Width	Automatically varied by software (10 NSEC to 4 µSec)
Update Rate	1 Hz for 60 seconds, then 0.1 Hz for 4 minutes
Power Down	Automatic after 4 minutes with no key depression
MECHANICAL	
Display	128 x 64 Graphic LCD
ENVIROMENTAL	
Temperature Range	0°C to + 40°C

Model Specification

Dimensions (mm)	300(L) x 180(W) x 70(H)
Power Source	6 x 1.5V C Batteries
Weight	1,5kg