

# Cable Fault Locator

Hand-held TDR (Time Domain Reflectometer) Model : mTDR-010



[www.nano-tronix.com](http://www.nano-tronix.com)



## Introduction

NanoTronix Numeric Cable Fault Locator (Model No.: mTDR-010) is the most suitable and low-price instrument for locating a fault such as open and short position in metallic telecom cables. It is unique in its class which utilizes TDR (Time-Domain Reflectometry) technology giving users accurate information of the faults based on a specific cables' VOP (Velocity Of Propagation).

The instrument is applicable for any cable consisting of at least paired (shielded or twisted) metallic conductors, such as coaxial cables and telephone cables at low cost. It has an automatic internal impedance matching network to allow testing of 25 $\Omega$ , 50 $\Omega$ , 75 $\Omega$ , 100 $\Omega$ , 125 $\Omega$  and 150 $\Omega$  cables.

The Numeric Cable Fault Locator is housed in a rugged ABS enclosure which is dust and weatherproof to IP 42. The instrument also comes with a soft carrying case and alligator clip adapter. It is powered by batteries, which are stored in a compartment on its back.

## Features

- ▶ Low cost numeric cable length meter /TDR Cable Fault Locator
- ▶ Full autoranging for measuring the length of cables
- ▶ High resolution and high accuracy
  - Resolution : 50 cm (20 inch)
  - Accuracy
    - Up to 100m :  $\pm 2\%$  of reading  $\pm 50$  cm (20 inch)
    - Over 100m :  $\pm 2\%$  of reading
- ▶ Extra-large backlit (icon type 7 segment) LCD
- ▶ Overload voltage detection : displays "OUCH" alert message with sound when line voltage exceeds 6.5V
- ▶ Internal VOP library for 39 standard cable types
- ▶ 20 additional library memory spaces for new V.O.P settings
- ▶ Automatic output impedance control of 25 $\Omega$ , 50 $\Omega$ , 75 $\Omega$ , 100 $\Omega$ , 125 $\Omega$  or 150 $\Omega$
- ▶ Safety protection (up to 250V RMS)
- ▶ FCC & CE Certified

**Technology at the speed of light**

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<b>Performance</b>	Measurement range	3,000 m (10,000 ft) for Coax. cable
	Minimum display resolution	50 cm (20 inch)
	Accuracy	Up to 100 m : $\pm 2\%$ of reading $\pm 50$ cm (20 inch)
		Over 100 m : $\pm 2\%$ of reading
	Automatic power off	30 minutes with no key touched
<b>Interface</b>	User interface	Extra-large backlit (ICON type 7 segment) LCD
	Connector type	BNC
	Internal library	39 standard cable types
	Additional library	20 additional library memory spaces for new VOP settings
	VOP	Adjustable from 1% to 99% (in 1% step)
<b>Power supply</b>	Battery	4 AA Batteries (LR6)
	Battery life	Approx. 5,000 tests
<b>Safety</b>	EMC	BS/EN 61326-1
	Safety	Complies with IEC 61010-1
<b>Environment</b>	Operating temperature	-18°C ~ +60°C (0°F ~ +140°F)
	Storage temperature	-20°C ~ +70°C (-4°F ~ +158°F)
	Humidity	85% at 35°C (95°F)
<b>Dimensions</b>	Height	235mm (9.2")
	Depth	44mm (1.7")
	Width	100mm (3.9")
	Net Weight	482g (17oz)

\* Except where otherwise stated, this specification applies at an ambient temperature of 20°C(68°F).

\* NanoTronix Co., Ltd. reserves the right to change the specification or design without prior notice.

## Applications

NanoTronix Numeric Cable Fault Locator (Model No.: mTDR-010) is primarily designed for cable wholesalers, retailers, contractors, electricians, cable installers, linemen and construction personnel who need to measure cable length and distance to a fault (open and short) of coaxial cables, telephone cables and any type paired (shielded or twisted) metallic cables.

## Automatic VOP calculation

NanoTronix Numeric Cable Fault Locator (Model No.: mTDR-010) presents automatic VOP calculation allowing efficient measurement for all types of cables - providing auto calculation of VOP of a sample cable: a sample of 10 meters (30 feet) enables even inexperienced technicians to set up and conduct standardized tests to get perfect results every time. Additional 20 memory spaces are available for storing new VOP settings, which let technicians to conveniently save the VOP values of frequently worked cables for future usage.

## Nonvolatile memory

Internal VOP library : 39 standard cable types  
Additional library : 20 additional library memory spaces for new VOP settings

## Standard Accessories

- ① Soft carrying case
- ② Alligator clip
- ③ User's manual

\* A battery pack is built into the instrument



## Warranty

1 year from the date of purchase



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