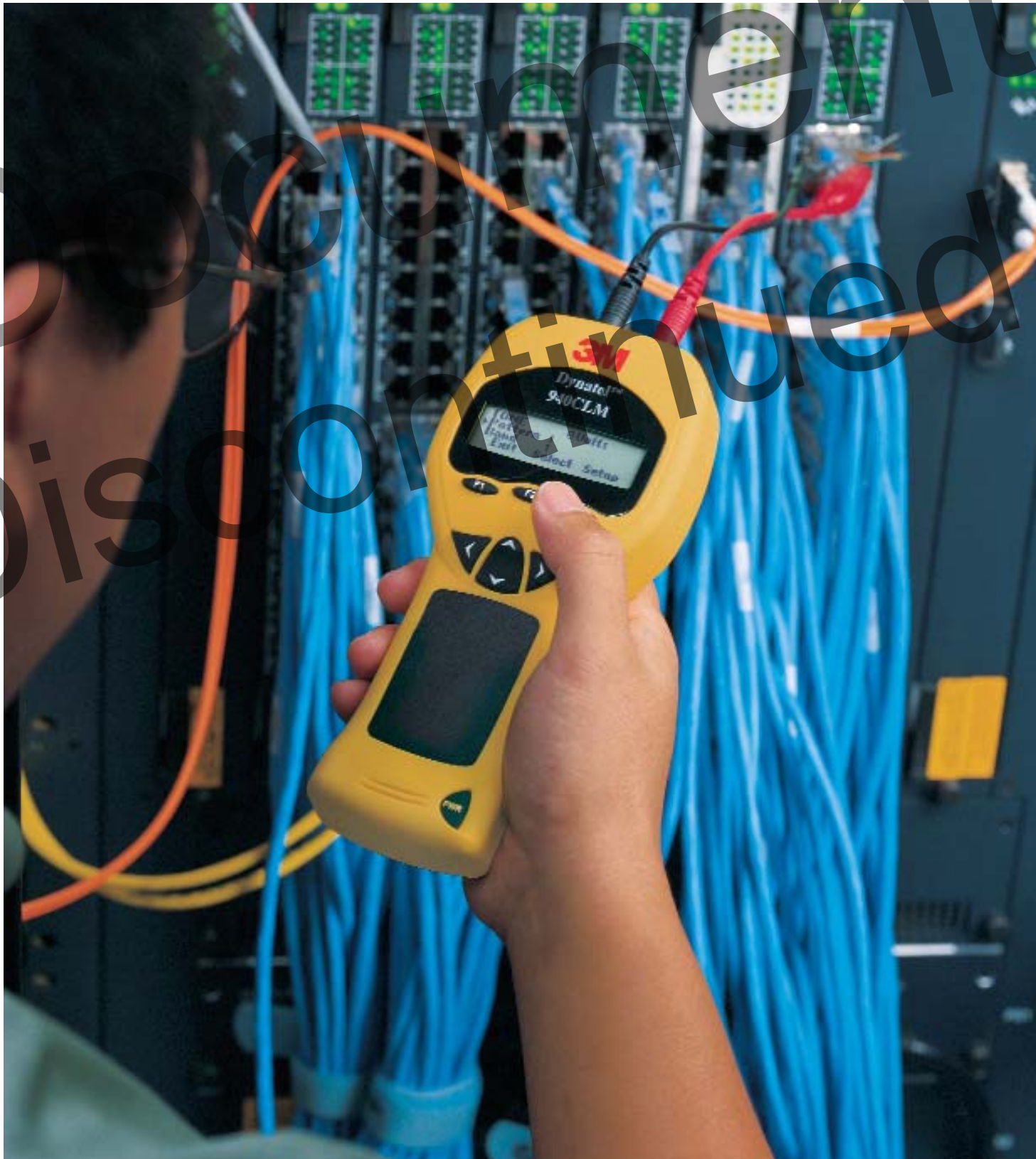


**3M**

# Dynatel™

Cable Length Meter/Time Domain Reflectometer 940CLM/TDR





## Works with most types of cable — and any technician.

The 940CLM/TDR includes a convenient, built-in library of over 60 cable types. The technician simply selects the type of cable to test, attaches the test leads and immediately receives a reading of cable length or distance to an open or short. Compatible with all common cables, it features standard banana jack connectors that accommodate a variety of leads or connectors. Virtually no training is required to learn to use this device, making it suitable for use even by technicians with little or no time domain reflectometer (TDR) experience.

## Part of a complete family of testing solutions from 3M.

The 940CLM/TDR can save valuable installation time by enabling technicians to determine how much cable they have to work with — and to detect shorts or opens in it — before work begins, instead of taking the risk that they may have to start over after wiring is well underway. When used with the 3M™ Dynatel™ Subscriber Loop Tester 945DSP, repair technicians are more productive since they can use the 940CLM/TDR to pinpoint a fault location. Both the Dynatel Subscriber Loop Tester 945DSP and the Dynatel Cable Length Meter/Time Domain Reflectometer 940CLM/TDR are part of 3M's complete family of industry-leading testing solutions for telco, CATV and electrical installations.

## Now there's one simple way to detect faults, measure cable, check for voltage and find hidden cable.

With the 3M™ Dynatel™ Cable Length Meter/Time Domain Reflectometer 940CLM/TDR, technicians of all skill levels can quickly and easily perform a variety of time-saving tasks when installing or maintaining metallic cable. This lightweight, hand-held tester:

- identifies most “clear-opens” or “dead-shorts” and displays the distance to the event in seconds
- instantly measures and displays cable length in feet or meters
- continually measures voltage to identify live circuits
- transmits four different tone frequencies and patterns to trace hidden cables or identify cable pairs
- includes selectable automatic power-down options (5, 15, 30 minutes or continuous)

## Saves time and money in the field.

The versatile, compact Dynatel 940CLM/TDR allows installation and repair technicians to be more productive than ever, by providing them with one simple device that meets several key needs. They can use it to quickly detect faults up to a distance of 2500 feet (750 meters); determine the length of cable, whether in a box, on a spool or behind a wall; measure and display voltages of up to 250 volts rms; and transmit any of four tone frequencies to trace hidden cable in walls and ceilings.



# 3M™ Dynatel™ Cable Length Meter/Time Domain Reflectometer 940CLM/TDR Specifications

## Physical Specifications

Size H x W x D in. (cm)	7.0 x 3.2 x 1.4 (17.8 x 8.1 x 3.6)
Net weight (including batteries)	8.7 oz. (247 g)

## Environmental Specifications

Operating temperature	32° to 122° F (0° to 50° C)
Storage temperature	14° to 131° F (-10° to 55° C)

## General Specifications

Power	4 AA alkaline batteries
Battery Life	Up to 12 hours continuous depending on temperature
Display	Graphical 122 x 32 pixels

## Length ("Open" - unterminated/unshorted cable)

Accuracy	+/- 2% plus +/- 2 ft. (with correct NVP)
Resolution	1 ft. (0.2 m)
Maximum	2500 ft. (750 m)
Minimum	0 ft. (0 m)

## Voltage (True rms Responding)

Range	0-250V (AC or DC)
Accuracy	+/- 3% plus 1 volt

## Tracing Tones

Frequencies	575Hz, 977Hz, 1.0KHz, 7.82KHz
Number of patterns	4

## Fault Location

### "Opens"

Accuracy	+/- 2% plus +/- 2 ft.
Resolution	1 ft. (0.2 m)
Maximum	2500 ft. (750 m)
Minimum	0 ft. (0 m)

### "Shorts" (R < 85Ω)

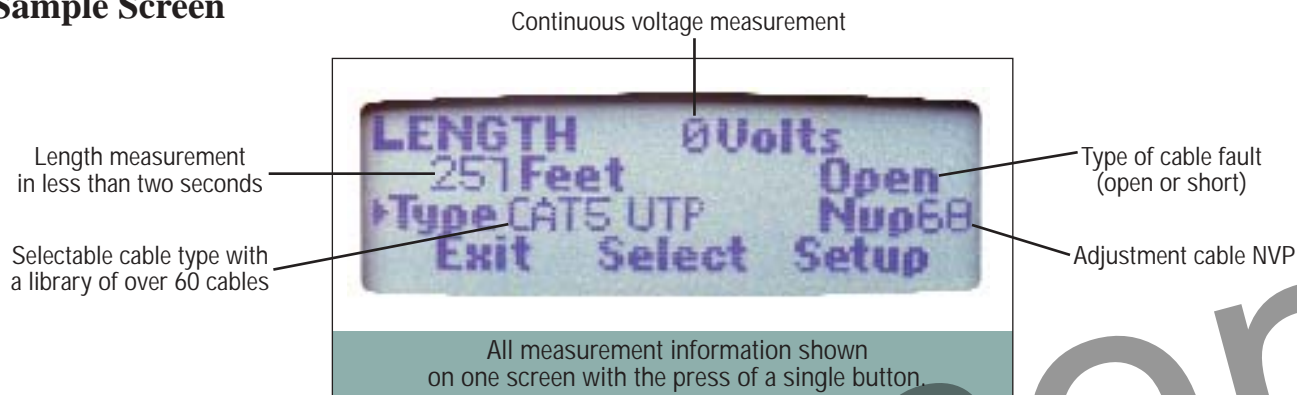
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Resolution	1 ft. (0.2 m)
Maximum	2500 ft. (750 m)
Minimum	0 ft. (0 m)

# 3M Dynatel Cable Length Meter/Time Domain Reflectometer 940CLM/TDR Applications

INDUSTRY	USES	
	Inventory Management	Fault Detection
Telco I&R	▶	▶
CATV	▶	▶
Cable Manufacturing	▶	▶
Aircraft Wiring	▶	▶
Premises Wiring	▶	▶
Electrical Contractor	▶	▶
Golf Course Sprinklers & Lighting	▶	▶
Street Lighting	▶	▶
Schools/Colleges	▶	▶
Heating/AC Contractors	▶	▶
Military	▶	▶
Railway	▶	▶
Fire Detection Systems	▶	▶
Cat 5/Cat 6/Enterprise	▶	▶
Indoor Telephone Installations	▶	▶
Thermostat Wiring	▶	▶
Amount of Cable on a Spool	▶	▶
Amount of Cable in a Box	▶	▶
Stock Control	▶	▶
Control Cables	▶	▶

# 3M™ Dynatel™ Cable Length Meter/Time Domain Reflectometer 940CLM/TDR

## Sample Screen



## Ordering Information

To order or for more information, please contact your local 3M Sales Representative or call 3M at **1-800-426-8688**.  
The 940CLM/TDR is shipped complete including carrying case, test leads, instruction manual, warranty card and batteries.



EN 613 26 Equipment for Measurement and Test

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