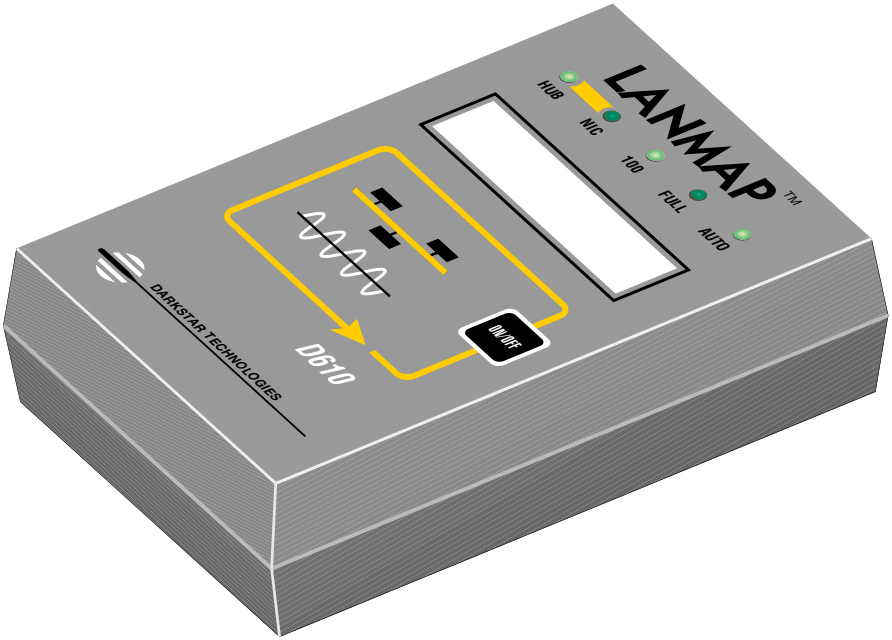
LANMAP D610

Port & Service Verifier

GUIDE TO OPERATION



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Features

The LanMap 610 was created to greatly simplify the work of installers, technicians and administrators who support 10/100 Mbit Ethernet LANs. The 610 is affordable, easy-to-use and its unique set of features makes it a valuable addition to everyone's tool kit. In addition to identifying LAN and Telco service on a cable or port, the 610 will display Ethernet link and traffic information and can act as a toner for cable identification.

The 610 supports link & traffic testing for 10BASE-T and 100BASE-TX networks as per the IEEE 802.3u standard. The LanMap will show the user exactly what capabilities are being advertised by a hub, switch or PC and will auto-negotiate and get link at the highest common capability. Finally, the unit will display network utilization and peak load as well as link and frame errors.

Operation

All of the LanMap's functions are automatic. Simply press the ON/OFF button on the front panel to activate the 610 and begin testing. If you see a LOW BATTERY ALERT message at any time, then simply replace the 9-volt alkaline battery in the rear of the unit.

SERVICE ID tests are performed first. The 610 will indicate NO SERVICE, TELCO SERVICE, TOKEN RING and ETHERNET devices. If an Ethernet device is detected then LINK & TRAFFIC checks are performed continuously.

The LanMap will try to establish link with any Ethernet hub, switch or NIC card. The 610 supports 10 Mbit, 100 Mbit and auto-negotiation. If a link partner is detected, the tester will display information about the speed and duplex status of the link, then will show you what capabilities the other device is advertising and will finally display the traffic load in the form of a bar graph. A special cursor will indicate the peak utilization and will then be cleared whenever the link is lost.

Note: If you connect to a switch port, you will see only broadcast traffic since the network would not be addressing any data to the tester itself. If no service is detected, then the 610 will default to its toner mode until switched off.

Note: "Ambiguous duplex" is a problem that arises from the fact that the duplex setting of a non-auto port cannot be known by the link partner. The LanMap will clearly indicate whether a port is really auto-negotiating and if so, which capabilities it is advertising.

Note: The LanMap 610 will automatically "cross over" its Ethernet pairs internally if necessary in order to get link. The HUB and NIC indicators on the front panel assume a "straight through" cable.

Here are some LanMap 610 display examples for a few common situations:

ETHERNET PORT * STAND BY *	Hub or NIC Detected
LINK! (Auto)	Got Link with Auto-negotiation
10 HALF FULL 100 HALF FULL T4	Advertised Capabilities
IIIIIIII 0...10...50...%	Traffic & Utilization
RECEIVER ERROR OR BAD CONNECTION	100BASE-Tx Receive Errors
SENDING TONE	Cable is Open
TELCO CIRCUIT DETECTED	POTS, ISDN or PBX
POSSIBLE TOKEN RING CIRCUIT	Token Ring Hub or MAU

THE TONER feature is activated automatically if no LAN or Telco service is detected. The 610 then sends an alternating tone, which allows you to trace open cables using any standard inductive probe/amplifier. While in this mode, the tester will periodically check for service at the other end of the cable.

Specifications

Power Requirement	9-volt alkaline battery
Unit Size	3.6 X 5.75 X 1.3 inches 9.1 X 14.6 X 3.3 centimeters
Shipping Weight	1 lb / 0.45 kg
Operating Temperature	0 to 45 degrees centigrade Non-condensing
User Interface	Single pushbutton control 2 X 16 LCD display Five link status leds & beeper
Cable Interface	Any UTP or STP using RJ-45 Including CAT5, CAT5e and CAT6 Ethernet, Token Ring, Telecom
Media Access	10BASE-T 100 BASE-TX Auto-negotiating devices as per IEEE 802.3u
Identifies	10/100 Ethernet, 100BASE-T4, Token Ring, Telco service
Verifies	Link, speed, duplex, HUB or NIC, FLP burst and Auto settings
Traffic Monitor	Bar graph shows % utilization and Peak load for 10/100 Ethernet
Error Detection	Invalid 4B/5B codes, Remote and parallel detection faults
Toner	Automatic when cable is open
Link Test Limit	100 meters

Technical Assistance

Customer support is obtained through the distributor from which you purchased your tester. If you still have problems or cannot locate your distributor, you may reach us via fax at (765) 775-4073 or via our website at:

www.lanmap.com

Warranty

Darkstar Technologies warrants its products against defects in materials or workmanship for a period of one year from the date of purchase. Any product that is returned shipping prepaid will be inspected and tested, and items meeting warranty conditions will be repaired or replaced free of charge.

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