DIGITUS NETWORK

LAN & Communication
Cable Tester

INSTRUCTION MANUAL

DN-14001

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Cable Tester

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A. GENERAL

The DIGITUS Cable Tester with Tone Generator is a perfect companion to any network professionals.
It combines the function of an easy to use cable tester with a built in tone generator. The tester can enhance one's ability to quickly locate and verify the status of a commonly used voice and data cable. The DIGITUS cable tester's functions include; loop-back, continuity, open, shorts, miss-wire and pin-to-pin configuration. It also generates a low emission frequency "tone". When coupled with Net Probe or other compatible tone tracer, the tone can help a technician to quickly isolate and locate the cable being tested.

The cable tester comes in two modular units, a tester and a remote terminator. The modular design enables the tester to be used for local loop-back test of a patch cable or remote testing of pre-installed premise wiring. It can verify a cable up to 2,000 feet in length. Furthermore, it comes with shielded connectors, which enables the testing of shielded twisted pair (STP) cables. It also features the convenient Auto Scanning and precision Manual Scanning modes, battery low indicator saves you from misreading the tester in case of low power.

The cable tester comes complete with adapters for testing of 10BASE-T, EIA/TIA 568 A/B, I00BASE-TX, TOKEN-RING, TP-PMD, ISDN, USOC and BNC networks. A RJ45-to-RJ45 patch cord is also included for testing patch panels and RJ45 network wall plates.

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|                 WARNING                  |
|                                          |
|    NEVER CONNECT THE TESTER              |
|  TO A LIVE WIRING. DOING SO MAY DAMAGE   |
|   THE TESTER AND/OR THE EQUIPMENT.       |
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B. LOOP-BACK TEST

1) Using the Main tester unit/Transmitter, connect one end of the cable into "TX/Remote" and the other end to "RX/Loop Back".

2) Set the power switch to ON/TONE.

2.1) Auto Scan Mode: When in Auto Scan mode, the LED in the TX row will scroll in sequence (Shield, 1, 2,...8 and repeat), to indicate the pins being tested. The RX row of LED will light, in relation to the TX row, to indicate status.

2.2) Manual Scan Mode:
Press the Auto/Manual button to switch to manual testing mode. The TX row of LED will hold and flash to indicate the pin being tested. The RX row of LED will light (or not), in relation to the TX row, to indicate status. Any subsequent press of the "TEST" button will advance the LED to the next one in sequence (Shield,1 , 2, 3, ...8, and repeat).

3) LED Status: When combining the information indicated by the RX and TX LEDs, a cable pin-to-pin configuration (cross, straight, reverse, miss-wire ... etc.) can be determined.

3.1) If more than one LED from the same row is lit - This indicates a "short".

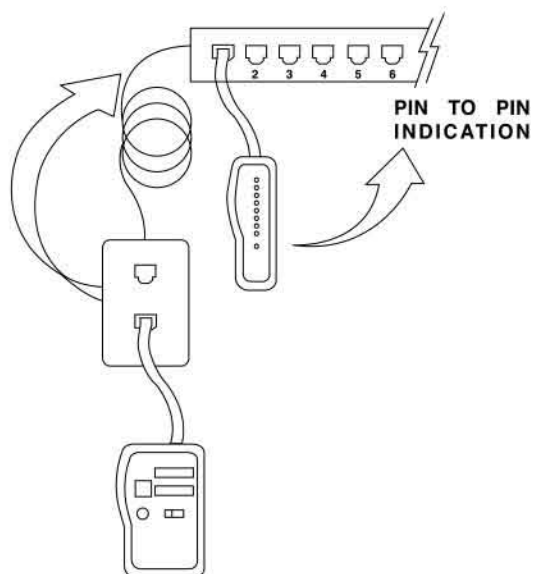3.2) If a LED is skipped - This may indicate an "open" .

3.3) If no LED will light - Please check or replace your battery.

4) To test BNC cable configurations please use the appropriate adapters and follow the above procedure. See RX and TX LED for test result.

C. REMOTE TEST

1) Connect one end of the test cable to the Main tester unit/Transmitter marked "TX /Remote".

PIN TO PIN INDICATION

2) Set the power switch to ON/TONE and set the tester to Auto scan.
The TX LED will begin to scroll in sequence (Shield, 1, 2, 3, ... 8 and repeat), to indicate the pins being tested. Use a patch cord (included) if the test cable terminates into a wall jack or patch panel.

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3) At the remote location, connect the other end of the test cable to the Remote terminator. The LED on the Remote terminator will light in relation to the Main tester unit/Transmitter to indicate status. A tone tracer can be used to isolate and locate the cable being tested.

4) LED Status: By reading the information indicated by the Remote terminator, a cable pin-to-pin configuration (cross, straight, reverse, miss-wire ... etc.) can be determined.

4.1) If more than one LED from the same row is lit - This indicates a "short".

4.2) If a LED is skipped - This may indicate an "open".

4.3) If no LED will light - Please check or replace your battery in the Main unit.

5) To test BNC cable configurations, please use the appropriate adapters and follow the above procedure.

D. SENDING TONE TO IDENTIFY CABLE

Using cable tester's tone generator along with a compatible tone tracer, enables you to quickly isolate and locate a hidden cable. A break (open) or short in the middle of a cable or a connector can also be located using this method.

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1) UTP/BNC Tracing - Using the Main tester unit/Transmitter, connect one end of the cable into "TX/Remote".
1.1) STP Tracing - Connect the UTP patch cord (supplied with the tester) into the Main Tester unit / Transmitter, then connect the STP cable to the UTP patch cord with a RJ45 to RJ45 coupler.

2) Set the power switch to ON/TONE and set the tester to auto scan. A "tone" will be delivered through the connected cable to the remote end of the cable. A sequencing tone is supplied on each of the 8 pins, shield, and BNC cable. The "tone" signal can then be received by the Net Probe or a compatible tone tracer.

3) Once the test cable is located, the status of the test cable can be verified by following the procedure outlined in Remote Test under Section C.

E. BATTERY REPLACEMENT

When the battery low indicator goes on, the battery should be replaced immediately, in order to prevent misreading results.

F. REMARKS

1) The Main tester runs on one 9V alkaline battery.

2) Please take out the battery if you do not need to use the tester for any extended period.

SPECIFICATIONS	
1. Power	Main unit - 9V Alkaline battery Remote unit - None required Battery life - 60 hours
2. Size	Main unit - 4.57" x 2.67" X 1.13" / 116mm x 68mm x 28mm Remote unit - 4.65" x 1.28" x 1.11" / 118mm x 32.5mm x 28mm
3. Weight	200g / 0.44lb with battery Shipping weight - 290g / 0.64lb without battery
4. Material	ABS
5. Built-in interface	RJ45 Jack - accepts both RJ45 & RJ 11 plugs
6. Display	3 Ø LED and 9 segments Bar-Graph
7. Tone Freq.	800 HZ
8. Test	For continuity, detects, opens, shorts, reversals, crossed and miss wires.
9.Cable types supporte	UTP, STP 10 Base-T, 100 Base-TX, Token Ring (RJ45) TP-PMD, T568 A / B, 10Base-2, BNC / COAX and USOC 8,6,4,2 cables.
10. Distance maximum length	2,000ft. / 610m

CE Declaration of conformity

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE and EN 55024. This meets the essential protection requirements of the European Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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