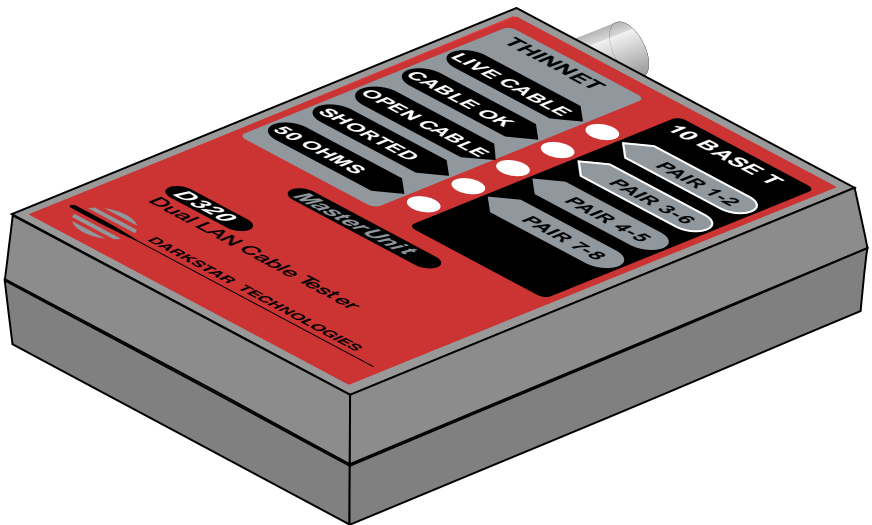


D320

10BASE-T / Thinnet Tester

GUIDE TO OPERATION



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Features

The D320 is a simple, low-cost approach to testing any T568 style cables or thinnet coax for correct continuity. We have combined our 10BASE-T and thin Ethernet testers into one unit to accommodate installers and technicians who support more than one LAN topology. It's easy to use and can fit easily in your pocket or tool kit. The two-piece design allows users to test cables either before or after installation.

Operation

Your D320 is turned on using the slide switch on the right hand side of the tester. The center switch position is the OFF position while the "up" and "down" positions activate the tester in either the 10BASE-T mode or the THINNET mode. When the unit is first turned on, the leds will momentarily flash and a beep will be heard as a self-test is performed. If the D320's leds appear dim or they fail to function, simply replace the 9-volt alkaline battery in the rear of the master unit.

D320 10BASE-T Mode

When the D320 tests a twisted-pair cable for continuity, there are five ways that information is conveyed to the user. All eight wires are tested for correct T568 connections. If all eight wires appear to be open at the far end (no shorts and no remote unit connected), then the leds will all remain dark.

led off - means that at least one wire in that pair is open.

led on - means that both wires in that pair are correct.

led flashes - means that a short or reverse is detected.

four leds flash - means that some sort of swap is detected.

any beep - means that some type of error is being displayed.

To test T568 or 10BASE-T cables for correct continuity, the D320 remote unit must be connected at the far end of the cable. If all pairs are wired correctly and no faults of any type are found, then all pair leds will light continuously.

If a short or a reverse is detected within a pair then that led will flash. If wires from two different pairs are shorted together then both leds will flash.

If a swap of any kind is detected, then the top four leds will flash. This would also occur if all four pairs were somehow shorted together, however this is very unlikely.

Note: The leds corresponding to each pair will only light steadily if the pairs are correctly wired. Some flickering will occur during continuity testing but can be easily distinguished from a flash and there will be no corresponding beep when there are no cable faults. The beeper will not sound if all four pairs are open as it will be interpreted as a "disconnected" condition.

D320 Thinnet Mode

When testing a coax cable, the D320 first checks to see if the cable is “live” by looking for Ethernet packets. If network traffic is seen, the LIVE CABLE led will flash and no further tests will be performed.

If the cable is open or unconnected (no termination detected at the far end), then the OPEN CABLE led will flash.

If the cable, a connector or a terminator is shorted, then the SHORTED led will flash and the D320 will beep.

The CABLE OK led will flash if the cable’s continuity is good and the D320 remote unit is seen at the far end of the cable.

The 50 Ohm terminators may be tested by simply plugging one into the D320. If they are within 2% of 50 Ohms, then the 50 OHMS led will flash to indicate that the terminator is OK. If you connect the D320 to an installed cable which has a 50 Ohm terminator at each end, the 50 OHMS led and the CABLE OK led will both flash together. If there is traffic on the cable, the tester may alternate between this condition and flashing the LIVE CABLE led.

If any unusual resistance conditions are seen that don’t match one of the scenarios described above, then the OPEN CABLE and the SHORTED CABLE leds will both flash together. This does not mean that the D320 is malfunctioning but suggests that some fault exists that the D320 cannot identify and may require the use of a more sophisticated tester such as a TDR.

Note: Be sure to conduct the traffic testing through a “T” connector and do not disconnect any coax cables that you suspect are part of a live network.

Specifications

Power Requirement	9-volt alkaline battery
Unit Size	4.5 X 2.3 X 1.0 inches - Main Unit 11.5 X 5.9 X 2.6 centimeters 2.3 X 2.4 X 1.0 inches - Remote Unit 5.9 X 6.1 X 2.6 centimeters
Shipping Weight	1.0 lb / 0.45 kg
Operating Temperature	0 to 45 degrees centigrade non-condensing
Cable Types Supported	T568 and 10BASE-T (RJ45) Thin Ethernet (BNC)
Maximum Cable Length	200 meters
Fault Conditions Tested	Opens Shorts Swaps or Reverses (T568) Termination (Thinnet)
Traffic Test	Thin Ethernet only

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.darkstar.crowecorp.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. Please contact your distributor if repair or replacement is required.

