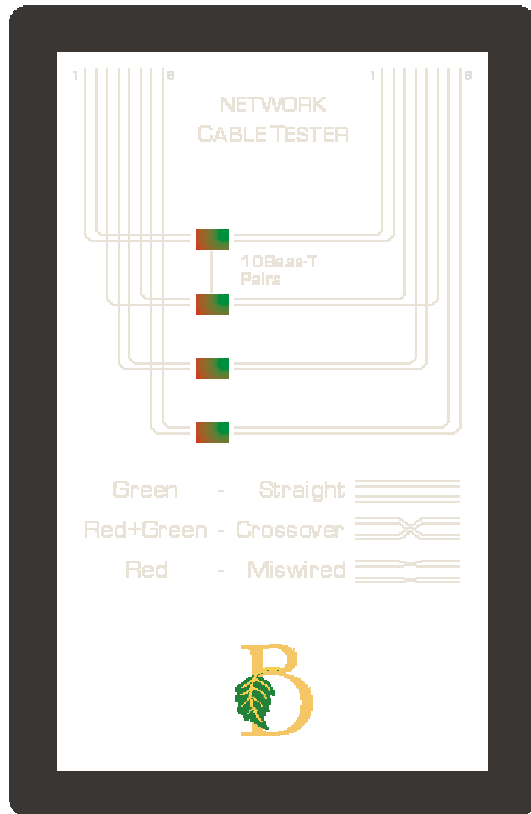


Network Cable Tester

Model MCT-NET

The MCT-NET is an economical, one-step continuity tester to quickly verify the integrity of computer network cables.



Instantly verify computer network cables conforming to the EIA/TIA 568A/568B and AT&T 258A wiring standards. This includes cables for Ethernet (10-BaseT/100BaseT), Token Ring, FDDI, ATM, and TP-PMD. These network cables utilize Unshielded Twisted Pair (UTP) cables, classified according to speed grade as CAT-5, CAT-5e, or CAT-6. The four pairs of wires connect between pairs of pins 1-2, 3-6, 4-5, and 7-8 of the 8-pin modular RJ-45 connector; the difference between the various cable types is in which pair of pins on one end of the cable is connect to which pair of pins on the opposite end. The MCT-NET tester has four bicolor LEDs corresponding to the four conductor pairs of the cable. If the wires in a pair are wired correctly, the straight-thru connection is indicated in green. If the wires in the pair are miswired, the reversed connection for that pair is shown as red. For crossover cable which is wired correctly, the LEDs for the swapped pairs will light red+green. If the LED for a pair is not illuminated, at least one wire of the pair is not connected.

Network technicians and cable installers will also find it a handy addition to their tool kit. Two of these testers acting together may be used for end-to-end testing of installed cables.

Attach the remote end of the cable to the right connector of one tester, and the local end of the cable to the left connector of a second tester. Connected pairs will be indicated on the local unit.

The cable tester is housed in a 1" x 2.4" x 3.8" plastic case, with power supplied by a 9-volt battery. Attachment of a cable activates the unit; when a cable is attached, the battery voltage is applied across the conductor and shield. The tester should NOT be attached to "live" cables, or damage to connected equipment may result. Disconnect both ends of the cable before attaching to the tester.

 **BirchTree**
San Jose, California
<http://www.BirchT.com>

To test free cables...

Attach each end of a cable to the tester. Each pair of wires in the cable has a corresponding LED which will light if the pair is present. A green light indicates the wires in the pair are wired straight-thru (e.g. pins 1 and 2 on one end are connected to pins 1 and 2 on the other end.) A red light means the wires in the pair are reversed (e.g. pins 1 and 2 on one end are connected to pins 2 and 1 on the other end.)

	Pair #1 (pins 1-2)
	Pair #2 (pins 3-6)
	Pair #3 (pins 4-5)
	Pair #4 (pins 7-8)

Common network cable configurations are shown below:

Cable Type	Connections	Indicators	Notes
10BaseT, 100BaseT, etc.	1,2 - 1,2 3,6 - 3,6		Pairs 4-5 and 7-8 are often connected on 8-wire CAT-5 cabling, but these pairs are not normally used in an Ethernet environment.
10BaseT, 100BaseT, etc. Crossover Cable	1,2 - 3,6 3,6 - 1,2		Miswired pairs will be shown as red regardless of whether the cable is a straight-thru or a “crossover” cable.
Token Ring	3,6 - 3,6 4,5 - 4,5		
FDDI, ATM, TP-PMD	1,2 - 1,2 7,8 - 7,8		

To test installed cables...

Attach two testers to each end of the cable as shown below:



Local Tester
(use left connector)



Remote Tester
(use right connector)

The condition of the cable is shown on the local tester.