Net-Rite™

ETHERNET CABLE TESTER

TP250

Features

- Size of an iPod

- Low cost

- Extremely easy to use
  - No buttons— Auto-off, Auto-on
  - Just plug-in an ethernet cable to the main unit and remote—it is tested for opens, shorts, split pairs, miswires and reversals

- Removeable remote enables testing longer cable runs terminated in different areas

- Tests up to 1000 ft!

- Full LCD display shows all test information clearly

- Shows cable faults per TIA568 specifications

- Batteries included

LCD Display Examples

Pass
S
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
Passing Shielded Cable

Open
S
1 2 3 4 5 6 7 8
1 2 3 · · 6 7 8
4-5 Pair Open

Short
S
1 2 3 4 5 6 7 8
· · 3 4 5 6 7 8
1-2 Short

Split
S
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
3-4 & 4-5 Split Pair

Miswire
S
1 2 3 4 5 6 7 8
1 3 2 4 5 6 7 8
2 & 3 Miswired

Miswire
Rev S
1 2 3 4 5 6 7 8
2 1 3 4 5 6 7 8
1 & 2 Reversed Miswire

GRAY = FLASHING

Net-Rite™…a new member of our Testing family.

TP250   TP300   TP350   TP500   TP600   NT700   NT950

JDSU

Enabling Broadband & Optical Innovation

Test-Um

www.test-um.com
805-383-1500 PHONE
805-383-1595 FAX

Features

- *Auto-on* when sensing the remote or a short

- *Auto-off* when the remote is disconnected to conserve battery life

- Ergonomic shape, with soft edges

- When not in use, the remote stores in the bottom of the main unit

Technical Specifications

Physical Dimensions
Size: 11.3 x 5 x 2.7 cm
        (4.5 x 2 x 1.1 inches)
Weight: 100 grams (3.5 oz.),
    with battery and remote

Environmental
Operating temperature:
    0 to 50°C (32 to 122°F)
Storage temperature:
    –10 to 60°C (14 to 140°F)
Humidity: 10% to 90%,
    non-condensing

Power Requirements
Four LR44 button cells (6 volts)

Battery Life (6v alkaline battery, typical) times are for the full capacity of the battery
Used continuously in one of the
    following modes:
    Standby: 2.5 years
    Cable Testing: 150 hours
Externally applied voltage
    without damage:
    250 volts peak DC or
    175 volts RMS AC for 5 seconds,
    100Vdc or 70Vac RMS
    continuous

Cable Types
Shielded or unshielded CAT5,
    CAT5E, CAT4, and CAT3
Minimum cable length for
    testing for split pairs:
    1 meter (3 feet)

To Wiremap a Cable

1) Using the RJ45 jacks, connect Net-Rite main unit and remote to the cable you want to test.

2) An icon and the wiremap are always displayed. Net-Rite reports:
    a) *PASS* when the cable pins are properly connected per T568A/B and there are no other faults, or
    b) an error icon when it does not pass. Pins with errors flash an error message: *Miswire, Split, Open, Short,* or *Reverse.*

Interpreting Wiremap Errors

Miswire—One or more pins or pairs are not connected to the correct pins at the other end of the cable, i.e., one-to-one—pin 1 to pin 1, pin 2 to pin 2, etc.

Split—A split pair is an error in the twisting of the wires together within the cable. The cables generally are made up of eight wires twisted together in 4 pairs. These 4 pairs are designated as pairs by the wiring standards and are intended to carry a signal and its return. 1 & 2, 3 & 6, 4 & 5 and 7 & 8 are the pairs designated by T568A/B for a RJ45 jack or plug. A cable can be wired with correct continuity, but not with correct pairing. This often happens when the cable is terminated consistently at both ends, but in the wrong order. A dynamic or AC test is required to detect this type of error. *If the only error is a split pair error, the cable has correct continuity. If cross talk is not a concern, as in flat satin cable, the cable is good if the only error is the split pair error.*
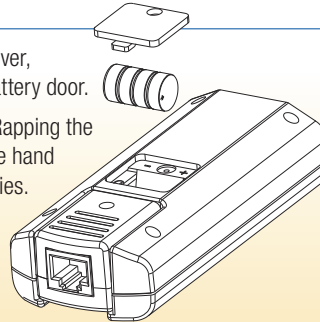
Open—The pair is not connected.

Short—The pair has a low resistance connection between wire pairs or the shield. The wire pairs involved displays on the LCD screen.

Reverse—A reverse (*Rev*) pair is a special case of a *Miswire,* and both icons will be flashing. The wires are connected to the correct pair of pins, but the two leads are reversed.

Voltage—When voltage is detected on any of the pins, *lightning bolt* icons flash. Disconnect from the cable as soon as possible.

Battery Replacement

1) Using a #1 Phillips screwdriver, unscrew and remove the battery door.

2) Remove old cell batteries. Rapping the case against the palm of the hand will help dislodge the batteries.

3) Install 4 new LR44 cell batteries, orienting the plus end of battery with the plus symbol on case.

4) Replace battery door and reinsert the screw. Do not over tighten.

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