

PART NO: 130-333

(UIDEK PT NO: 3700)

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• Four types of connector for testing today's most popular cabling systems:

- RJ-45** for testing
  - USOC 468, Ethernet 10BASE-T, EIA/TIA-568A/B, AT&T 258A, Token Ring, and any other cabling systems with RJ-45 connectors
- RJ-11** for testing Telephone, PhoneNet, and any other cabling systems with RJ-11 connectors
- Mini-Din-3** plus for testing AppleTalk cabling system
- BNC** for testing Ethernet 10BASE2/10BASE5 terminator value

- Separable module design for testing two remote points
- Simple operation steps
- Power supplied with 9-volt alkaline battery
- Automatic de-activation for power saving
- Battery condition indicator

## INTRODUCTION

The Remote Cable Tester is for testing of open/short LAN cables. It is a palm-sized unit with four kinds of connectors: RJ-45, RJ-11, MiniDin-3, and BNC, for the testing of today's most popular media. This unit can be used to verify the condition of cables, both before and after their installation. The separable passive module is connected to the remote end of installed network cabling. The tester also offers easy operation; the user begins testing by simply pushing a button. Multiple LEDs give a clear indication of testing status and go off automatically, to minimize power saving.

## FEATURES:

- Multiple functions:
  1. Open/short wiring test
  2. Connected wires display
  3. No wire or termination indication
  4. Wrong connection/Non-parallel connection
  5. Ethernet 10BASE2 termination value detection

### SPECIFICATIONS :

#### Functions :

- Open/short wiring test
- Connected wires display
- No connection/no terminator indication
- Wrong connection/Non-parallel connection display
- Ethernet 10BASE2/10BASE5 terminator value detection

#### Indicators :

- BATTERY GOOD/BATTERY LOW (GREEN/YELLOW) 3s
- NO CONNECTION/NO TERMINATOR LED (yellow) 5s
- NON-PARALLEL/50 OHM LED (yellow) 5s
- CONNECTED/25 OHM LED (green) 5s
- SHORT LED (red) 5s
- S,C1,2,3,4,5,6,7,8 LEDs (yellow) 3s

#### Connectors :

- RJ-45 x 2 plated pd 20µ
- RJ-11 x 2 plated pd 20µ

- MINI DIN 3 x 2 plated gold 30 µ
- BNC x 1
- Cable length : 200m( 984 feet) for all connectors
- Power : 9-volt alkaline battery
- Size : 145 x 86 x 26 mm
- Weight : 3.708 x 3.386 x 1.024 inch
- Weight : 135g

#### APPLICATION :

Who can benefit from the Remote Cable Tester?

- ✓ Network cabling system installer
- ✓ Telephone cabling system installer
- ✓ Network debugging technician
- ✓ Cable manufacturer

#### KEY COMPONENTS :

*Remote Cable Tester Master Unit*  
 0 Operation push button

## OPERATION INSTRUCTION

To test the cables not installed (RJ-45, RJ-11, and MiniDin-3) :

1. Connect one end of the cable to the proper connector on the master, and the other end to the remote module.
2. Press the test button
3. Read the result when the LEDs stop flashing.

To test the cables already installed (RJ-45, RJ-11, and MiniDin-3) :

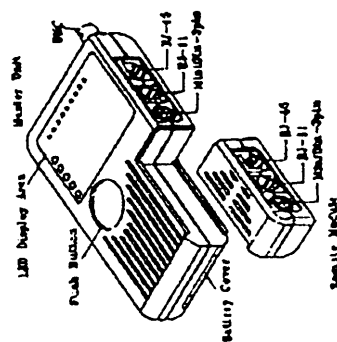
1. Connect one end of the cable to the proper connector on the master.
2. Separate the remote module, then connect it to the remote point on the cable.
3. Press the test button.
4. Read the result when the LEDs stop flashing.

Note 1: Do not connect the tester to a live circuit.

Note 2: Do not test more than one cable at the same time.

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- o Battery cover
  - o BNC connector
  - o Shielded RJ-45 connector
  - o RJ-11 connector
  - o Mini Din 3 pin connector
  - o LED indicators (Refer to Appendix A)
- Separable Remote Module**
- o Shielded RJ-45 connector
  - o RJ-11 Connector
  - o Mini Din-3 connector



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### HOW TO READ THE RESULTS

Here are some examples of how to read the testing results.

To test cables with RJ-45, RJ-11, and Mini DIN-3

1. LED for short and LEDs for wire S, 1, 2, ... 8

When LEDs for Short, S, and 3 are on, it means Wire no. 3 and shield are shorted. If LEDs for Short, 3, 4, and 5 are on, it means Wire no. 3, 4, and 5 are shorted.

2. LED for Connected and LEDs for Wire S, 1, 2, ... 8

When LEDs for Connected, S, and 1...8 LED are on, it means the shielding and indicated wires are pin-to-pin connected between cable's two ends. For instance, if a standard Ethernet 10BASE-T unshielded twisted-pair cable is tested, the LEDs for Connected, Wire 1, 2, 3, and 6 will turn on.

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To test Ethernet 10BASE2 terminator Value (BNC) :

1. Disconnect any one of the T-connectors from its attached node on the 10BASE2 segment that you are testing, and link the T-connector to the tester's BNC port.
2. Press the test button.
3. Read the result when the LEDs stop flashing.

Note 1: Before conducting the test, make sure there is no active node on the 10BASE2 segment.

Note 2: If testing LED fails to light up after pressing the test button, replace the battery.

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### To test cables with BNC connector

#### 1. LED for short, S, and C

When LEDs for short, S, and C turn on, it means shield and center of BNC connector are shorted.

#### 2. LED for 25 ohm, S, and C

When LEDs for 25 ohm, S, and C turn on, it means tested cable is terminated with correct terminated resistor value.

#### 3. LEDs for 50 ohm, S, and C

When LEDs for 50 ohm, S, and C turn on, it means a single ending terminated resistor value is detected. It may be caused by a broken cable, or the terminator at one end not linked well.

#### 4. LED for No terminator

When LED for NO Terminator turns on, it means no resistor value is detected between shielding and center. The cable is not properly connected to open.

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**Note:** If there is only one wire connected inside a cable between the cable's two ends, the tester will show no wire connected.

#### 3. LEDs for both Connected and Non-parallel, and LEDs for Wire S, 1, 2, ... 8

When the LEDs for both Connected and Non-Parallel, and some of S, 1, 2, ... 8 turn on, it means the shielding and indicated wires are connected between cable's two ends, but not pin-to-pin straight connection. It is possibly a improperly connected cable, or a cross-over cable.

**Note:** If there are only two wires connected inside a cable between the cable's two ends, the tester cannot detect whether these two wires are pin-to-pin connected or not. It only indicates two wires connected.

#### 4. LED for No Connection

When the LED turns on, it means there is no connection between the master and the remote module. It happens when no cable is connected to the tester.

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## APPENDIX A

### LED Indicators

The Remote Cable Tester has 14 LEDs totally, 9 horizontal LEDs indicating each individual wire inside a cable, and 5 vertical LEDs indicating a cable's connection status. You can read the result from the combination of 14 horizontal and vertical LEDs.

- S (yellow) : Shielding
- C/I (yellow) :  
Center of coaxial cable (BNC) or wire 1 of TP cable (RJ-45), telephone cord (RJ-11), or Apple Talk (MiniDin 3)
- 2, 3, 4, ...8 (yellow) :  
Wire 2, 3, 4, ... or 8
- SHORT (red) :  
Short condition between wires, or between shielding and center of BNC connector-cable is detected
- CONNECTED or 25 OHM (green) :  
A straight-through connection cable is detected.  
Or a standard Ethernet 10BASE2 cable terminated with 25 Ohm is detected.
- NON-PARALLEL or 50 OHM :  
A non-straight-through connection cable is detected. Or an Ethernet 10BASE2 cable with one end termination value (50 ohm) is detected.

### • NO CONNECTION/NO TERMINATOR

- (yellow) :  
No cable or terminator is scanned.
- Battery good/Battery low (green/yellow)  
It shows the battery status. If green is displayed, the battery condition is good; while if yellow displayed, the battery condition is low. You should keep a spare battery at hand.

## APPENDIX C

## Wiring Schemes



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## APPENDIX B

## UTP Color Code

Pair 1 White-Blue(W-BL)  
 Blue(BL)  
 Pair 2 White-Orange(W-O)  
 Orange(O)  
 Pair 3 White-Green(W-G)  
 Green(G)  
 Pair 4 White-Brown(W-BR)  
 Brown(BR)

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