Instruction Manual
2050084
Multi Media Cable Tester

EN

Contents

Introduction:

2050084 is a hand-held test instrument that lets you verify and troubleshoot the LAN cable. Detects opens, shorts, mis-wires and split pairs on twisted pair cabling.

Features:

- LCD display with automatic backlight.
- Detect opens, shorts, miswires and split pairs on twisted pair cabling.
- Displays graph wiremap, opens, shorts, miswires, split pairs and remote ID numbers all on one screen.
- Identify remote ID number on one pair only.
- Measures distance.
- Using multiple remote ID numbers up to 8 locations.
- Low battery indication.
- Auto power on/off.
- Backlit on/off

General specification:

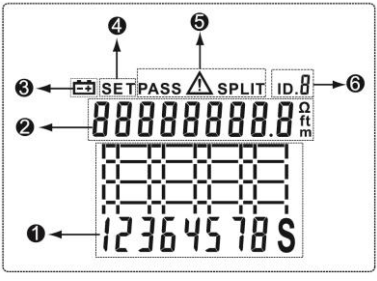
- Display: LCD display
- Connector type: RJ-45
- Cable category: LAN cable (UTP, STP)
- Wire-map test: Detects opens, shorts, miswires, split pairs
- Length test: Up to 255 M (836 ft)
- Length resolution: 0.1 M (ft)
- Length units: Meter and Foot
- Accuracy: ±10% + 1.0M (3 ft)
- Power Supply: 9V NEDA 1604, IEC 6F22, JIS 006 P battery x 1pc.

- Battery life: About continuous testing 200 times.
- Dimension: (LxWXH): 156m x 37mm x 35mm.
- Weight: Approx. 170g with battery
- Accessories: Manual, 9V battery, carrying bag, CAT5 STP cable and remote ID(1)

Instrument description:

1. Test / Enter / Power.
2. Setup function right key.
3. Set / Unit.
4. Length / wiremap.
5. Setup function left key.
6. LCD display.
7. RJ-45 connector socket.
8. Tripod mounting screw.
9. Remote ID locator.
10. RJ-45 connector socket of remote ID
11. Battery cover
12. Battery

LCD display:



1. Displays graph wiremap , opens, shorts, miswires, split pairs.
2. Displays Length and Unit.
3. Lower battery indication.
4. Enter the SETUP mode symbol.
5. Result displays, Pass, ⚠, split.
6. Displays remote ID number.

Safety:

	CAUTION
⚠	Be extremely careful for the following conditions while measuring.

- Do not operate the meter in any environment with explosive gas (material), combustible gas (material) steam or filled with dust.
- In order to avoid reading incorrect data, please replace the battery immediately when the symbol 🔋 appears on the LCD.

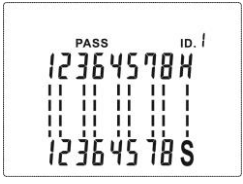
- In order to avoid the damage caused by contamination or static electricity, do not touch the circuit board before you take any adequate action.
- Operating Environment is for indoors use only. The meter was designed for being used in an environment of pollution degree 2.
- Operation Altitude: Up to 2000M.
- Operating Temperature & Humidity: 5℃ ~ 40℃, 0%~ 80%RH.
- Storage Temperature & Humidity: -10℃ ~ 60℃, 0%~ 70%RH.

Operation:

1. Connect the meter and remote ID locator to the cabling as shown in Figures.

2. Press TEST to turn the power on.
3. Press TEST again to measures wiremap and Remote ID Locators detect.

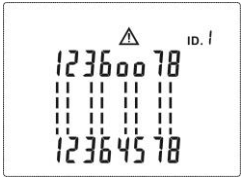
4. LCD displays the test result.



The following figures show typical test results for twisted pair cabling. Any error occurs will show ⚠ symbol on LCD.

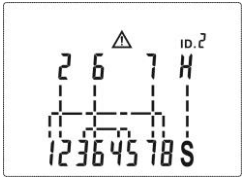
Opens:

Figure shows an open pair wire 4 and 5.



Shorts:

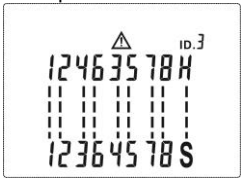
Figure shows tow short between wires 3, 4 and 5, another 1 and 8.



※ When shorted occur, the verifier maybe not show open and miswires.

Miswires:

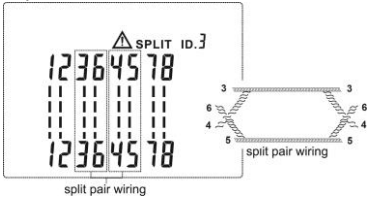
Figure shows that wires 3 and 4 are crossed.
The pin numbers order to indicate the fault.



Split Pair

The following figure shows a split pair on 3, 6 and 4, 5. The split pair flashes to indicate the fault. LCD will show “SPLIT” indicate.

In a split pair, continuity from end to end is correct, but is made with wires from different pairs. Split pairs cause excessive crosstalk that interferes with network operation.



※ The split pair detects of cable must be at least 5 meter(15ft) in length.

※ If open, short or miswired occur, the split pair detects will not work.

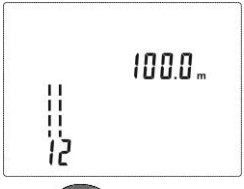
5. Press TEST for more than 2 seconds to turn the power off.

Length measurement

Press TEST to turn the power on.

Press L/W to enter the length measurement.

Press ◀ or ▶ to select the tested pairs and show the length.



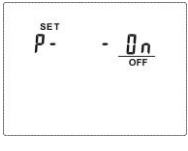
Press SET UNIT repeatedly to change the units of ft or m.

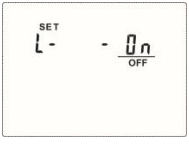
Press L/W to exit this function.

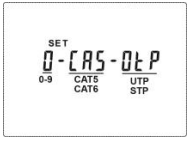
Setting Mode

Press SET UNIT for more than 2 second to enter the setting mode.

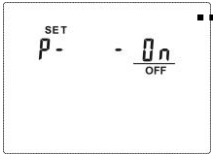
Press ▶ repeatedly to select the functions of auto power on/off, backlit on/off and parameter options(0～9).







Auto Power on/off

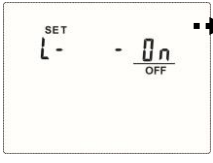


In this mode, press SET UNIT again to enter this function.

Press ◄ or ► to select on/off.

Press TEST to set and exit.

Backlit on/off

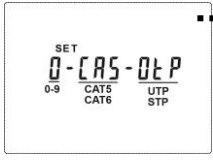


In this mode, press SET UNIT to enter this function.

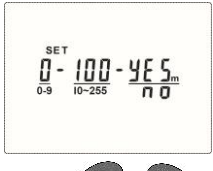
Press ◄ or ► to select on/off.

Press TEST to set and exit.

Parameter options (0～9), Cable Types and Length



In this mode, press SET UNIT repeatedly to select the settings of 0~9, CAT5/CAT6 or UTP/STP, when the selected setting is flashing, press ► or ◄ to change 0~9, CAT5/CAT6 or UTP/STP.



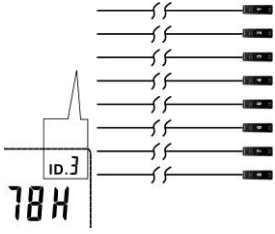
Press SET UNIT again to select the length measurements value parameter, the number is flashing, press SET UNIT again to change the units of m or ft.

Press ► or ◄ to change the length values (10~255m / 30~750ft).

Press TEST to set and exit the setting mode.

Using Multiple Remote ID Locators

The multiple remote ID locators (1 ~ 8) helps you to identify multiple network cable connections, as shown in Figure.



The display in Figure shows that the verifier is connected to the cable terminated with remote ID locator number 3.

Battery Replacement:

The meter is powered by 9V battery x 1pc.
Use the following procedure to replace the battery:

1. Replace battery immediately when the LCD displays .
2. Turn the meter off and remove the battery cover.
3. Replace with the new battery; take care to note the correct polarity.
4. Re-install the battery cover.

Limited Warranty:

This meter is warranted to the original purchaser against defects in material and workmanship for 3 year from the date of purchase. During this warranty period, RS Components will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction. This warranty does not cover fuses, disposable batteries, or damage from abuse, neglect, accident, unauthorized repair, alteration, contamination, or abnormal conditions of operation or handling.
Any implied warranties arising out of the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. RS Components shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you. For full terms and conditions, refer to the RS website.

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