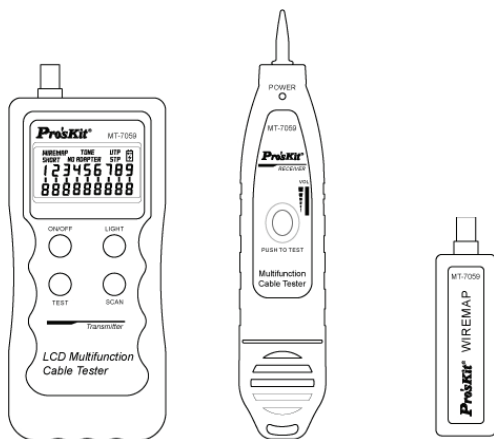




MT-7059

LCD Multifunction Cable Tester



User's Manual

2nd Edition, 2013

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⚠ Please read the safety instructions carefully before using or maintaining the equipment

- Never expose the equipment directly in the sun.
- Never store the equipment at dusty humidity and high temperature (over 40°C) environment.
- Battery replacement should follow specification; otherwise, it may damage the equipment.
- Never disassemble the equipment by yourself. Maintenance or repair should be by professional person.
- Please remove the battery from both transmitter and receiver when storing equipment to avoid battery liquid leaked.
- Never detect live power cord by this equipment; otherwise, it may damage equipment or injure person.
- Never connect to any equipment when thunderstorms are likely, this may cause personal shocked.

Overview

MT-7059 LCD Multifunction Cable Tester combines transmitter, receiver and remote unit. The large LCD display design with multi testing function, fast test result display, and user friendly design features easy operation and user convenience. Ideal for long distance wire tracing, communication line status checking, weak circuits testing, weak distribution system installation and maintenance. Widely used in telecommunications systems, computer networks, network monitoring and other metal wire lines and other fields.

Product features:

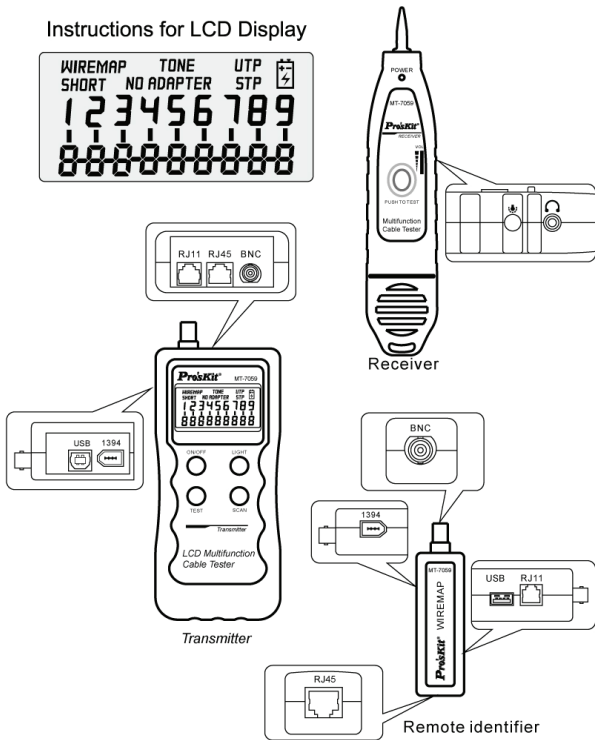
- Large LCD display test result for easy reading and identification.
- Directly connected to Ethernet switch/ router/ PC terminal to perform wire hunting.
- Test UTP/STP/SFTP cat.5 cat.5e cat.6, telephone wire, coaxial cable, USB cable, 1394 cable for cable status checking (Short, Open, Crossover, no connection) .
- Test UTP/STP/SFTP cat.5 cat.5e cat.6, telephone wire, coaxial cable, USB cable, 1394 cable for finding cable.
- Containing RJ45/RJ11/BNC/USB/1394 and other test socket, without complex conversion
- Power on/off and backlight display on/off selectable switching function.
- Auxiliary lighting function
- Different sound indicated for different circuit status.
- 9 tones selection for convenience use under different environment condition.
- 9V battery for power supply and low-voltage indicated function

Specification

Transmitter	
Display	LCD 53X25mm,with backlight
Tone frequency	225kHz
Max. distance of transmission	2km
Max. distance of cable map	300m
Max. working current	$\leq 70\text{mA}$
Tone mode	9 adjustable tone
Compatible connectors	RJ45(8 pin) · RJ11(6 pin) · BNC · USB · IEEE 1394
Continuity test	LCD (SHORT)

Transmitter	
Max. signal voltage	1.5Vp-p
Function selection	3 function buttons & 1 power switch
Function and faults LCD display	LCD display (wire map ; tone ; short ; no adapter ; UTP ; STP ; low battery)
Cable map indication	LCD (#1~#8)
Shielded indication	LCD (#9)
Voltage protection	AC 60V/ DC 42V
Low battery display	LCD (6.5V)
Battery type	DC 9.0VNEDA 1604/ 6F22 DC9V ×1) (Alkaline battery recommended)
Dimension (LxWxD)	185X80X32mm
Receiver	
Frequency	225kHz
The max. working current	≤70mA
Ear jack	1
LED illumination	2 LEDs
Battery type	DC 9.0VNEDA 1604/ 6F22 DC9V ×1) (Alkaline battery recommended)
Dimension (LxWxD)	218X46X29mm
Remote unit	
Compatible connectors	RJ-45(8 pin) 、 RJ-11(6 pin) 、 BNC 、 USB 、 IEEE 1394
Dimension (LxWxD)	107X30X24mm

Product Interface and Keypad Introduction



Instructions for product

WIREMAP
NO ADAPTER

Install DC 9V battery to transmitter then press "ON/OFF" button, it is power on with a long sound. LCD will showed "TEST" then auto started wire mapping test, if the cable is not connected to

transmitter and receiver, the LCD will show “NO ADAPTER”

Cable mapping test (for example: test RJ45 patch cord)

Plug in RJ45 patch cord to transmitter, and the other terminal into remote unit, press “ON/OFF” button and push “TEST” button for wire mapping test. If the cable with shielding (or earthed), LCD will show “STP”; if not LCD will show “UTP”. Press “LIGHT” to turn on backlight when you test in dark environment.

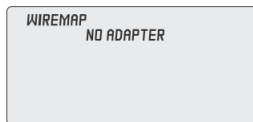
Several test results as follows may occur.

Test Result1: Short (SHORT)



If cable or connector connected situation is short, transmitter LCD will show “3-4” and “short” with three short sounds.

Test Result 2: The cable did not plug in remote unit or transmitter,



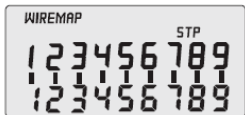
LCD will show “NO ADAPTER”:

Test Result 3: Straight

If cable or connector connected situation is good and straight, LCD will show as following figure with one short sound.



RJ45 cable without shielding

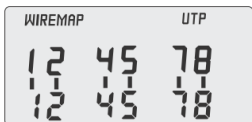


RJ45 cable with shielding wire. Number 9 indicate the cable with earthed conduct.

Test Result 4: Open

LCD will show the numbers of good connected wires as following figure with one short sound.

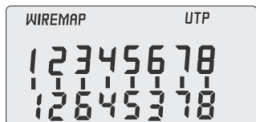
Below figure indicates that “3” “6” line of RJ45 cable is open.



Test Result 5: Crossover or miss-wire

LCD will show as following figure with two short sounds.

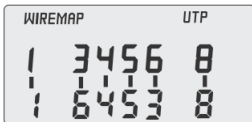
The figure indicates that “3” “6” line of RJ45 cable is crossover.



Test Result 6: Crossover or miss-wire with open situation

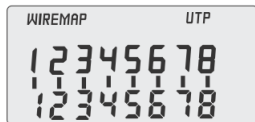
LCD will show as follow figure with two short sound and displays

The picture indicates that “3” “6” line of RJ 45 cable is crossover and “2” “7” lines are open.

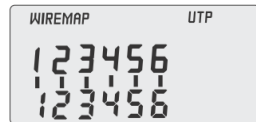


Perform different cable mapping test (Testing result is good)

RJ45 cable



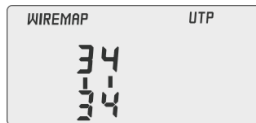
RJ11 Cable



1394 cable



BNC cable



USB cable

USB cable with shielding

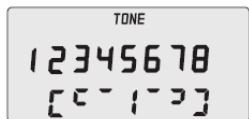


USB cable without shielding



Hunting test

Plug in the target cable (RJ45, RJ11, USB, BNC, 1394) that wanted to find, press "ON/OFF" button, power on with a long sound then press "SCAN" button, LCD will show as following figure.



Select frequency (the number showed on bottom of LCD) depends on tested circuit (there are 9 kinds of selectable frequencies, press "SCAN" button to change it. (Number 1 to 9 then back to 1.)).

Open the battery compartment cover of receiver then install 9V battery. Press "TEST" button, the "POWER" LED will light up, then take the receiver and make the probe part approaching the numerous cables and find target wire. When receiver closes to the target cable, sound will be louder.

Extra functions

(1) Low battery indication

When the battery is low, LCD will show flash " " icon.
Please replace battery.

(2) LCD backlight function

Press the LIGHT key on transmitter panel, LCD backlight will light up, and around 10 seconds lights off automatically.

(3) Earphone function

Please wearing earphone when perform test in noisy environment to avoid interference.

(4) Volume adjustment

Turn volume adjustment switch on the receiver when perform hunting test to ensure the sound is clear for listening.

(5) Illumination

There are 2 white LEDs on the top of receiver and the on/off button beside earphone jack.

Packing list

- | | |
|--------------------|-----------------------------------|
| 1. Transmitter x 1 | 7. Alligator clip adaptor cable x |
| 2. Receiver x 1 | 1pcs |
| 3. Remote unit x 1 | 8. RJ45 adaptor cable : 1pcs |

- | | |
|----------------------------|----------------------|
| 4. 9V Alkaline battery x 2 | 9. User's manual x 1 |
| 5. Earphone x 1 | 10. Carrying bag x 1 |
| 6. RJ11 Adapter cable x 1 | 11. Color box x 1 |

Troubleshooting

Problem	Solution
Can't perform cable map	Check battery of transmitter, if low battery, replace a new one.
	Confirm plug is well connected.
	If above two ways can't solve problem, Instrument is damaged; please send it back to us for repair.
Can't receive the tone signal for finding cable	Check battery of receiver, if low battery, replace a new one.
	Confirm transmitter is on " SCAN " function.
	If above two ways can't solve problem, Instrument is damaged; please send it back to us for repair.
Perform test with telecom switching equipment, can't receive the tone signal for finding cable	It is probable tone signal interfere with telecom switching equipment signal when perform cable finding test that will effect testing result, you can turn telecom switching equipment power off if necessary.
Cable mapping result is incorrect.	Confirm plug is well connected.
	If reinsert plug can't solve problem, Instrument is damaged; please send it back to us for repair.
The other problems.	Instrument is damaged; please send it back to us for repair.