

multicomp PRO



LAN Cable Multifunction Tester

MP001976

INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronics Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.



Made in China
LS12 2QQ

Specifications:

Name	LAN Cable Solution
Display	Text Mode : 2 x 8 Chinese fonts or 4 x 16 English fonts. Graphic Mode : 144 x 65 dots. LCD Module size : 70mm x 38 mm
Connector type	RJ45 , RJ12 (RJ11) & F connector
Button	(1) LAN . (2) TEL . (3) COAX . (4) TONE . (5) LENGTH . (6) TEST . (7) POWER .
Cable type	Shielded or unshielded, CAT -6, CAT -5E, CAT -5, CAT -4, CAT -3 and Coax
Error status	Open circuit, short circuit, jumper wire, reverse , connection or cross-talk interference and split pairs
Measure types	Measures cable length via TDR Checks and verifies wire map Generates four different tracing tones to help identify users
Cable length & accuracy	Accuracy of the length measurement is $\pm 5\%$ length: 1-350 meters (3-1200 feet)
Minimum cable length for testing of split pairs	1 meter (3 feet)
Power source	9 Volt alkaline battery Detects a low battery condition.
Turns off automatically	Auto-off in any mode and low power consumption for long battery life

Input protection	Protection against excess voltage , transients ringer signal
Physical Dimension	195 mm (L) , 90 mm (W) , 40 mm (H)
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
Accessories	ToolBag * 1 pcs , F to BNC Adapter * 2 pcs

Instructions for Operation

* Power On · Beep one time · Starting picture as follow :
For a moment display select mode as follow :



Press ▲ ▼ KEY Select what mode to test
then press TEST KEY to start testing.

Testing LAN Mode :

Testing LAN MODE have 2 way of MAIN to LOOPBACK & MAIN to REMOTE TERMINATOR.

(1). Testing from MAIN connector to LOOPBACK connector :
LAN cable connected from MAIN to LOOPBACK.

Test Function :

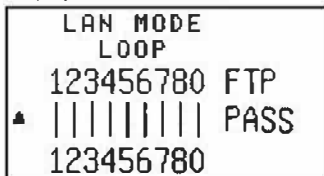
- PASS · OPEN · SHORT · CROSS · SPLIT etc.
Display wrong cables .
- Test FTP or UTP LAN cable .
- When LAN cable OPEN FAIL , Can display distance from MAIN connector to broken point.



* LAN MODE Test initial picture as follow :
Press LAN KEY or TEST KEY Start to Test

Test Result:

* If LAN cable is correct & FTP type Will display PASS as follow :



Press ▲ KEY Back to Initial picture.

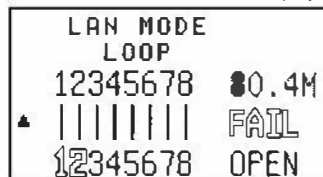
• FTP : Shielded · UTP : Unshielded.

• 0 : Shielded.

• LOOP : LAN cable connected from MAIN connector to LOOPBACK connector.

• REMOTE : LAN cable connected from MAIN connector to remote terminator connector.

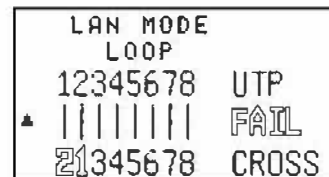
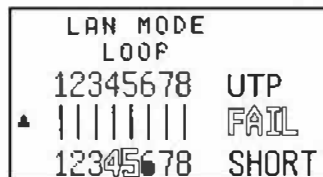
* If LAN cable is OPEN will display FAIL as follow :



• Display the OPEN LAN cable pair 's distance from MAIN connector to broken point , and the open pair's numbers will be blinking.

* If LAN cable is SHORT will display FAIL as follow :

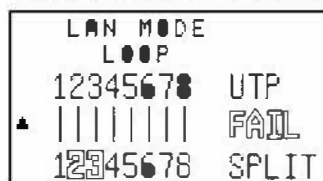
* If LAN cable is CROSS will display FAIL as follow :



• The short pair's numbers will be blinking.

• The CROSS cable's numbers will be blinking & show different arrangement .

* If LAN cable is SPLIT will display FAIL as follow :



• The SPLIT cable's numbers will be blinking .



(2). Testing from MAIN connector to REMOTE terminator connector :
LAN cable connected from MAIN to REMOTE terminator.

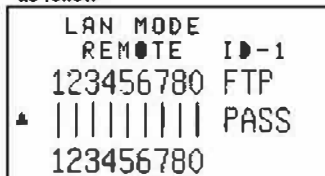
Test Function :

- (a). PASS · OPEN · SHORT · CROSS etc. display wrong cables .
(No available SPLIT)
- (b). Test FTP or UTP LAN cable .
- (c). When LAN cable OPEN FAIL , Can display distance from MAIN connector to broken point.

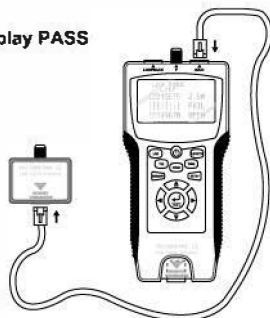
Press LAN KEY or TEST KEY Start to test

Test Result :

* If LAN cable is correct & FTP type will display PASS as follow :

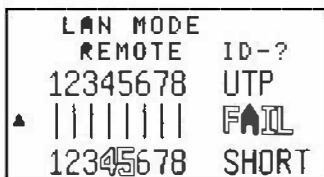
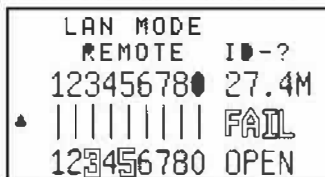


- Display the remote terminator ID number
(For example : ID-1) and Buzzer beeping .



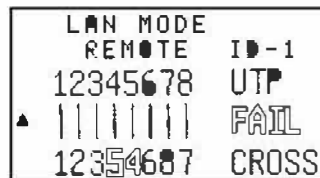
* If LAN cable is OPEN will display FAIL as follow :

* If LAN cable is SHORT will display FAIL as follow :

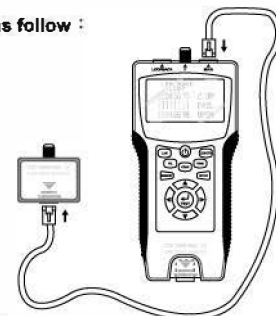


- Display the OPEN LAN cable pair 's distance from MAIN connector to broken point , and the open pair's numbers will be blinking , Display ID-? .
- The short pair's numbers will be blinking.

* If LAN cable is CROSS will display FAIL as follow :

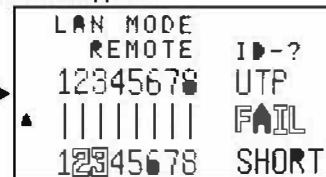
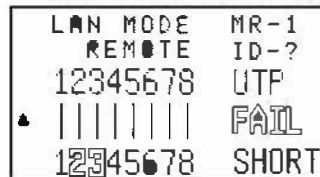


- The CROSS cable's numbers will be blinking & show different arrangement .



(3). MEMORY KEY . Can memorize the test

result and show MR-1 one moment then disappear .



- MR-01 : 1-st set memory · Total 8 sets memory .
(LAN MODE & TEL MODE have 8 sets memory) .
(COAX MODE & LENGTH MODE have 4 sets memory) .

* Press MEMORY KEY over 3 seconds · Into the picture of memorize test result :

Press ▲ ▼ KEY Display the data of different sets memory .
Press another MODE KEY departed from MEMORY MODE .



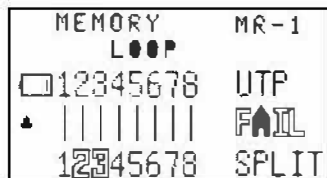
- If the data of memory is FAIL , The wrong cable numbers will be blinking .


* Press TEST KEY will display as follow :



• Press ◀KEY clear memory · Press ▶KEY Not to clear memory & back to last picture.

(4). Battery low when voltage of battery is lower than 6.0V · will display as follow :



 The picture will be blinking .

Testing TEL Mode :

TEL MODE only can connected from MAIN connector to LOOPBACK connector .

Test Function :

- PASS · OPEN · SHORT · CROSS etc. Display wrong cables .
- When LAN cable OPEN FAIL , Can display distance from MAIN connector to broken point .
(Just for reference)

* TEL MODE test Initial picture as follow :



- TEL (6C · 4C · 2C) Cable connected from MAIN connector to LOOPBACK connector.
- Press TEL KEY or TEST KEY start to test .

Test Result :

* If TEL cable is correct will display PASS as follow :



* If TEL cable is OPEN will display FAIL as follow :

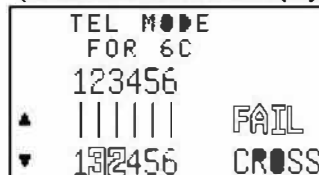
* If TEL cable is SHORT will display FAIL as follow :



- The OPEN cable's numbers will be blinking .
- The SHORT cable's numbers will be blinking .

* If TEL cable is CROSS will display FAIL as follow :

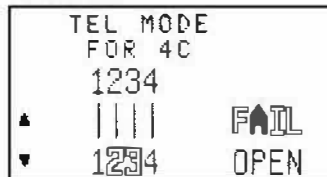
(CROSS FAIL : would not display FAIL)



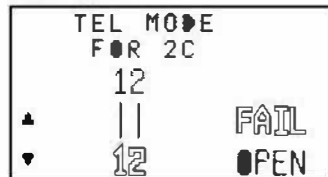
- The CROSS cable's numbers will be blinking & show different arrangement .

* TEL MODE Push ▲ ▼ KEY can select 6C、4C、2C、 will display as follow :

Picture of 4C



Picture of 2C



• The wrong cable numbers will be blinking .

* Press MEMORY KEY · Can memorize the test result and show MR-1 one moment then disappear .

* MR-01 : 1-st set memory · Total 8 sets memory .

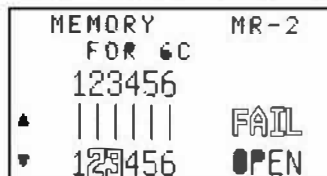


* Press MEMORY KEY over 3 seconds · into the picture of memorize test result :

Press ▲ ▼ KEY display the data of different sets memory .

Press another MODE KEY departed from MEMORY MODE .

* Press TEST KEY will display as follow :



• The wrong cable numbers will be blinking .

• Press ◀KEY clear memory · Press ▶KEY Not to clear memory & back to last picture .

(5). Testing COAX Mode :

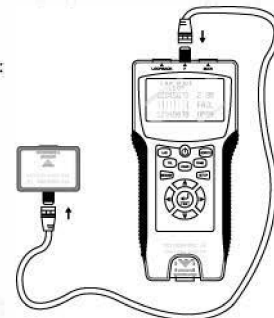
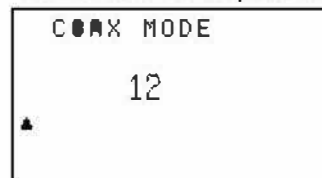
COAX MODE only can connected from MAIN connector to REMOTE terminator connector .

Test Function :

(a). PASS · OPEN · SHORT etc. Display FAIL .

(b). When LAN cable OPEN FAIL , Can display distance from MAIN connector to broken point .
(Just for reference)

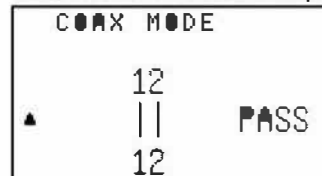
* COAX MODE test initial picture as follow :



* Press TEL KEY or TEST KEY start to test

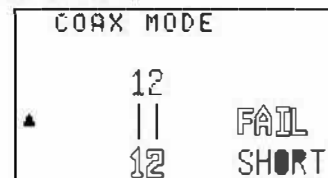
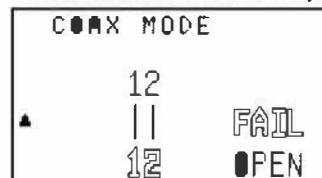
Test Result :

* If COAX cable is correct will display PASS as follow :



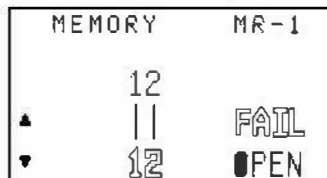
* If COAX cable is OPEN will display FAIL as follow :

* If COAX cable is SHORT will display FAIL as follow :



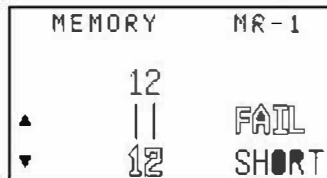
* Press MEMORY KEY · Can memorize the test result and show MR-1 one moment then disappear .

MR-01 : 1-st set memory , Total 4 sets memory .



* Press MEMORY KEY over 3 seconds · into the picture of memorize test result :

Press ▲ ▼ KEY display the data of different sets memory .
Press another MODE KEY departed from MEMORY MODE .



* Press TEST KEY will display as follow :



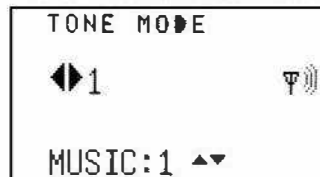
* Press ◀KEY clear memory · Press ▶KEY Not to clear memory & back to last picture .

(6). To use TONE Mode :

Tone Mode :

Transmit audio frequency from cable to detect the cable's broken point by probe .

Push TONE KEY will display as follow :



- ◆ Press ◀▶KEY to select TONER output signal from difference pair .
- ◆ Press ▲ ▼KEY to select difference audio frequency from TONER .
(2 Audio Frequency) .

(7). Testing LENGTH Mode :

LENGTH MODE may connected from MAIN connector to Open .€

Test Function :

- (a). Can measure the Length of LAN cable or COAX cable .
- (b). Can memorize the data of test result about LAN cable or COAX cable .
- (c). SET MODE to calibrate : If the test result of measure length is over error of specification .

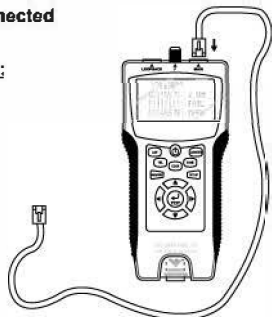
* Can use the function of LAN Cable ADJ or COAX Cable ADJ to make the length calibration Or restore to the default value of initial .
(The operational method refer to SETUP MODE).

1. Testing LAN Cable : LAN cable connected from MAIN connector to open .

* LENGTH MODE Initial picture as follow :



• Push LENGTH KEY or TEST KEY start to test .



* Test result will display as follow :



• Press ▲ KEY to return to the last picture .
Press ◀▶KEY to select the test result of the different pair's length .
Press ▼ KEY to select the length measurement of COAX cable .

* If the LAN cable is connected from MAIN connector to REMOTE Terminator .

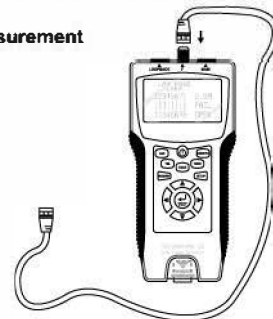
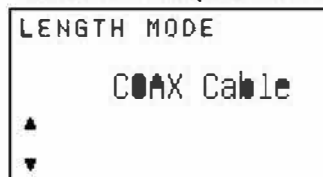
* Will display " Keep OPEN " as follow :



2. Testing COAX cable : COAX cable connected from MAIN connector to open .

* Push ▼ KEY to select the length measurement of COAX cable .

* COAX cable initial picture as follow :

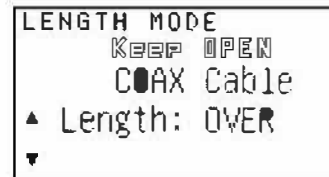
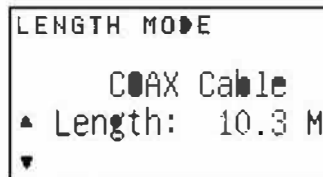


* Push LENGTH KEY or TEST KEY start to test .

* Test result will display as follow :

* If the COAX cable is connected from MAIN connector to REMOTE terminator .

* Will display " Keep OPEN " as follow :



• Press ▲ KEY to return to the last picture .

* Press MEMORY KEY · Can memorize the test result and show MR-01 one moment then disappear .

* MR-01 : 1-st set memory · Total 4 sets memory .

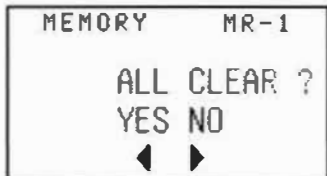


* Press MEMORY KEY over 3 seconds into the picture of memorize test result :

Press ▲▼ KEY Display the data of different sets memory .

Press another MODE KEY departed from MEMORY MODE .

* Press TEST KEY will display as follow :



• Press ◀KEY clear memory , Press ▶KEY Not to clear memory & back to last picture .

(8). The function of the SETUP Mode :

If change the value on SETUP MODE . You must push the MEMORY KEY to save the value.

Otherwise the value you set would not save in the memory when power off .

If you departed from SETUP MODE , must into the SETUP MODE again & push MEMORY KEY To save the set value .

Otherwise the value you set would not save in the memory when power off.

* Press SETUP KEY will display as follow :

1. Unit Setting :



• Press ◀▶KEY to change setting .

Press ▲▼KEY to jump to next picture setting .

(Be selected value will be blinking)

2. LAN Length adj setting :

Press ▼KEY to jump to LAN length adj setting.

Will display as follow :



(TEST KEY will be blinking)

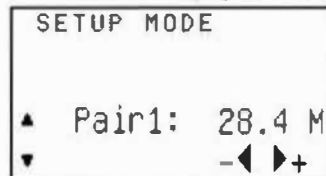


* Connected the LAN Cable is known the length from MAIN connector to open .

(For Example : 100m)

* Push TEST KEY to measure the length .

* Test result will display as follow :



• Press ◀▶KEY to adjust the value is same as known length you measured .

• Press MEMORY KEY To save the calibration value .

• Press ▲▼KEY to jump to last or next picture setting .

3. COAX Length adj setting :

Press ▼KEY to jump to COAX length adj setting.

Will display as follow :



(TEST KEY will be blinking)



* Connected the COAX cable is known the length from MAIN connector to Open . (For Example : 100m)

* Press TEST KEY to measure the length .

* Test result will display as follow :



• Press ◀▶KEY to adjust the value is same as known length you measured .

• Press MEMORY KEY To save the calibration value .

• Press ▲▼KEY to jump to last or next picture setting .

4. Buzzer ONOFF setting :

Press ▼KEY to jump to buzzer setting . will display as follow :



- Press ◀▶KEY to change the setting . (Be selected value will be blinking)
- Press MEMORY KEY To save the change setting .
- Press ▲▼KEY to jump to last or next picture setting .

5. Back Light ON OFF Setting :

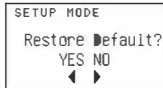
Press ▼KEY to jump to Back Light Setting . Will display as follow :



- Press ◀▶ KEY to change the setting . (Be selected value will be blinking)
- Press MEMORY KEY To save the change setting .
- Press ▲▼ KEY to jump to last or next picture setting .

6. Restore to default value setting :

• Press ▼ KEY to jump to Restore to default value Setting . Will display as follow :



- Press ▲ KEY to jump to last picture setting.
- Press TEST KEY Will display as follow :
- Press ◀KEY YES Restore to initial default value .
- Press ▶KEY NO Back to last picture .

※ If do not touch any key over 5 minutes would be auto power off in all MODE , except TONE MODE .

※ If do not touch any key over 30 minutes would be auto power off in TONE MODE .