

LAN/Length Cable Tester

TCT-2690 Pro

User Manual



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LAN/Length Cable Tester

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Introduction

The Goldtool LAN /Length TCT-2690 Pro is designed to check , measure Length and troubleshoot the pin connections of RJ45 and F connect cables. It is ideal for testing the continuity of each pair of an LAN cable and F cable prior to installation on equipments.

- 1) Check Coax , type CAT5, 5e , 6 and 7 twisted cord network and trouble.
- 2) Check cable sequence .
- 3) Use TDR (time domain reflect meter), Measure length and distance, find the trouble location.
- 4) Find the determined open circuit, short circuit, jumper, cross or split pairs.
- 5) Service line test and no external adaptor is required.
- 6) Determine continuity and wiring pattern.
- 7) Low Battery indication

Features

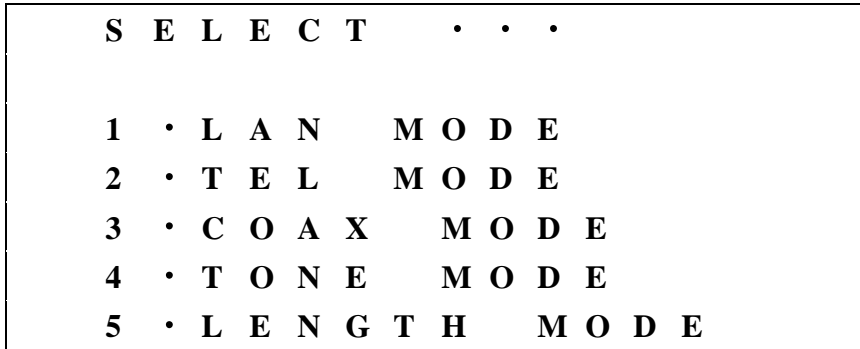
- 1) One person enough to complete cable continuity check.
- 2) Check wiring error in 5E, 6E, coaxial cable and telephone line such as open circuit, short circuit, jumper wire, reverse connection , cross-talk interference or split pairs.
- 3) Locate the wiring or connection error.
- 4) Measure cable length and determine the distance of open circuit and short circuit.
- 5) Dynamically calibrate cable length and make length measurement as accurate as 97% .
- 6) Simple and easy use 144 x 64 Dots FSTN LCM Big screen to display test result clear.
- 7) Portable unit with long battery life.
- 8) Automatically time-delay shut off.
- 9) Measure length and pair with or without far-end recognizer.
- 10) Locate cable and there are 8 far-end passive test jacks (ID No. ID1-ID8).
- 11) Far-end recognizer with prompting voice.
- 12) Self-checking function and automatically compensate any change in battery capacity or ambient temperature.
- 13) Single board computer software watchdog design and reliable operation.

Specifications:

Name	TCT-2690 Pro
Display	144 x 64 Dots FSTN LCM LCD Module : 80 x 54 mm (valid visual field 64.78 x 33.26 mm)
Connector type	F/RJ45
Button	(1) TEL . (2) COAX . (3) LAN . (4) TONE . (5) LENGTH . (6) SET (7) POWER . (8)MEMORY. (9)UP.(10)DOWN.(11)RIGHT.(12)LEFT.(13)TEST/ENTER.
Cable type	Shielded or unshielded, CAT-7, 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 $\pm 5\%$ or ± 1.5 feet . length: 1~350 meters (3~1200 feet) Up to 1000 meters
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	
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
Note	Accessories: Tool Bag x 1 pcs , F to BNC Adapter x 2 pcs , RJ45 to USB Adapter x 2 pcs , RJ45 to RJ11 Adapter x 2 pcs , ID1 ~ ID8 x 1 set .

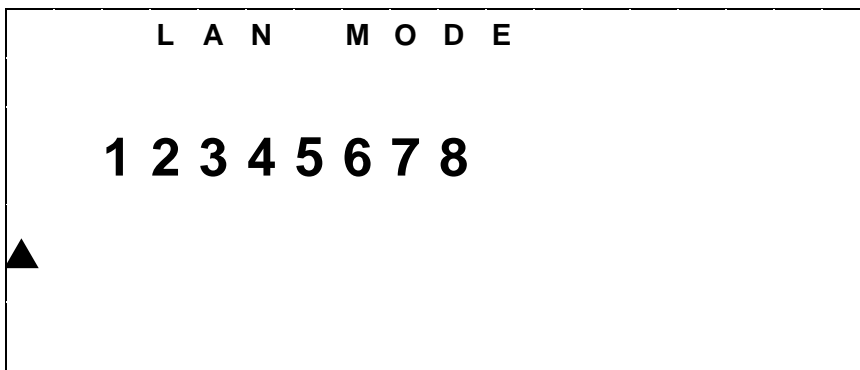
Instructions for Operation:

Picture of power on



LAN Mode: Connect to Loopback connector

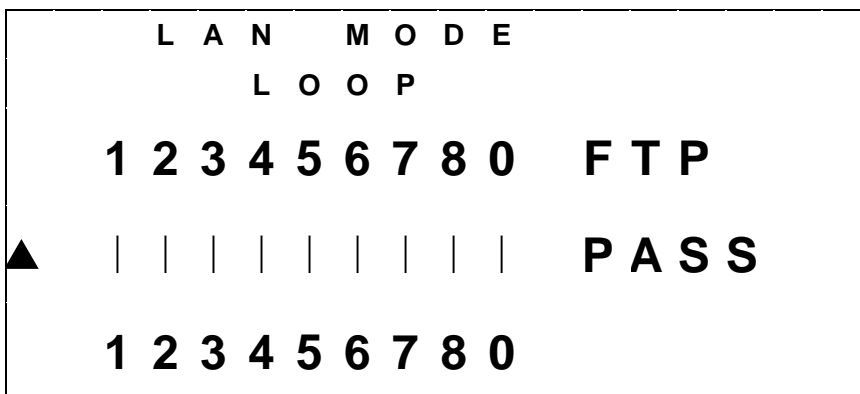
**Push LAN Key to Select LAN Mode
Before Test**



- 1) Connect one end of the cable to the Main connector, and the other end to the Loopback connector.
- 2) Select LAN Mode , Push LAN Key or Test Key to test .
- 3) Display can indicate the test result of the cable , Open , Short , Cross , Split , Fail or Pass, FTP or UTP .

The wrong cable will be blinking and display FAIL , otherwise display PASS .

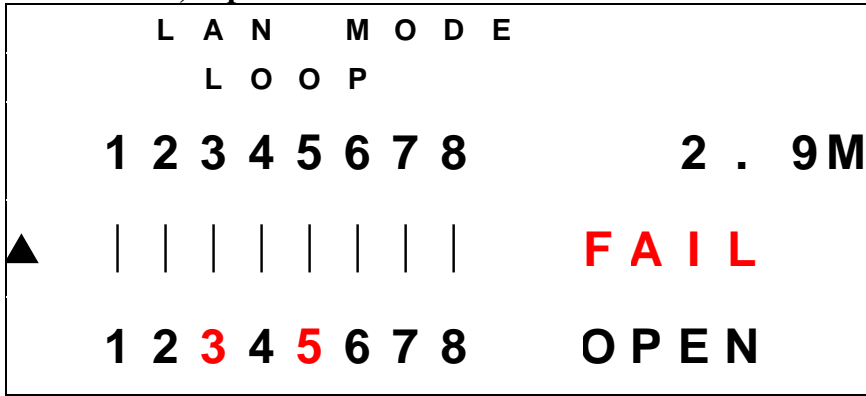
After Test : If All Pass FTP (STP) Cable



0 : Shield

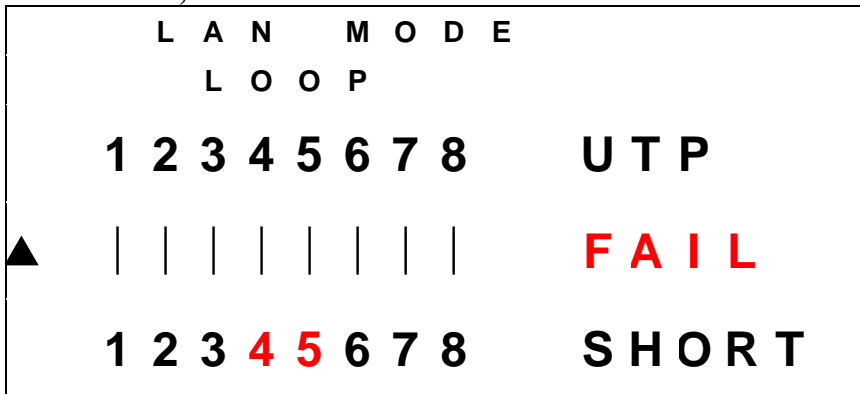
Push ▲KEY back to the picture of before test

After Test : If 3,5 open UTP Cable



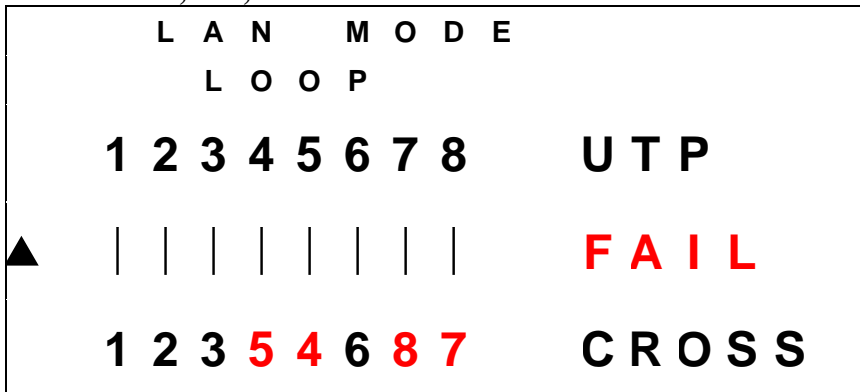
The wrong cable will be blinking and display FAIL and show the length of the open cable .

After Test : If 4,5 short UTP Cable



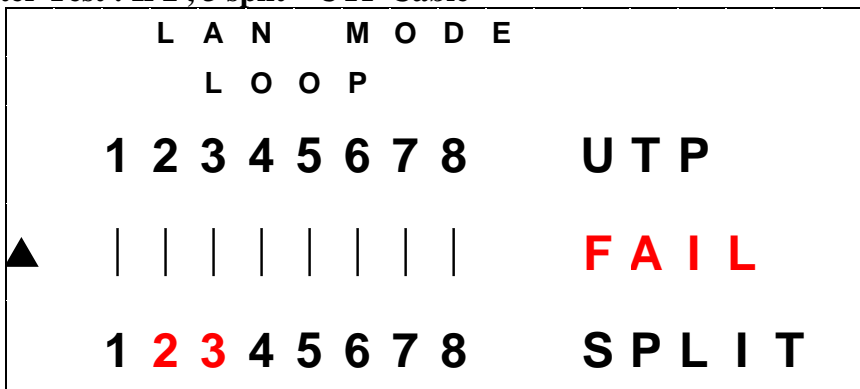
The wrong cable will be blinking and display FAIL

After Test : If 4,5 . 7,8 cross UTP Cable



The wrong cable will be blinking and display FAIL and show wrong pair

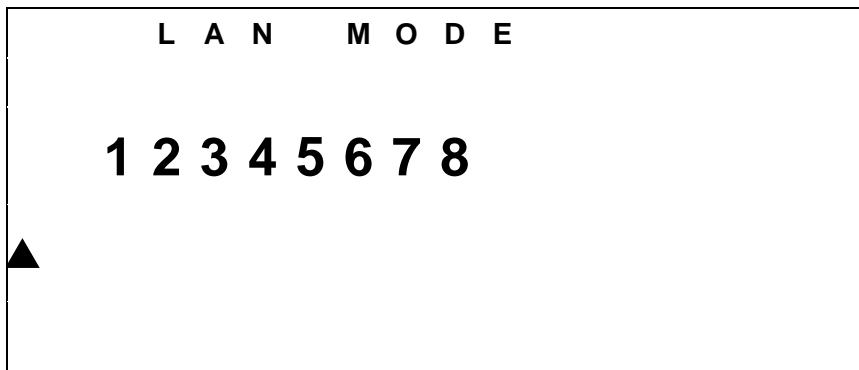
After Test : If 2 , 3 split UTP Cable



The wrong cable will be blinking and display FAIL

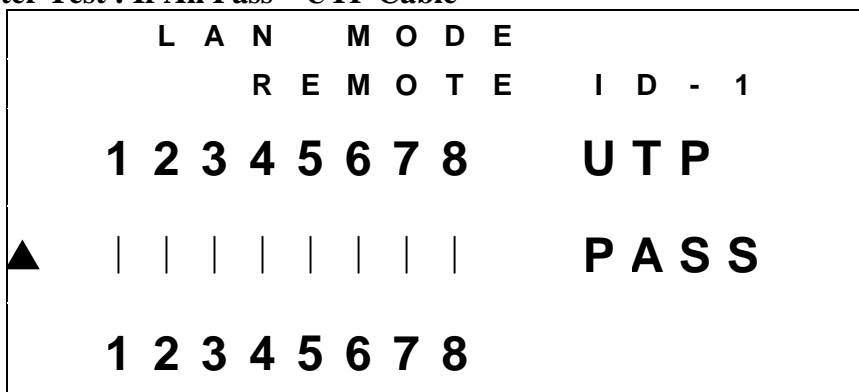
LAN Mode: Connect to Remote Terminator (ID No. ID1-ID8)

**Push LAN Key to Select LAN Mode
Before Test**



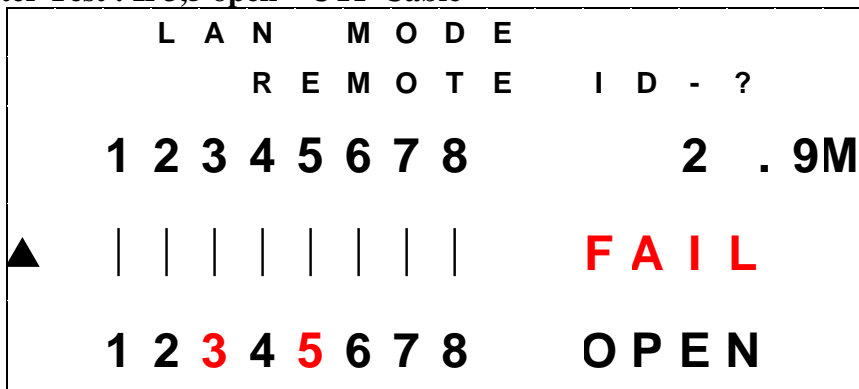
- 1) Connect one end of the cable to the Main connector, and the other end to the Remote Terminator.
- 2) Push LAN Key or Test Key
- 3) Display can indicate the test result of the cable ,Open ,Short , Fail or Pass ,STP or UTP & ID No.
(without Split function)
The wrong cable will be flashing and display FAIL , otherwise display PASS .

After Test : If All Pass UTP Cable



The Remote terminator will beep .
Push ▲KEY back to the picture of before test and turn off the beep .

After Test : If 3,5 open UTP Cable



The wrong cable will be blinking and display FAIL
If Fail display ID-?

After Test : If 4,5 short UTP Cable

L A N M O D E								
R E M O T E		I D - ?						
1	2	3	4	5	6	7	8	U T P
▲								F A I L
1	2	3	4	5	6	7	8	S H O R T

The wrong cable will be blinking and display FAIL

After Test : If 4,5 . 7,8 cross UTP Cable

L A N M O D E								
R E M O T E		I D - ?						
1	2	3	4	5	6	7	8	U T P
▲								F A I L
1	2	3	5	4	6	8	7	C R O S S

The wrong cable will be blinking and display FAIL and show wrong pair

Memory Mode: Push MEM Key over 3 seconds can memorize the picture of test result .

And will display MR-01 for 1 second . Maximum 8 sets memory : MR-01 ~ MR-08.

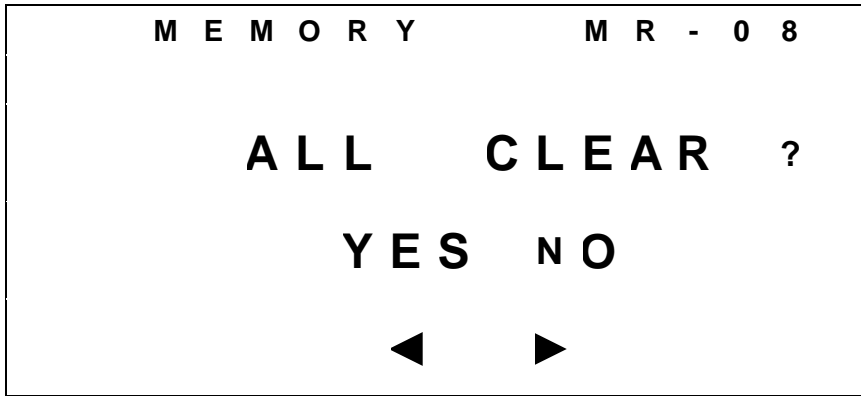
L A N M O D E		M R - 0 1						
R E M O T E		I D - ?						
1	2	3	4	5	6	7	8	U T P
▲								F A I L
1	2	3	5	4	6	8	7	C R O S S

Push▲▼ KEY to display different sets memory

Push another MODE Key to go away MEM Mode .

M E M O R Y		M R - 0 1						
L O O P								
1	2	3	4	5	6	7	8	U T P
▲								F A I L
1	2	3	5	4	6	8	7	C R O S S

When push Test Key will display follow picture:

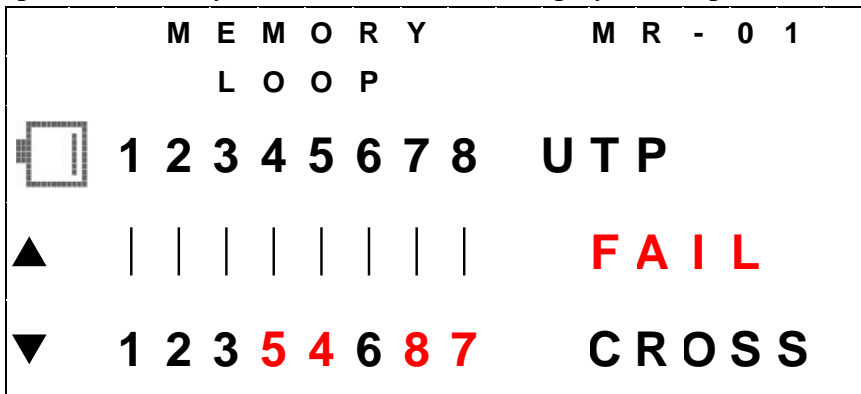


Push ◀KEY to erase the memory or Push ▶KEY to keep the memory and back to original picture

Note : LAN Mode : 8 sets Memory . TEL Mode : 8 sets Memory . COAX Mode : 4 sets Memory .
LENGTH Mode : 6 sets Memory .

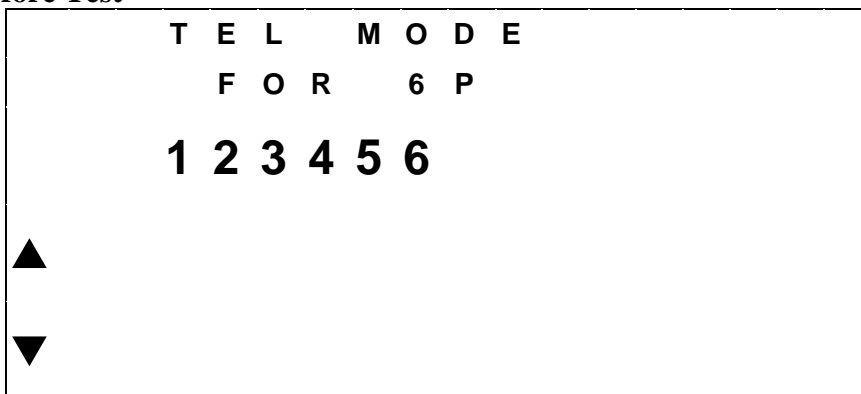
Low Battery Mode:

When power of battery lower than 6.0 V will display follow picture:



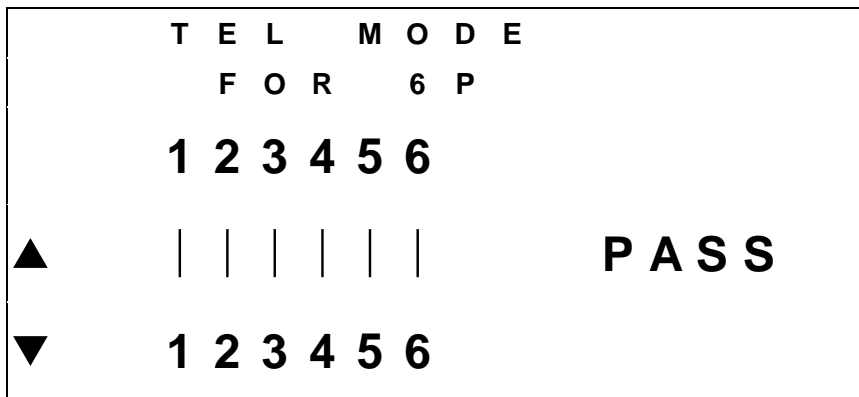
TEL Mode:

Push TEL Key to Select TEL Mode
Before Test

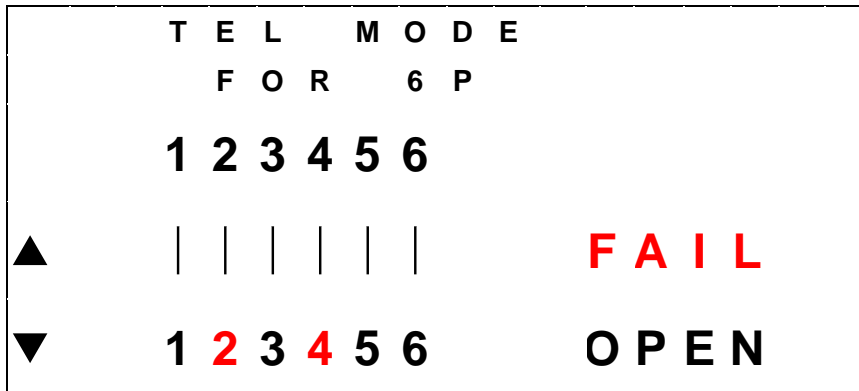


- 1) Connect one end of the cable to the Main connector, and the other end to the Loopback connector.
- 2) Select TEL Mode , Push TEL Key or Test Key to Test , UP/Down key select 6P , 4P or 2P
- 3) Display can indicate the test result of the cable , Open , Short , Cross , Fail or Pass.
The wrong cable will be blinking and display FAIL , otherwise display PASS .

After Test : If All Pass 6P

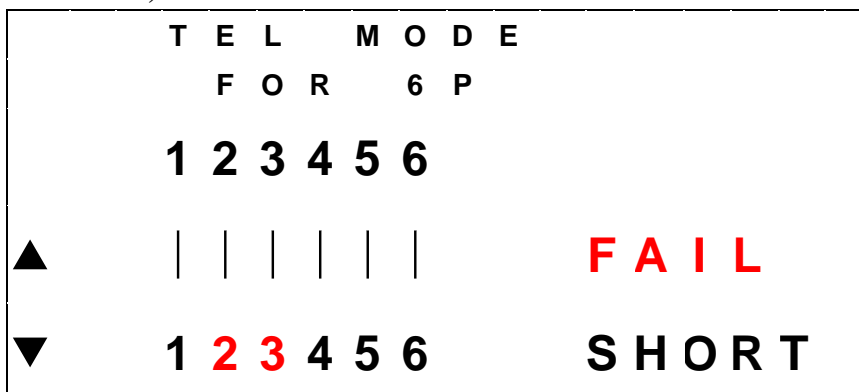


After Test : If 2,4 open 6P



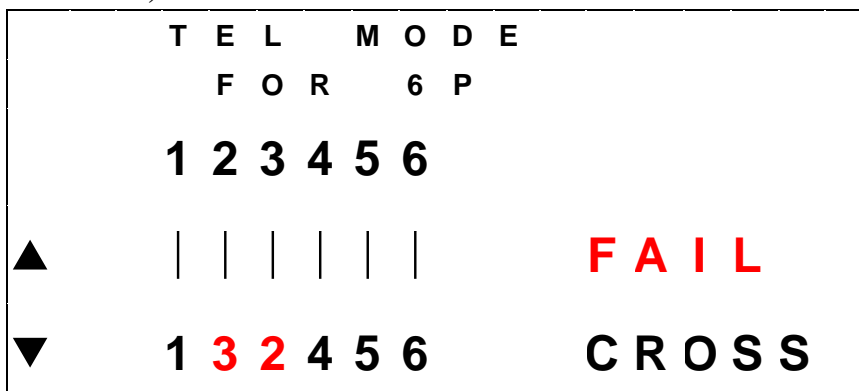
The wrong cable will be blinking and display FAIL

After Test : If 2,3 short 6P



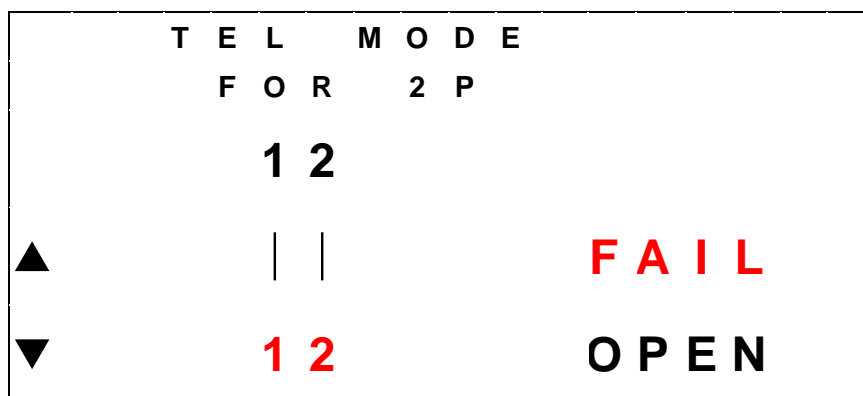
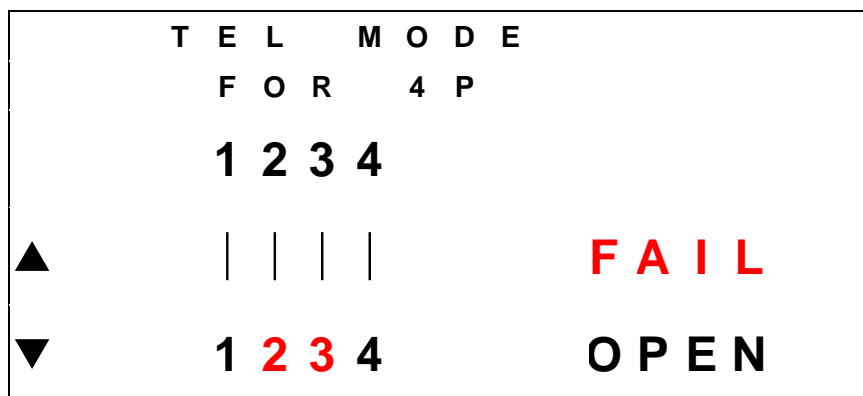
The wrong cable will be blinking and display FAIL

After Test : If 2,3 cross 6P



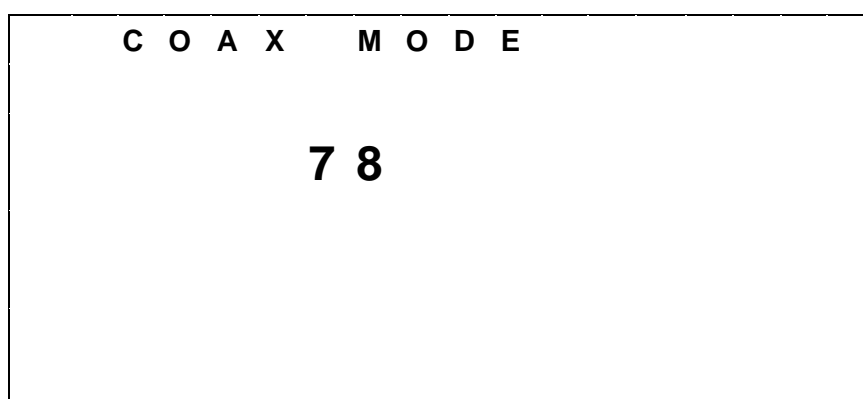
The wrong cable will be blinking and display FAIL and show wrong pair

In TEL Mode Push ▲▼KEY to select 6P、4P、2P.



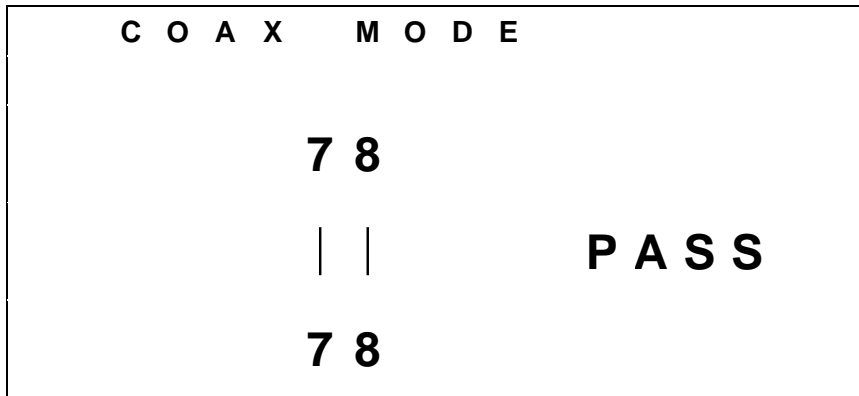
COAX Mode:

Push COAX Key to Select COAX Mode
Before Test

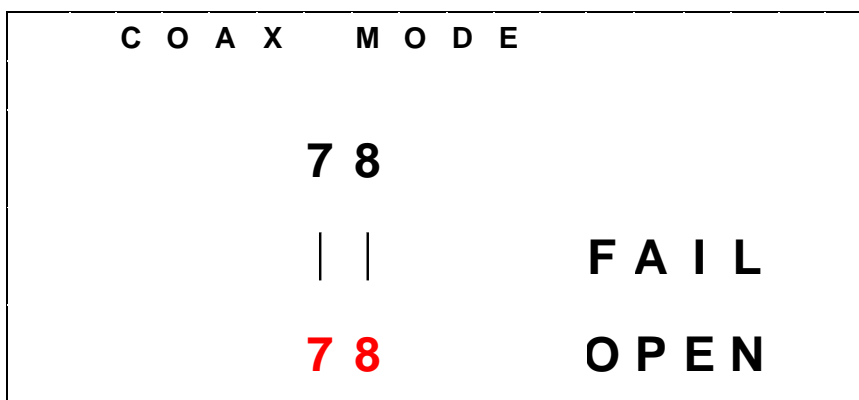


- 1) Connect one end of the cable to the Main connector, the other end to the Terminator connector.
- 2) Select COAX Mode , Push Coax Key or Test Key to test .
- 3) Display the cable Pass or Fail .

After Test : If All Pass Coax



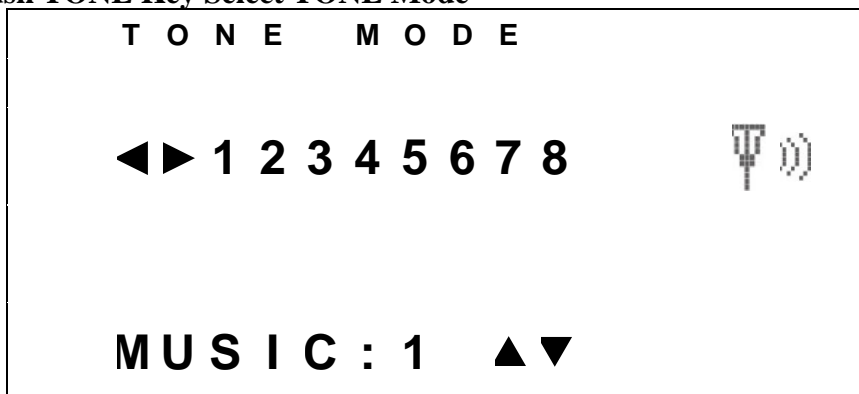
After Test : If 7,8 open Coax



The wrong cable will be blinking and display FAIL

TONE Mode:

Push TONE Key Select TONE Mode

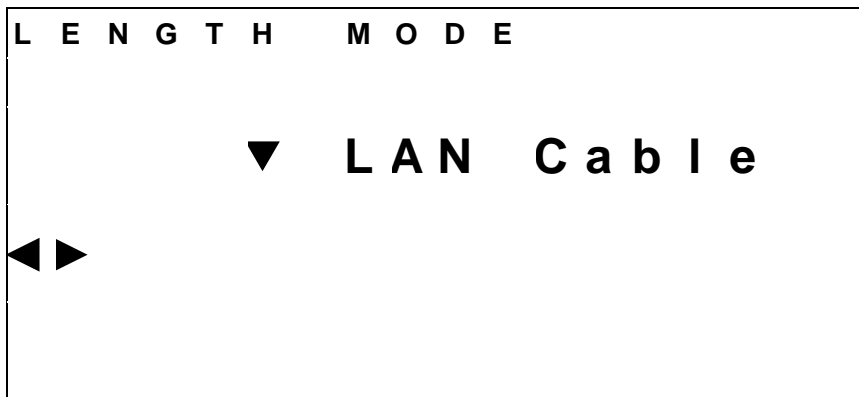


- 1) Connect one end of the cable to the Main connector.
- 2) Select TONE Mode , Push TONE Key or Test Key to test .
- 3) Push ▲▼key select different music .
- 4) Push ◀▶ key select different pairs output .

LENGTH Mode: For LAN

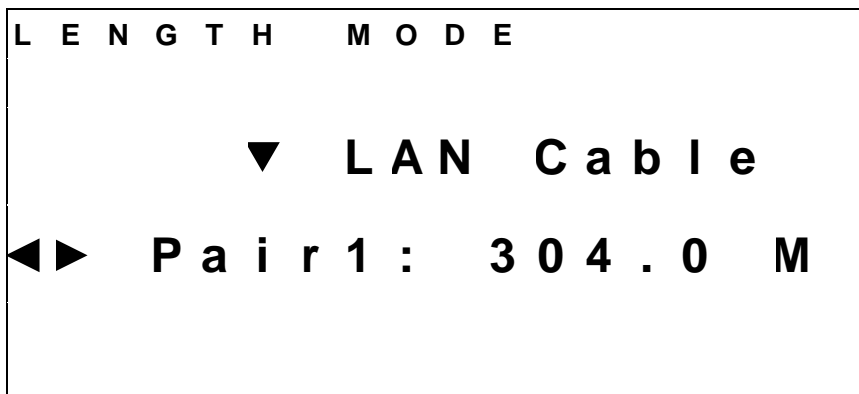
Push LENGTH Key Select LENGTH Mode

Before Test : For LAN



- 1) Connect one end of the cable to the Main connector, the other end free or to the Loopback connector.
- 2) Select LENGTH Mode , Push LENGTH Key or Test Key to test .
- 3) Push ◀▶ key to display the length of each pair .

After Test



LENGTH Mode: For COAX : Push ▼ key to select COAX Cable Length Test

Before Test : For COAX



- 1) Connect one end of the cable to the Main connector, the other end free .
- 2) Select LENGTH Mode , Push LENGTH Key or Test Key to test .

After Test



SET UP Mode:

Push SET UP Key to Select SET UP Mode

Push ◀▶ key to set

Push ▲▼ key to next mode

1) Buzzer On/Off .



The select setting will blinking .

Push SETUP Key to memorize the setting and back to the picture of test

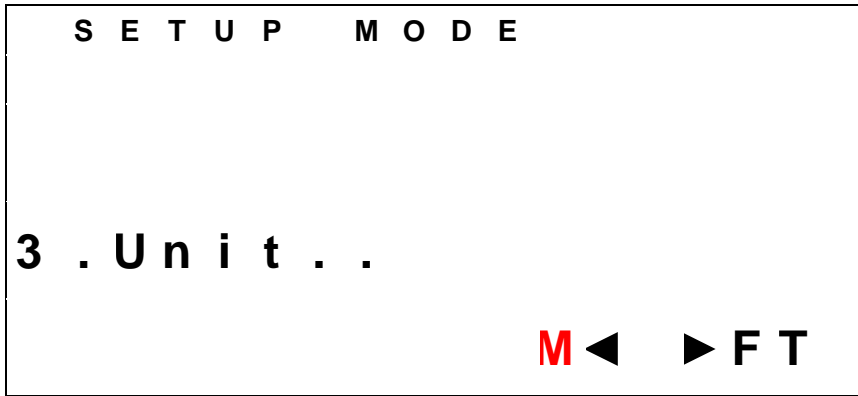
2) Backlight On/Off .



The select setting will blinking .

Push SETUP Key to memorize the setting and back to the picture of test

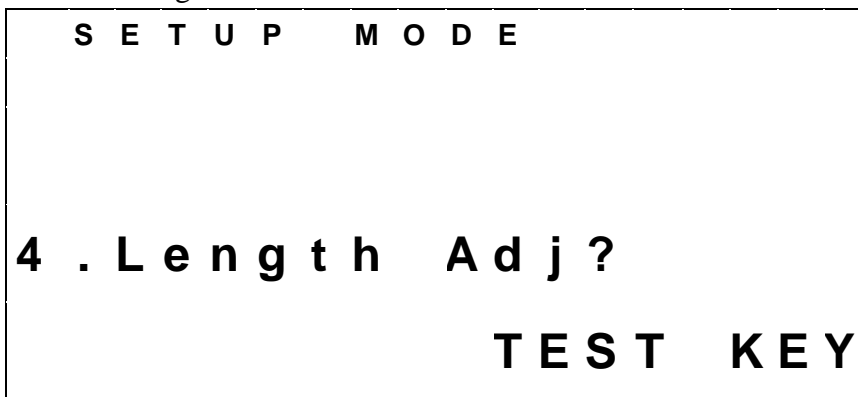
3) Length unit select .



The select setting will blinking .

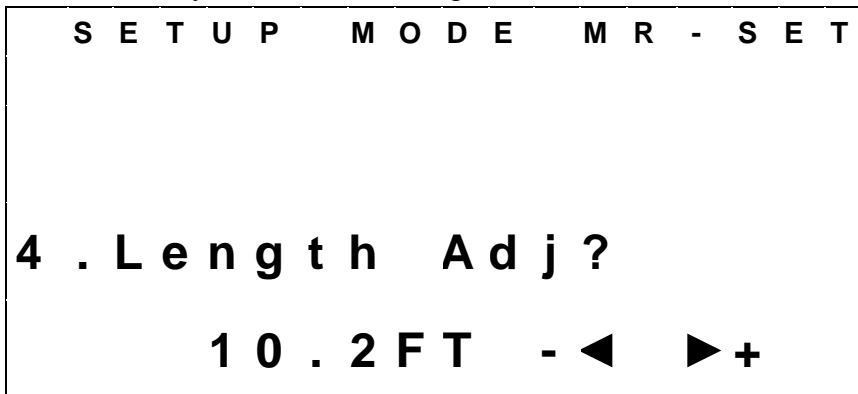
Push SETUP Key to memorize the setting and back to the picture of test

4) Calibrate Length .



1) Connect the Calibrate cable to the connector .

2) Push TEST Key to measure the length of the cable



Push ◀▶ key to calibrate the length

Push ▲▼key to next mode

Push MEMORY Key To Memorize the setting

Push any Mode Key back to the picture of test

Note :

- 1) **Power Auto off if no touch any key in 5 minutes , except TONE Mode .**
- 2) **Power Auto off if no touch any key in 30 minutes , On TONE Mode .**