## Foreword

NetWork WireMap Tester is a special tool with powerful functions to prevent and solve cable installation problems. It is the best practical and economic choice to use NetWork WireMap Tester to test the installation of various voice and data links. The tester is capable to test cable connection sequence, user jumper, making and breaking of wiring, open circuit and short-circuit. It can save your time and money in installation of cables. Its unique function is report test result in multiple languages.



## Major Functions and Features

- Cable types to be tested:
  It is capable to test unshielded pair and shielded pair (UTP, FTP) of RJ45 port; with special adapters, it is capable to test RJ11 port, telephone line (TEL) and coaxial cable (BNC).
- One person is enough to complete link continuity test.
- It is capable to detect wiring troubles such as open circuit, short-circuit and dislocation.
- It is simple and easy use and the test result is clear at a glance with the aid of LCD display of wiring diagram.
- Voice report of test result makes test work convenient and interesting (only Model "A" unit).
- It is portable with long service battery (reserve for 50 hours).
- It is capable to locate cable with 8 far-end passive test ports (Identification Number ID1 - ID 8 are used for quick check of cable far-ends respectively).
- Single chip microprocessor software watchdog design is reliable in operation.
- Low battery voltage alarm display.

## Technical Index

(1). Overall Dimension:
123.7 x 66.5 x 24.5 mm
(2). Battery:
4 x AAA 1.5V dry battery with power consumption 8 mA
(3). Display:
Special cable tester LCD display (effective visual range 35 x 17 mm)
(4). Cable Types to be tested:
UTP/FTP twisted line, coaxial cable (BNC) and telephone line (TEL)
(5). Working Ambient Temperature:
-10℃ to +40℃
(6). Tester Ports:
Main RJ45 master port (M), Loop-back RJ45 port (L) and far-end recognizer RJ45 port (R)
(7). Maximum Length of Cable:
twisted UTP/FTP cable < 300 m,
BNC coaxial cable < 500 m,
TEL telephone line < 300 m.
(8). Location of Wiring Sequence and Cable Trouble:
detection of trouble such as open circuit, short-circuit and dislocation.
(9). Location of Cable Link Route:
Maximum 8 far-end identification recognizers are used in test and location of cable links (ID1 - ID8).



## Interface and Push Buttons

# Operation

## Cautions

1. If the battery low voltage alarm sign is appeared, replace the battery timely and otherwise the test result will be influenced.
2. Protect the tester and accessories from moisture and raining and otherwise the test result will be influenced. Start the tester only after it becomes dry.

## A. Initial Frame

Turn the tester power switch on and all LCD characters will display for 2 seconds to confirm LCD display is in normal condition. (The initiating music is available if the tester with voice function.)


After 5 seconds, it enters into UTP test mode.
UTP test mode is the initiating test mode in memory of the tester.

## B. Selection of Test Cable Type

Push down test button for more than 3 seconds and the test frame will display "UTP", "FTP", "TEL" and "BNC" in cycle and the cycle time is 2 seconds. Release the button if the frame displays the test type just you want and you enter this test type immediately.

**Note:** the tester with voice function will sound "UTP", "FTP","TEL" and "BNC" for your convenient selection.

## C. Universal Twisted Pair (UTP) Test

Before testing, connect one end of the cable with M port of mater tester while connect the other end of the cable with R port of the far-end matching unit or L port of the master tester.
Push down the test button (The tester with voice function will sound "Start test".), the test frame will flash and test result will show on LCD display (The tester with voice function will report test result in voice.).

● LCD display will be as follows if UTP passes test:

If the test is passed, it will display the identification OFFICE ID of the far-end matching unit.


Then it will display wiring diagram (WIREMAP) as follows:


● LCD display will be as follows if UTP has short-circuit (SHORT):

If there are some short-circuits in the cable or terminal, it will display as follows: (e.g. 4 and 5 are in short-circuit):

● LCD display will be as follows if UTP has open circuit (OPEN):

If there are some open circuits in the cable or terminal, it will display as follows: (e.g. 4 and 5 are in open circuit):


**Note:** Open circuit pin displays are always in pair ( 12, 36, 45 or 78). For example 45 pairs are in open circuit as shown above.

● LCD display will be as follows if UTP has dislocation (WRONG):

If the cable or terminal is in dislocation with wrong connection, it will display as follows: (e.g. 1 and 2 are dislocated)


## D. Shielded Twisted Pair (FTP) Test

Before testing, connect one end of the cable with M port of mater tester while connect the other end of the cable with R port of the far-end matching unit or L port of the master tester.

Push down the test button (The tester with voice function will sound "Start test".), the test frame will flash and test result will show on LCD display (The tester with voice function will report test result in voice.)



● LCD display will be as follows if FTP passes test:

If the test is passed, it will display the identification OFFICE ID of the far-end matching unit.


Then it will display wiring diagram (WIREMAP) as follows:


("0" indicates shielded layer of FTP cable.)

● LCD display will be as follows if FTP has short-circuit (SHORT):

If there are some short-circuits in the cable or terminal, it will display as follows: (e.g. 4 and 5 and shielded layer are in short-circuit):


●LCD display will be as follows if FTP has open circuit (OPEN):

If there are some open circuits in the cable or terminal, it will display as follows: (e.g. the shielded layer is in open circuit):

● LCD display will be as follows if FTP has dislocation (WRONG):

If the cable or terminal is in dislocation with wrong connection, it will display as follows: (e.g. 1 and 2 are dislocated)


## E. Telephone Line (TEL) Test

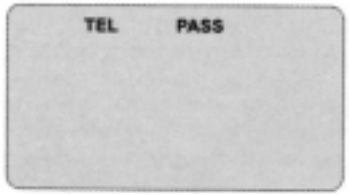
The tester is capable to test the cable line of both two-wire telephone and four-wire telephone.

Before testing, connect one end of the cable with M port of the master tester via RJ45-RJ11 adapter while connect the other end of the cable with the far-end matching unit via RJ45-RJ11 adapter (or connect with L port of the master tester). The adapter clip should clamp on both ends of the wire to be tested.

Push down the test button (The tester with voice function will sound "Start test".), the test frame will flash and test result will show on LCD display (The tester with voice function will report test result in voice.).

● LCD display will be as follows if TEL passes test:

If the test is passed, it will display "PASS" and wiring diagram (WIREMAP) as follows:






●LCD display will be as follows if TEL has short circuit (SHORT):


If there are some short circuits in cable or terminal, it will display as follows:

●LCD display will be as follows if TEL has open Circuit (OPEN):

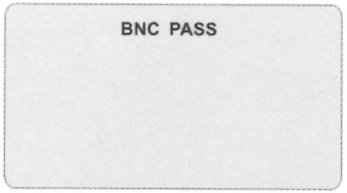
If there are some open circuits in cable or terminal, it will display as follows:


## F. Coaxial Cable (BNC) Test

Before testing, connect one end of the cable with M port of the master tester via RJ45-BNC adapter while connect the other end of the cable with the far-end matching unit via RJ45-BNC adapter (or connect with L port of the master tester). Insert the wires to be tested into BNC plug.Push down the test button (The tester with voice function will sound "Start test".), the test frame will flash and test result will show on LCD display (The tester with voice function will report test result in voice.).

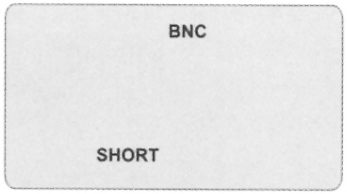
● LCD display will be as follows if BNC passes test:

If the test is passed, it will display "PASS" as follows:




●LCD display will be as follows if BNC has short circuit (SHORT):

If there are some short circuits in cable or terminal, it will display "SHORT" as follows;




●LCD display will be as follows if BNC has open circuit (OPEN):

If there are some open circuits in cable or terminal, it will display "OPEN" as follows: