# Warnings

1) The tester use a stacked battery 9V power.

2) The tester will shut off automatically if it does not work for 5 minutes.

3) The tester will shut off when push "ON/OFF" for 3 seconds.

4) Before power on, the testers (include RJ45, RJ11, USB, BNC connecting ports) cannot be connected to the testing product,

5) LCD display low battery when this battery with too low voltage and influence its operation, this series inspectors are developed for testing different cable terminals, they cannot be misused, otherwise they will be damaged permanently.

6) The cable under tested cannot be charged, otherwise the tester will be burned.

# **Technical Specification**

### 1) Display

Dot 128x64 Sequence LCD lattice (valid visual field 48x32mm)

### 2) Power supply

A stacked Battery of 9V with power consumption 15mA

### 3) Low battery display

The 9V battery voltage is low 6.5V, LCD display low battery.

### 4) Manual turn on

Press the "on/off' button for 3 seconds to turn it on

### 5) Energy-saving design

The LCD backlight will turn off in 10 seconds under no operation

## 6) Type of Test Cable

STP/UTP twisted cable, Coaxial cable, telephone line, USB line.

## 7) Tester Port

Tester RJ45 master port(M), tester LOOPBACK RJ45 port(S), BNC, USB(A), RJ11, far-end recognizer RJ45 port(R), The extra BNC, USB(B) and RJ11 converters are used to measure and check the continuity of coaxial cable telephone line and USB line.

## 8) Working Ambient Telephone

-10°C ~ +60°C

## 9) Length Measure ment of Twin Twisted Cable

Scope: 1~350m

Calibration accuracy: 2%(+/-0.5m or +/-1.5ft) (Calibration cable > 5m)

Shipment accuracy: 3%(+/-0.5m or +/- 1. 5ft) (AMP, AT&T Class 5 cable)

Display: Meter, Feet or Yards.

## 10) Length Calibration:

User can set calibration factor by himself with a given length cable, the length of calibrating cable is more than 10meter.

#### 11) Wire Sequence and Locating Cable Error:

Check errors such as open circuit, short circuit, reverse connection, crossover or cross-talk.

Interference

#### 12) Locating cable

I far-end passive test j acks (we can use other type: ID2—ID20 according to customers request.

### 13) Automatic time-delay Shut off Time:

The tester does not operate for 5 minutes.

#### 14) Manual Shutdown

Press "on/off' button for 3 seconds to turn it off

#### 15) Attention!

It will not turn off automatically under scanning situation.

Scanning and Locating Wiring 5E.6.6A, Coaxial cable, USB line and telephone line.

#### 16) The sensitivity is charged by adjust the volume switch

### 17) Dimension

149x66x23mm

## Features



1) Scanning and locating Wiring 5E, 6, 6A, Coaxial cable, USB line and telephone line.

2) The sensitivity is changed by adjust the volume switch.

3) Check wiring error in 5E, 6, 6A, Coaxial cable, USB line and telephone line.

4) Such as open circuit, short circuit jumper wire, reverse connection or cross-talk interference.

5) Locate the wiring or connection error.

6) Low Battery display.

7) Automatically time-delay shut off.

8) Far-end recognizes with prompting voice.

9) Self-checking function and automatically compensate any change in battery capacity or ambient temperature.

- 10) Measure cable length and determine the distance of open circuit and short circuit.
- 11) Dynamically calibrate cable length and makes length measurement as accurate as 98%.

# **Operation Procedures**



Push"ON/OFF" key for 3 seconds to turn it on.

Wire Mapping	
Cable Length	
Scan Cable	
Configure	

There are four functions to be chosen on main menu.

# 1. Wiring mapping test function

After entering the wiring test function, the tester first configure the 5E.6.6A, Coaxial and USB cable in main menu, and display as follows while checking is being undertaken: The Result 1, there is a USB line is tested the LCD will display as follows:



Wiring diagram measurement to check end to end continuity of cables M, S, R and locate error, Coaxial cable, USB line and telephone line measurement to check continuity and indicate open circuit and short circuit.

# 1.1 Lan Cable Test

Push "Wire Mapping", the LCD will display as follows:



Test in progress

# **1.2 Lan Cable Map Test result**

## **Result 1: Pass**



"S" line shows RJ45 jack pin number of far-end port and the far-end matcher number,

"M" line shows the RJ45 jack pin number of master port,

At the moment, push up or down key to restart testing or push enter key to return main menu.

## **Result 2: Open**



"S" line "1" and "2" pins location display "x", it indicates o circuit in far-end plug "1" and "2" pins and open circuit is located nearby the far-end plug

#### **Result 3: Short**

Wire Map: short 2-3

"M" line "2" and "3" pins location are displayed, it indicates short circuit in far-end plug "2" and "3" pins and short circuit is located nearby the near-end plug

#### **Result 4: Cross**



Line "1" and "2" are crossed

**Result 5:** 

Wire map	
pls. plug wire	

The tester will automatically detect far-end matcher or local port (S) cable and it will display as follows if the far-end of cable to be checked does not insert into the far -end matcher or if the cable does not insert into the local port (S) in local test.

# **1.3 Tel Cable Map Test**



# 1.4 Tel Cable Map Test result

Result 1: Pass circuit

Tel Map: pass M:123456 |||||| S: 123456

## Result 2: Short circuit

Result 3: Open circuit

Tel Map: open M:12x456 |||||| S: 12x456 **Result 4: Cross circuit** 

# **1.5 BNC Cable Map Test**



# 1.4 BNC Cable Map Test result

# 2. Cable Length Test



Pair and measure length to verify cable length, open circuit distance, pairing and cross-talk interference. And measurement length for Coaxial cable, USB line and telephone line.

# 2.1 Pair and length measurement (pair & length) function:

The Lan cable should be connected with "M" port in the course of length measurement. No matter whether there is a far-end recognizer at the far-end of the cable. The tester is capable to have pair and Length (pair &length) measurement therefore, the far-end recognizer can keep connected in the course of wiring diagram (wire map) and pair and length (pair &length) measurement to avoid repeated insertion and pulling out. After entering into pair and length measurement function, the tester shall have pair and length test and it will display as follows to indicate the measurement is being undertaken.

# 2.2 UTP LAN Cable Test



The Lan cable should be connected with "M" port in the course of length measurement. After entering into UTP LAN Cable, the tester could test correct the wire (CAT-5, 5E.6.6A) length.

# 2.3 UTP LAN Cable Result

## Result 1:



## Result 2:



## **Result 3:**





The Length

test result:

12	100.0M
36	100.0M
45	100.0M
78	100.0M

## 2.4 STP LAN Cable Test



The Lan cable should be connected with "M" port in the course of length measurement. **This part is the same as <u>2.3 UTP LAN Cable Result.</u>** 

# 2.5 BNC Cable Test



The BNC cable should be connected with BNC port in the course of length measurement.

# 2.6 Tel Cable Test





# 2.7 Calibration



1. Factory settings: Restore the default length factor.

2. Length adjust: Using 5m, 10m, 20m wire to test, e.g. using 10m wire to test while the measuring result is different. Then push Down/Up to adjust manually.



After saving the statistics, the tester goes back to the TEST interface.

# 3. Scanning and locating Cable



Select "Scan cable" of menu, and push "Enter" key, then LCD display:



Push "stop" key, the LCD display "start" key. Push it again, the LCD will display "stop". The port of BNC, USB, R11,& RJ45(M), will send a single, Plug one port of the cable (such as the port of extension line or the port extension line or the port of computer network cable) into the RJ11, or BNC, USB, RJ45(M)) jack on the emitter.

Power on the receiver and the "Power" LED lights the detect the sound "toot" from the speaker on the receiver around another port of cable testing (such as cable layout shelf of telephone system, junction box, and Hub port of computer).

Then compare the volume of the "toot" sound, the twin cables which makes the highest sound of "toot" are the one to be found.

# 4. Configure

Select "Configure" of menu, and push "Enter" key, then LCD Display:



Then LCD

Display:



A) Select Language: English/Chinese

Select Return, push "enter" key, and display main menu.

B) Select Unit: Meter/Feet

Select Return, push "enter" key, and display main menu

C) Select Backlight: on/off

When choosing "on", the backlight will take effect.