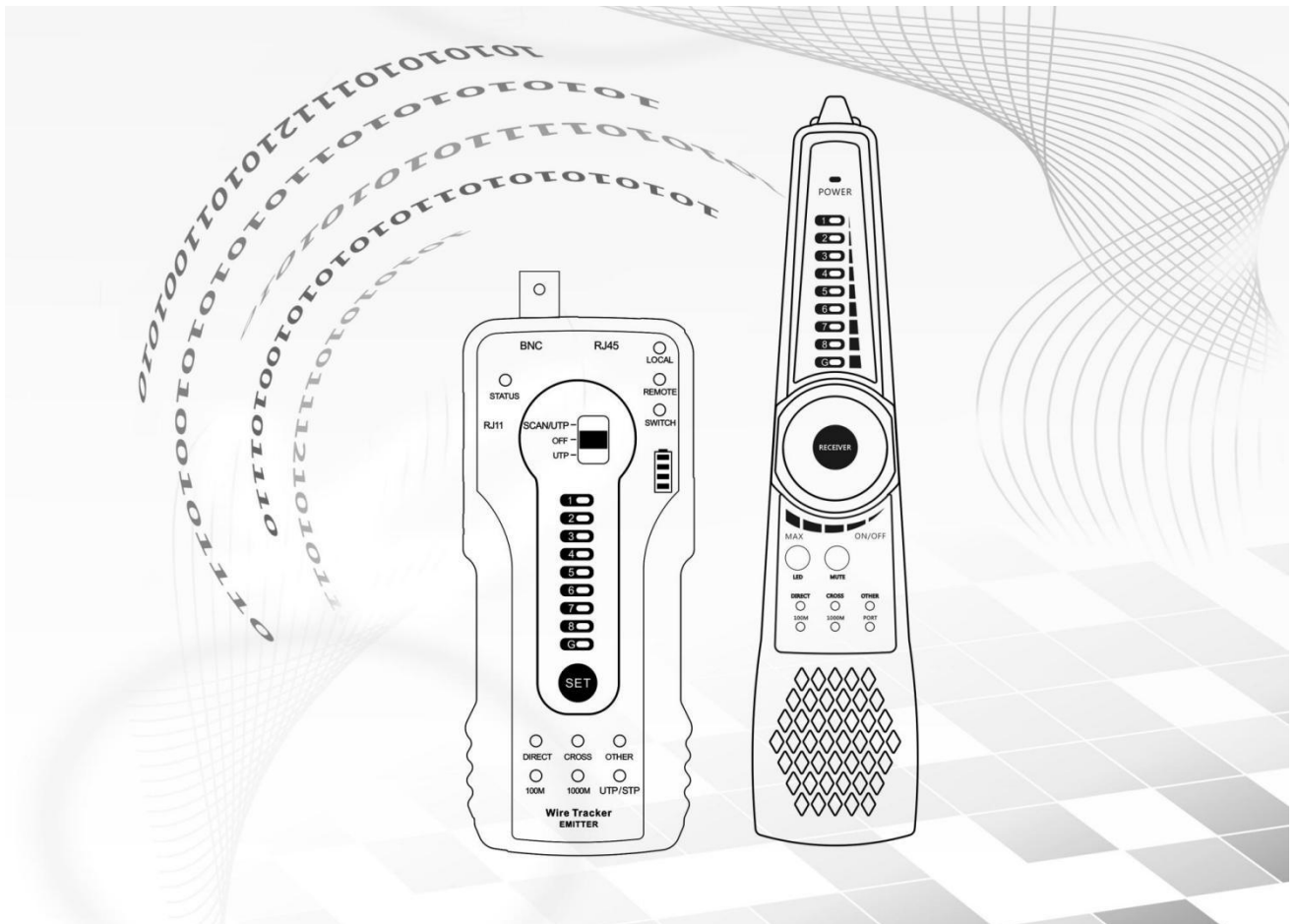


Multi-function Wire Tracker

User Manual



- Thank you for purchasing the Wire Tracker. Please read the manual before using the Wire Tracker and use properly.
- For using the Wire Tracker safely, please first read the 「 Safety Information 」 carefully in the manual.
- The manual should be kept well in case of reference.
- Keep the S/N label for after-sale service within warranty period. Product without S/N label will be charged for repair service.
- If there is any question or problem while using the Wire Tracker, or damages occurred on the product, please contact our technical Department.

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1. Safety information

- ◆ The wire tracker is intended to use in compliance with the local rules of the electrical usage and avoid to apply at the places which are inapplicable for the use of electrics such as hospital, gas station etc.
- ◆ To prevent the functional decline or failure, the product should not be sprinkled or damped.
- ◆ The exposed part of the wire tracer should not be touched by the dust and liquid.
- ◆ Don't use the wire tracer where the temperature is high.
- ◆ Please don't use this instrument to detect power lines (such as 220V power lines), otherwise it may damage the instrument or involve personal safety.
- ◆ During transportation and use, it is highly recommended to avoid the violent collision and vibration of the tester, lest damaging components and causing failure.
- ◆ The wire tracker should not be used in the environment with the flammable gas.
- ◆ Do not disassemble the instrument since no component inside can be repaired by the user. If the disassembly is necessary indeed, please contact with the technician of our company.
- ◆ The instrument should not be used under the environment with strong electromagnetic interference.

2. Feature

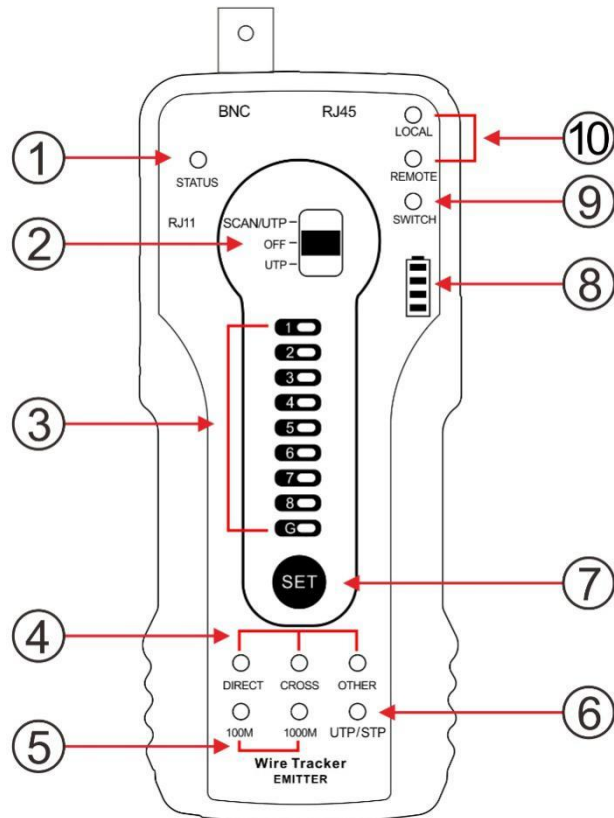
- ◆ Secondary code digital mode, decisively rejects noise and false signals, locate cables quickly and easily.
- ◆ Cable tracer and UTP cable test at the same time.
- ◆ Identify cable type:100M/1000M, straight/cross/other.
- ◆ UTP/STP/RJ45/RJ11 cable scan and continuity testing.
- ◆ Identify the status in the working telephone line: standby, ringing and off-hook
- ◆ Quickly detect the near-end, mid-end and far-end fault point of RJ45 cable plug
- ◆ UTP port support max 60V withstand voltage, the wire can be traced directly in connection with PoE switch.
- ◆ Shielded cable and shielding layer continuity test
- ◆ PD powered detection: detect whether the power output of the POE switch is normal, and detect the pins used for power supply.
- ◆ Support silent mode
- ◆ Two bright LED lights for working in the dark

3. Packing list

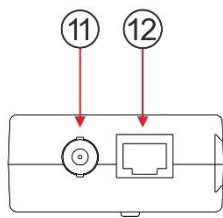
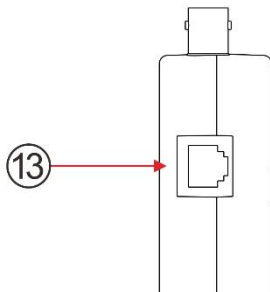
- 1) Wire tracker emitter
- 2) Wire receiver
- 3) RJ45 cable
- 4) RJ11 cable
- 5) RJ11 crocodile clip cable

4. Interface and Function Introduction

1) Emitter Interfaces and functions:



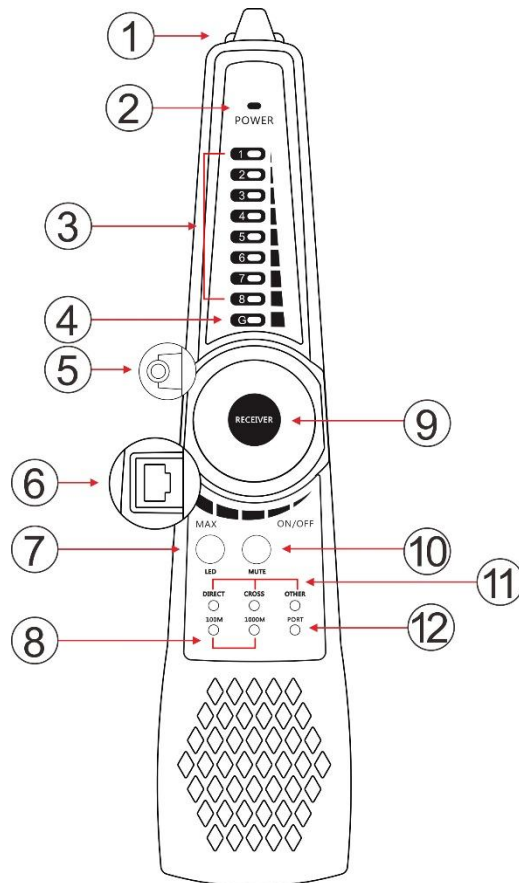
| | |
|----|---|
| 1 | Telephone status indicator |
| 2 | Functions switch: SCAN/UTP, OFF, UTP cable test |
| 3 | UTP cable sequence/ continuity indicators |
| 4 | UTP cable type indicator: straight /cross /other |
| 5 | 100M /1000M indicator |
| 6 | Cable tracer mode indicator: Green-normal mode, red-shielding mode |
| 7 | SET: Switch function shielded or unshielded in cable tracer mode and "local / remote / switch" in UTP cable test mode |
| 8 | Battery indicator |
| 9 | SWITCH continuity indicator |
| 10 | LOCAL/ Remote end continuity indicator |

| | |
|--|--|
| <p>Top interface</p>  | <p>Left interface</p>  |
| 11 BNC interface | |
| 12 UTP/ Scan port | |
| 13 RJ11 port | |

Note: Telephone status description:

Please use detection in the OFF status. The indicator light off / on / flashing correspond to telephone status standby / ringing / off-hook.

2) Cable tracer (Receiver) Interfaces and functions :



1 LED light

2 Power Indicator

3 UTP cable sequence / signal strength indicator Earphone jack

4 Shielded layer continuity indicator

5 Earphone jack

6 UTP cable test port

7 LED light switch

8 100M / 1000M indicator

9 Switch / Sensitivity knob

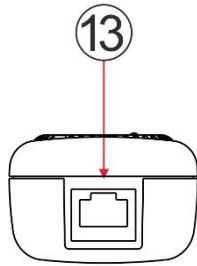
10 MUTE button (long press to silent mode, short press to port connectivity detection)

11 UTP cable type indicator: straight /cross /other

12 Port continuity detection indicator (ON indicates local end cable connectivity function, OFF indicates

cable sequence function)

Bottom interface



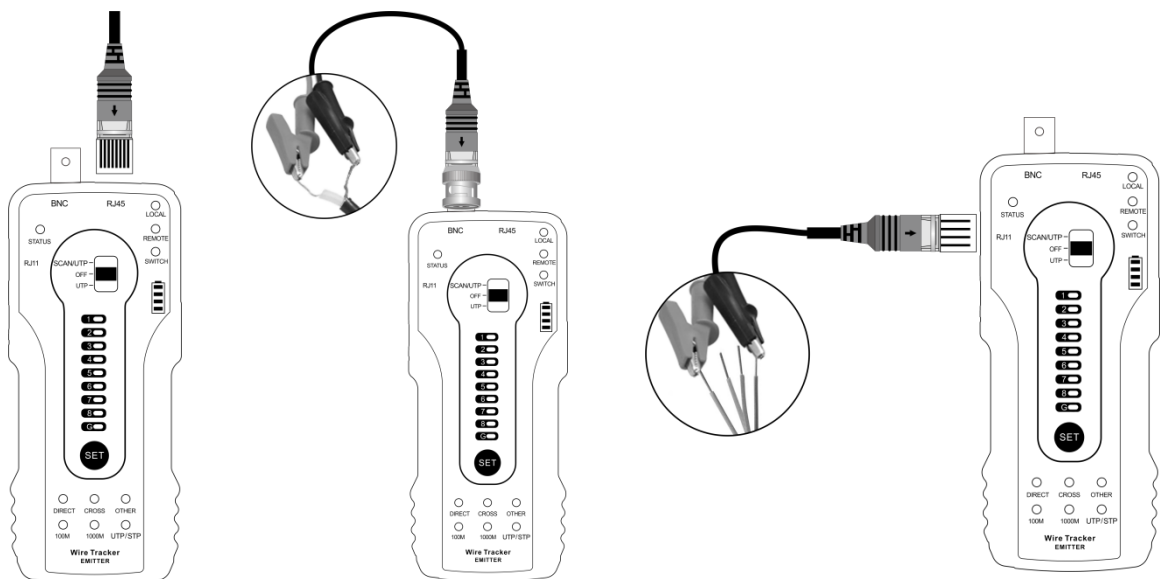
13 PD Powered test port (detect whether the power output of the PoE switch pins is normal.)

Note: Receiver port connectivity detection only supports the local end, does not support the remote end. Emitter can support the local end, middle end and remote end port detection.

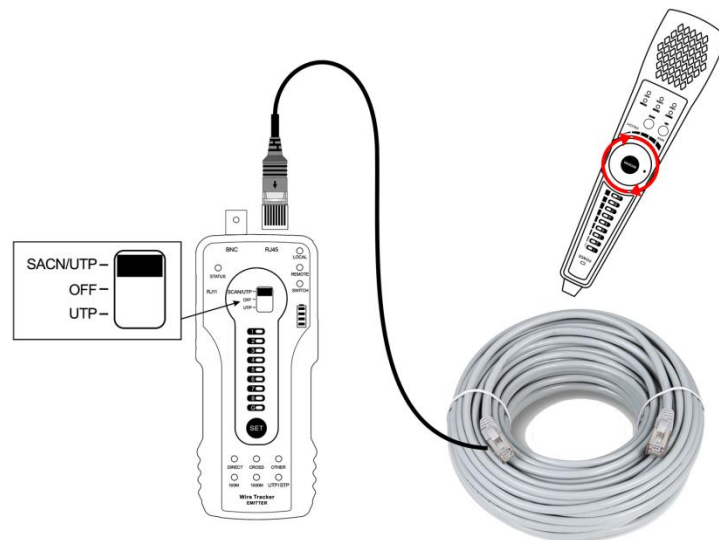
5. The instruction of product application

5.1 Cable tracer

Connect the network cable into the emitter's RJ45 port, connect BNC cable or RJ11 telephone line to the emitter's BNC or RJ11 port. If no connector cable, can use crocodile clips to clip the bare copper wire.



(1) Adjust the switch of emitter to the "Scan/UTP" mode, press "SET" key to switch to UTP/STP mode. The green light of the "UTP/STP" indicator means normal mode, while the red light is shielded mode. Turn on the wire receiver model at the same time to trace the wire.

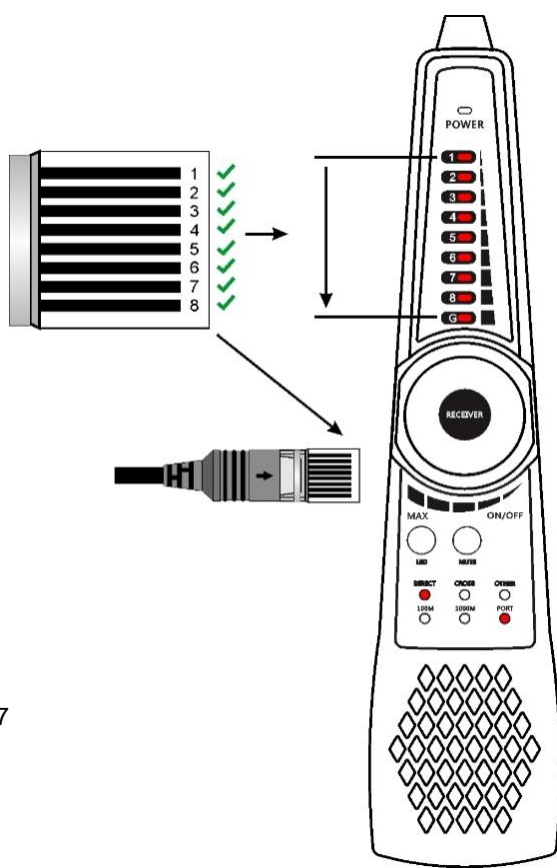


(2) Rotating the knob of receiver to adjust the sensitivity. When the cables are very close, can adjust to the small sensitivity to find the cable.

Long press the "MUTE" key for MUTE mode. In this mode, the signal strength indicator light is used to trace the wire. When received the strongest signal, the eight indicator lights are on. Press "MUTE" again to exit MUTE mode.

(3) Quickly verify the tracking result (only for RJ45 port). After found the cable, connect the network cable to wire receiver "UTP" port for pair line detection. For example, When the "Straight/Cross/Other" lights up, indicates the verification of the matching cable. The indicator also shows the type of the cable. The 1-8 and G indicators show the detection of line sequence by default, and the order in which the indicator lights up is the sequence of the line.

Port continuity detection:



Press “MUTE” button, when the indicator light of port is on, the 1-8 and G indicator lights will show the connection of the line of the RJ45 connector or within 1 meter from RJ45 connector. As shown on the right, If the light is on, it means it is connected and vice versa.

(4) The UTP port of emitter and receiver can max 60V withstand voltage, the wire can be traced directly in connection with PoE switch.

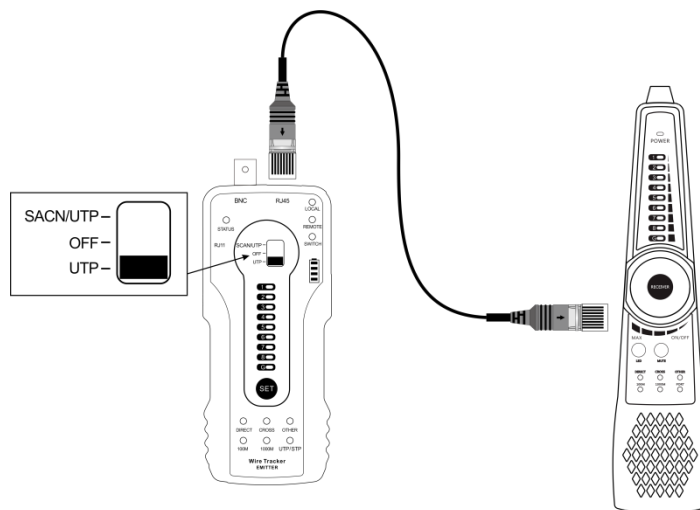
5.2 UTP detection

5.2.1 Sequence and pair line continuity detection

Step 1: Connect the network cable or telephone cable to the RJ45 port of wire tracer emitter, and connect the other end to the UTP interface of the wire receiver. (The wire receiver needs to be turned on)

Step 2: Switch the wire tacker emitter to UTP mode, the 1-8 and G indicators will indicate the sequence of cable, 100M and 1000M indicator will indicate whether the cable is 100M or 1000M network, the cable receiver also can see the sequence.

Can quickly determine the cable whether is normal through wire tracer emitter or wire receiver, if indicate Direct/Cross, the cable is normal. After the 8 indicators flashed, the wire receiver will beep to indicate the type of network cable. One sound is a straight cable, two sounds are a cross cable, and three sounds are another or wrong cable.



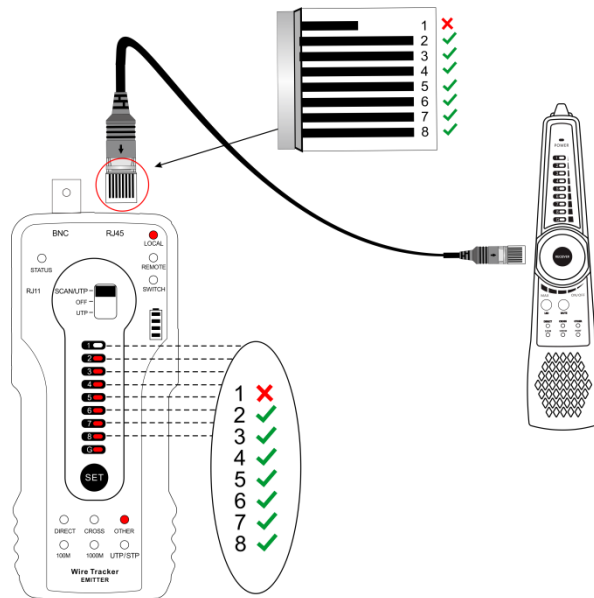
5.2.2 Network cable port continuity detection

In the UTP mode, press “SET” key to switch “LOCAL” mode.

Local port continuity detection: when the “LOCAL” indicator is on, connect the other end of network cable to wire

receiver “UTP” port or disconnect the UTP port, the 1-8 and G indicators indicate the continuity status of network cable port or within 1 meter of network port which connected wire tracker emitter.

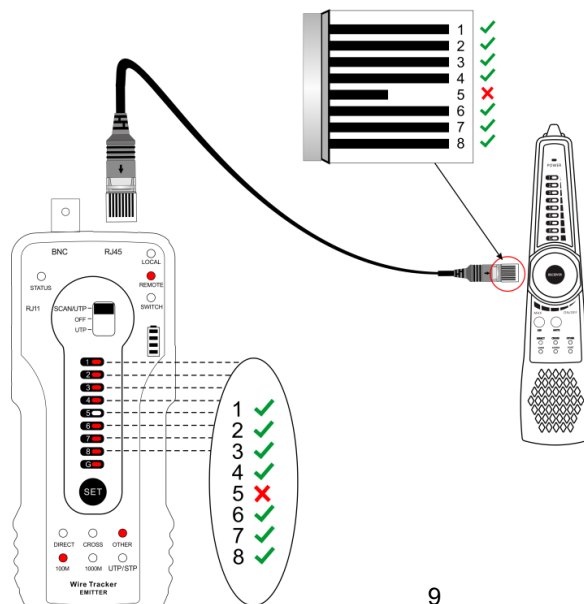
As shown in the picture below, the 1st pins of network cable port on the side of wire tracer emitter is disconnected, the 1 indicator is off of 1-8 indicators, it means 1pin of port is disconnected.



Under UTP mode, press “SET” key to switch to the "REMOTE" function

Remote port continuity detection: The “REMOTE” indicator is on, connect the other end of the cable to the UTP port of cable tracer (Receiver).

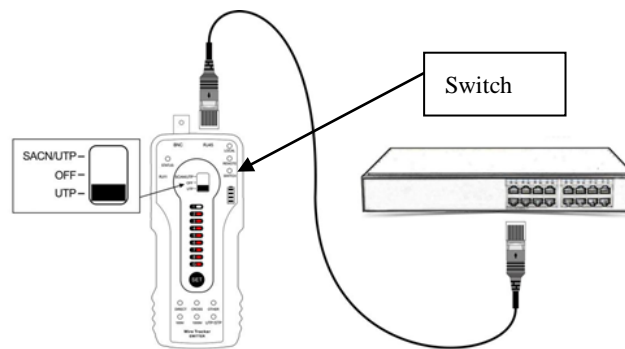
1-8, G indicator indicates the continuity of the cable port which connected to the Remote end (Receiver) or the cable within 1 meter from the port. As shown in the picture below, the 5th pin of the cable port on the side of the cable tracer (receiver) is disconnected, and the 5 indicator in the 1-8 indicators is off, indicating that the 5th pin of the port is disconnected and the other pins are connected.



The middle of cable (mid-end) continuity detection: If the cable sequence detects that the pins of the cable are disconnected, and the local / remote pins are detected to be connected, indicating that the break point of the cable is in the middle position away from the ports on both sides.

5.2.3 Continuity detection in the state of connected switches

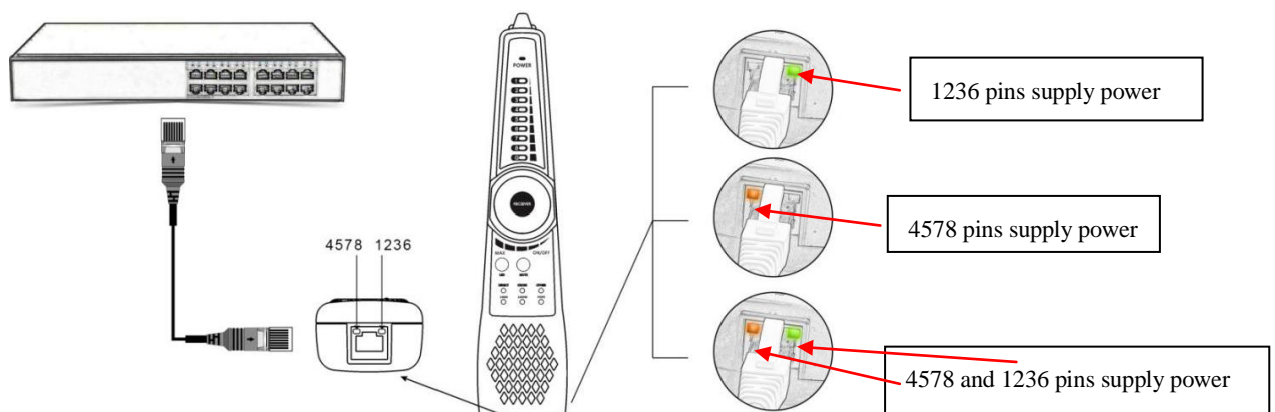
Under UTP mode, press “SET” key to switch to the "SWITCH" function. The “SWITCH” indicator is on, when connected to a switch, 1-8, G indicator indicates the continuity of the cable, lights on means connected, lights off means disconnected.



5.3 PD powered detected

PoE switch or PSE power supply device connected to the “PD” port of the cable tracer, if the indicator light is on, it means PoE voltage output working normal. There are 4 indicator lights of the “PD” port, when testing the pins used of PoE switch for power supply, if 1236 indicator light is ON, it means PoE switch supply power through Pin 1236. if 4578 indicator light is ON, it means PoE switch supply power through pins 4578. if 1236 and 4578 indicator lights are ON, it means device power supply through pins 1236 and 4578.

Application: checking the pins used of PoE switch or other device for power supply, to avoid cause cannot supply power or camera and other device damaged.



5.4 Other features

Line DC level and positive / negative polarity testing

Turn off the emitter, the red and black wire clip of RJ11 adapter cable be connected to telephone line

(Note: If the telephone cable with well RJ45 connectors, directly connect telephone cable to RJ11 port)

If the red indicator is on, it means the red wire clip is positive, and the black clip is negative; if the green indicator is on, it means the black wire clip is positive, and the red wire clip is negative. the level is higher, the indicator light is brighter, the level is lower, the indicator light is darker.

6. Specifications

| Item | Wire Tracker |
|--|--|
| Emit signal | Digital signal (rejects noise and false signals) |
| Cable type | RJ45 Twisted pair, RJ11 telephone line, BNC cable etc. |
| UTP cable test | The digital “1-8” for cable sequence shielded cable and shielding layer continuity indicator, check cable type indicator: straight/cross/other, 100M/1000M Network cable test, and near-end, mid-end, far-end continuity testing |
| Continuity test of RJ45 cable connectors | check wire continuity of both RJ45 cable connectors |
| PD (powered) test | PoE switch power supplying status test and check the pins used for power supply. |
| LED lamp | Short press On /Off Led Light |
| Silent mode | Long press key “Mute” to switch silent mode, find cable through indicator |
| Audio output | Support external audio output |

| | |
|-----------------------|-----------------------------|
| Power supply | |
| External power supply | Two AA battery |
| General | |
| Working Temperature | -10°C---+50°C |
| Working Humidity | 30%-90% |
| Dimension | |
| Emitter Dimension | 152mm x 62mm x 27mm /0.12KG |
| Receiver Dimension | 218mm x 48mm x 32mm /0.1KG |

The data above is only for reference and any change of them will not be informed in advance. For more detailed technical inquiries, please feel free to contact us.