UNI-T UT682 Wire Tracker Instruction Manual

Contents

UNI-T UT682 Wire Tracker

Safety Tips

The manual includes the attention and safety rules that must be followed for the safety of the instrument. Please read carefully before using it and understand its contents.

Safety Considerations:

a: Do not put the instrument in dusty, high-temperature, or humid environments.

b: The transmitter and receiver of the instrument are powered by 9V layer-built battery. Do not use other battery specifications to power the instrument.

c: Please take out the battery when the instrument is not used for a long time.

d: Do not use this instrument on live circuits over 37VAC or 52VDC.

e: Do not use this instrument in thunderstorm conditions.

CE: Conforms to the standard of EU (European Union)

Features

This instrument is a wire tracker, which consists of the transmitter and receiver. Its functions include telephone line tracking, network line tracking, power cable line tracking, network line check, etc. With features such as quick and accurate testing, it is an ideal tool for maintenance personnel working with communication lines, integrated wiring lines, and other low-voltage systems.
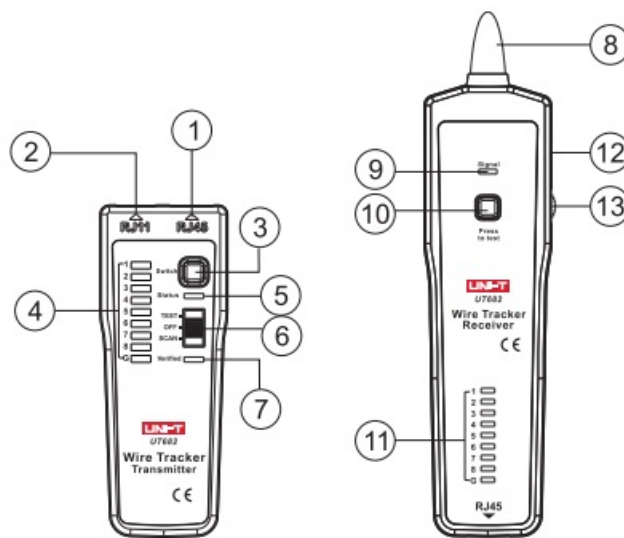
Figure 1. Transmitter and Receiver

RJ45 Socket	2	RJ11 Socket
Function button	4	Line sequence indicator
Line tracking indicator	6	Functional select switch
Line alignment indicator	8	Signal probe
Signal Indicator light	10	Find button
Line sequence indicator	12	Headset jack
Volume knob		

Packing List

Transmitter————1
Receiver————1
9V Battery————2
RJ11 Adapter wiring————1
RJ11 Alligator clip adapter wiring————1
RJ-45 adapter wiring————1
User manual————1
Cloth Bag————12

4. Telephone Line Tracking Function

a: Connect the telephone line head into the transmitter's RJ11 interface;
b: Press the transmitter functional select switch to the 'TEST" position, Line tracking indicator "Status" will flash, which indicates that the transmitter works properly;
c: Hold down the receiver "Press to test" button and look for the target cable with the receiver probe.
d: During the testing, light press the "Switch" button to switch between single and double audio test patterns.

Network Line Tracking Function

a: The network line with a crystal head into the transmitter RJ45 interface;

b: Press the transmitter functional select switch to the TEST" position, Line tracking indicator "Status" will flash, which indicates that the transmitter works properly:

c: Hold down the receiver "Press to test" button and look for the target cable with the receiver probe.

d: During the testing, light press the "Switch" button to switch between single and double audio test patterns.
Note: When the product is used for tracing wires in server rooms, please remove the crystal headpiece and trace wires one by one.

Power Cable Line Tracking Function (Power the cable must not be powered)
a: Connecting the transmitter with the metal cable using an alligator clip adapter wiring
b: Adjust the transmitter functional select switch to the TEST" position, line tracking indicator "Status" will flash, which indicates that the transmitter works properly;
c: Hold down the receiver "Press to test" button and look for the target cable with the receiver probe.
d: During the testing, light press the "Switch button to switch between single and double audio test patterns.
Telephone Line Tracking, Network Line Tracking, Power Cable Line Tracking Diagram

Figure 2

Network Line Check Function

a: Connect both ends of the network cable to the transmitter and receiver
b: Press the transmitter functional select switch to the "SCAN" position, indicator "Verified" will flash, which indicates that the transmitter works properly:
c: Determine the characteristics of the path, short circuit, open circuit, and cross circuit by 18 (2*9) line sequence indicators.
d: During testing, light press the "Switch" button to switch between high and slow speed.
e: The diagram below shows the normal connection, short circuit, open circuit, and cross circuit wiring (without shielding wire)
Normal:
The LED (1-8) of the transmitter and the corresponding receiver LEDs are on
Short circuit:
Transmitter LEDs are on, corresponding receiver LEDs are on and non-corresponding LEDs are on as well, but dimmed (Please refer to the diagram below) Broken circuit: Neither the transmitter nor the receiver LEDs are on.
Cross circuit:
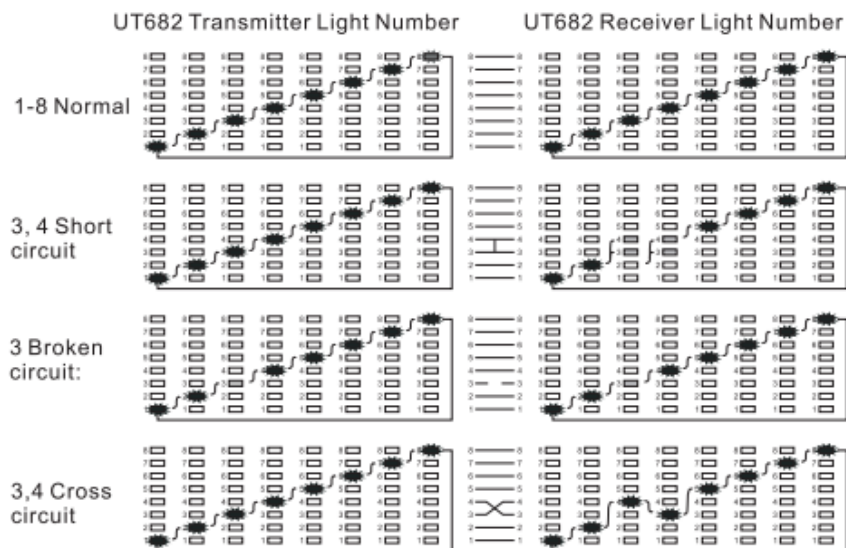The lit LED position of the transmitter and receiver are reversed,

Figure 3: Normal, short circuit, broken circuit, cross circuit

Other Function Tests & Product

Specifications

a: Open Circuit or Short Circuit Test Function

Shift the transmitter functional select switch to the "SCAN" position and long press transmitter "Switch " button for 3 seconds. At this time, the Verified" indicators will change from flashing to a solid light, connect the alligator clip adapter wiring to the transmiter RJ11 interface. Clamp the two ends of the wire to be tested with the alligator clip. If it is short circuit, the first indicator of transmitter will light up, the resistance of the circuit can be expressed by the light and shade level. The brighter indicator, the smaller resistance, the darker indicator, the bigger resistance.

b: DC Voltage Testing Function

Shift the transmitter functional select switch to the TEST position and long press transmitter "Switch " button for 3 seconds. At this time, the 'Status" light will be off and the "Verified" light will flash. Connect the alligator clip adapter wiring to the transmitter RJ11 interface. Clamp the two ends of the wire to be tested with the alligator clip. If the "Status" turns green, the clamped red clip is positive; if the "Status" turns red, the clamped red clip is negative DC voltage test range: t3.3V-+52V. For safety, when testing DC voltage10V (absolute value), each measurement should be perfomed in less than 2 minutes, the rest interval time should be more than 5 minutes for instrument to cool off.

c: Low Battery Indication Function

Shift the transmitter functional select switch to the TEST position, when the battery voltage is about less than 6V, "Status "light and Verified light will flash at the same time, the instrument cannot be used normally until the battery is replaced.

d: Volume Control Function

During line tracking, adjust the volume knob on the receiver to adjust the sound.

e: Target Audience

This instrument is suitable for internet cafe, telecommunication companies, corporate network administrators, etc.

f: Product Specifications

Product name	Wire Tracker
Power specifications	9V Battery
Signal transmission form	Multi-frequency pulse
Short circuit, open circuit test	
Telephone line polarity Instructions	
Audio signal test range	? 1000 m
Video line distance	? 100 m
Low battery Indication (Transmitter)	

g: Headset Function
To avoid outside interference, wear a headset when testing in noisy environments.
Note 1:
Please turn the receiver down to the minimum and plug-in headset,
slowly tug the volume knob to the appropriate slot, then begin testing.
Note 2:
The headset needs to be set up by the user, this product is not equipped
with a headset by default.
h: Other Specifications
Work environment: Woking temperature: 0°C-40°C
Storage temperature: -10°C-50'C
Working humidity: 20%-75%RH
Storage humidity: 10%-90% RH
Altitude: <2000m
Exterior size: Transmitter: 125mmx48mmx28mm
Receiver: 195mmx48mmx30mm
Weight: Transmitter: about 125g
Receiver: about 153g
:Application standard: EN61326-1:2013, EN61326-2-2:2013

Battery Replacement

a: Firstly, shift the function select switch to the "OFF" position, and then remove the test leads from the instrument.
(Only for the transmitter; for the receiver, directly remove the battery cover, and reinstall the battery)
b: Remove the battery cover, and replace the 9V battery.
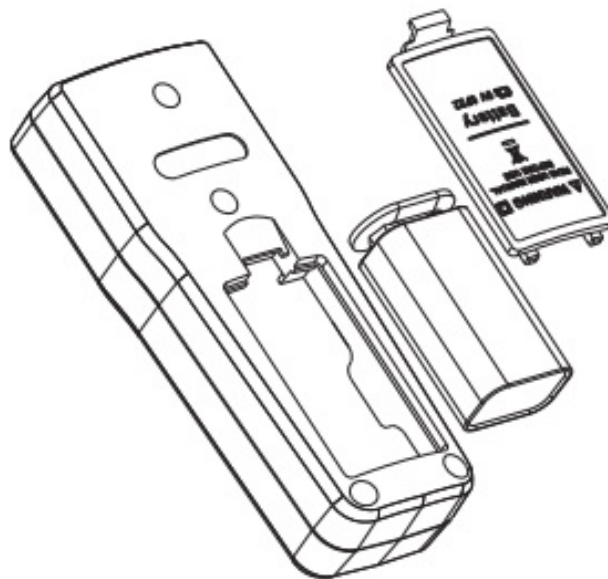**C:** After replacement, close the battery cover

Figure 4 UT682 Transmitter

Maintenance and Repair

a: Case Cleaning
When cleaning the case, gently wipe with a dry towel, please keep the instrument dry. Do not use alcohol or any corrosive agent.
b: Repair
If the following questions appear, please contact the service center of the company's marketing department or agency
A. Instrument casing damage or device damage

B. LED indication is not normal
C. Button malfunction

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Documents / Resources

UNI-T UT682 Wire Tracker [pdf] Instruction Manual
UT682, Wire Tracker, UT682 Wire Tracker, Tracker

References

- **User Manual**