UT683KIT
Wire Tracker User Manual

Preface

Thank you for purchasing this brand new product. In order to use this product safely and correctly, please read this manual thoroughly, especially the safety notes.

After reading this manual, it is recommended to keep the manual at an easily accessible place, preferably close to the device, for future reference.

Limited Warranty and Liability

Uni-Trend guarantees that the product is free from any defect in material and workmanship within one year from the purchase date. This warranty does not apply to damage caused by accident, negligence, misuse, modification, contamination or mishandling. The dealer shall not be entitled to give any other warranty on behalf of Uni-Trend. If you need warranty service within the warranty period, please contact your seller directly.

Uni-Trend will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by using this device.

I. Safety Information

This manual includes precautions and safety regulations for safe use of the device. Please read and understand the content carefully before use.

1. Do not use or store this device in dusty, hot or wet environments.
2. Both the transmitter and receiver of this device are charged with a DC 5V power adapter, and the charging time is about 2 hours.
3. Do not use this device on live circuits exceeding AC 60V or DC 70V.
4. Do not use this device during thunderstorms.

The meaning of the symbol associated with this device:
    Complies with European Union standards

II. Structure

The UT683KIT is an intelligent wire tracker for noiseless wire tracking. The RJ45 jack of the transmitter can enable tracking and flashing functions simultaneously to help you quickly and accurately locate the target cable. The RJ11 jack can automatically identify open circuit, short circuit, polarity, ringing signal, and other states to help you quickly distinguish cable faults. It is an ideal tool for integrated wiring and installation and maintenance of weak electricity systems.
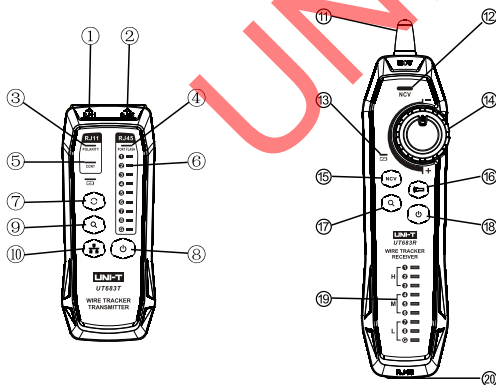
1	RJ11 jack	2	RJ45 jack
3	POLARITY indicator	4	PORT FLASH light
5	CONT indicator	6	Line sequence indicators
7	Switch button	8	Power button
9	Tracking button	10	Validating indicator
11	Antenna	12	NCV indicator
13	Charging state indicator	14	Sensitivity knob
15	NCV button	16	Flashlight button
17	Tracking button	18	Power button
19	Line sequence indicators	20	RJ45 jack

III. Packing List

Item	Qty	Item	Qty
Transmitter	1	Receiver	1
Micro USB charging cable	1	RJ11 adapter cable	1
RJ11 alligator clip adapter cable	1	RJ45 adapter cable	1
User manual	1	Pouch	1

IV. Network Line Tracking

1. Insert the RJ45 plug of the network line into the RJ45 jack of the transmitter.
2. Press the $\mathcal{Q}$ button on the transmitter to enable the tracking function. In tracking mode, press the $\circlearrowright$ button to enable the flashing function simultaneously. If the target network line is connected to an active switch, router or network card, the PORT FLASH light of the transmitter will flash synchronously with the network port indicator.
3. Press the $\mathcal{Q}$ button on the receiver to start tracking. When beeps are heard, the target network line is found.

V. Telephone Line Tracking

1. Insert the RJ11 plug of the telephone line into the RJ11 jack of the transmitter.
2. Press the $\mathcal{Q}$ button on the transmitter to enable the tracking function.
4. Press the $\mathcal{Q}$ button on the receiver to start tracking. When beeps are heard, the target telephone line is found.

VI. Power Cable Tracking

1. Use the RJ11 alligator clip adapter cable to connect the transmitter and metal cable being tracked.
2. Press the $\mathcal{Q}$ button on the transmitter to enable the tracking function.
3. Press the $\mathcal{Q}$ button on the receiver to start tracking. When beeps are heard, the target cable is found.
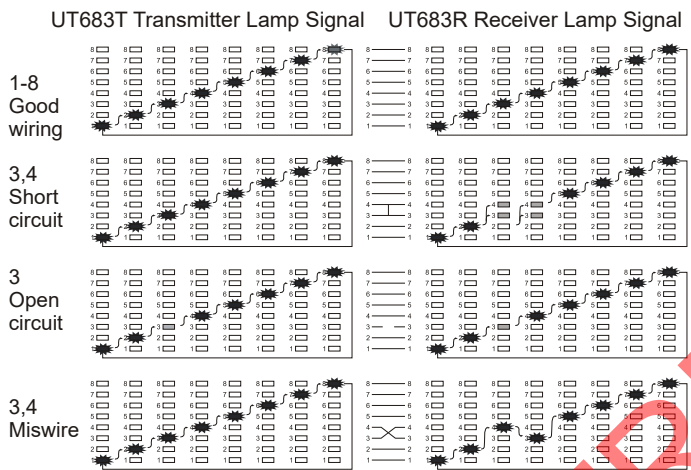
VII. Demonstration of Tracking Operation
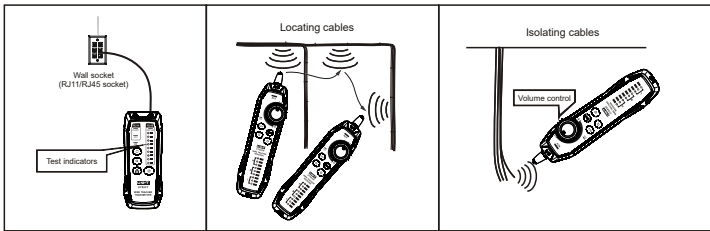
If the target cable are intermixed with massive cables, turn the sensitivity knob to adjust the sensitivity. Louder sound means stronger signal and closer to the target cable.

VIII. RJ45 Cable Validating

1. Insert the RJ45 plugs of the cable under test into the RJ45 jacks of the transmitter and receiver.
2. Press the ⊹ button, the ↻ button flashes, and the validating function is enabled.
3. Judge the state of the cable (good wiring, short circuit, open circuit, miswire) according to the line sequence indicators on the transmitter and receiver.
4. During test, press the ↻ button to switch between fast and slow mode.
5. The diagram below shows the wiring of different states (good wiring, short circuit, open circuit, miswire) for unshielded cables.
- Good wiring: LEDs (1~8) on the transmitter and receiver light up in turn.
- Short circuit: No.3 and No.4 LEDs on the receiver light up simultaneously with dim brightness.
- Open circuit: No.3 LED of the transmitter and receiver do not light up.
- Miswire: LEDs of the transmitter and receiver do not light up correspondingly.

UT683T Transmitter Lamp Signal   UT683R Receiver Lamp Signal

1-8 Good wiring

3,4 Short circuit

3 Open circuit

3,4 Miswire

IX. RJ11 Cable Validating

1. Insert the RJ11 plug of the cable under test into the RJ11 jack of the transmitter, or use the RJ11 alligator clip adapter cable to connect the transmitter and metal cable under test.
2. Press the ⊹ button, the ↻ button flashes, and the validating function is enabled.
3. The CONT indicator lights up green to indicate open circuit of the cable, and red to indicate short circuit of the cable. The POLARITY indicator lights up green to indicate that the cable has a positive polarity voltage, red to indicate that the cable has a reverse polarity voltage, and green and red flash alternately to indicate a ringing signal or AC power on the cable.

X. Other Functions

1. NCV Function
Press the NCV button to enable the NCV function. When the target cable or socket has an AC voltage over 40V, the receiver will beep and the NCV indicator will flash synchronously.

2. Flashlight
Press the 🔦 button to turn on/off the flashlight of the receiver.

3. Low Battery Indication
1) When the battery voltage ≤3.4V, the power button will flash.
2) When the battery voltage ≤3.0V, the device will automatically shut down and need to be charged.

4. Earphones
In noisy environments, users can wear earphones during operation (earphones need to be prepared by users). Volume can be adjusted by turning the sensitivity knob.

XI. Specifications

1. Power supply: 3.7V rechargeable batteries
2. Signal mode: modulation signal (125kHz carrier wave)
3. Tracking distance: ≥3000m (disconnected mode)
4. Tracking distance of switch: ≥100m (connected mode)
5. Operating temperature: -10°C~50°C
6. Storage temperature: -20°C~60°C
7. Operating humidity: 20~75% RH (N.C)
8. Storage humidity: 10%~90% RH (N.C)
9. Operating altitude: ≤2000m
10. Dimensions
    Transmitter: 130mm×51mm×28mm
    Receiver: 197mm×48mm×34mm
11. Weight
    Transmitter: about 95g
    Receiver: about 127g
12. Applicable standards
    EN61326-1:2013   EN61326-2-2:2013
    EN61000-3-2:2014   EN61000-3-3:2013

XII. Maintenance and Repair

1. Maintenance
Clean the casing with a dry cloth. Do not use abrasives or solvents!

2. Repair
Please contact your seller directly if the following anomalies occur.
1) Damage of casing or parts
2) Abnormal LED indication
3) Button failure