

# UT681L/UT681C

## Cable Tester User Manual

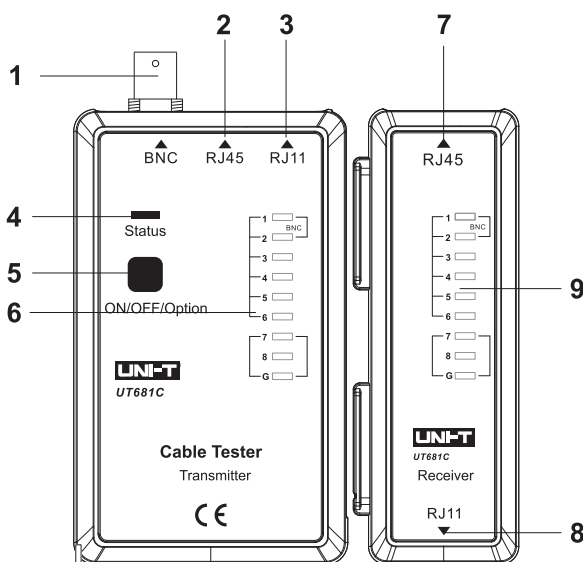
**⚠ Note: Before using this instrument, please read and understand the instructions**

- The instrument can not be used to test the network cable, telephone cable that is in working state . otherwise it will damage the instrument and equipment being connected by the cable
- When low voltage indication appears (LED lights for 5 seconds when Power On), please replace the 9V battery (Note: Power input to the device cannot be greater than 12VDC).
- If there is no complete pressure for RJ45 crystal head copper , it can not be used for the testing , otherwise it will damage the instrument port.
- If do not use this instrument for a long time, please take out the battery to prevent the leakage of liquid to protect the instrument.
- The meaning of the symbols of this instrument is as follow CE: Meets the European Community (European Union) standard
- Application standards: EN61326-1: 2013; EN61326-2-2:2013

### I. Instrument function introduction

UT681L/C are professional testers used to test a variety of cable connectors to determine which line is short, open, or switched.

1. UT681 L can be used to test RJ45, RJ 11 / 12,
2. UT681 C can be used to test RJ45, RJ 11/12, and BNC
3. ON/OFF/Option Key: At Power OFF state, short press the ON/OFF/Option Key for 0.5 seconds to turn on device, the indicator will flash immediately. Long press ON/OFF/Option Key for 2 seconds to shut down device.  
At the Power ON state, short press the key to switch between fast and low speed mode. The state indicator flashing speed is used to identify the test mode chosen. (High speed flashing means high-speed mode, Low speed flashing means the low-speed mode)
4. After Power On, if the state indicator lights up for 5 seconds and then turns off, it indicates that the battery is low, please replace the battery as soon as possible.
5. Auto shut down function: when no operation within 10 minutes, the instrument will automatically shut down.



1	Transmitter BNC interface(UT681C)
2	Transmitter RJ45 interface
3	Transmitter RJ11 interface
4	Transmitter state indicator
5	Transmitter ON/OFF/Option key
6	Ransmitter alignment indicator
7	Receiver RJ45 interface
8	Receiver RJ11 interface
9	Receiver alignment indicator

### II. Test method of the instrument

#### A) Use UT681L/UT681C to test RJ45 cable:

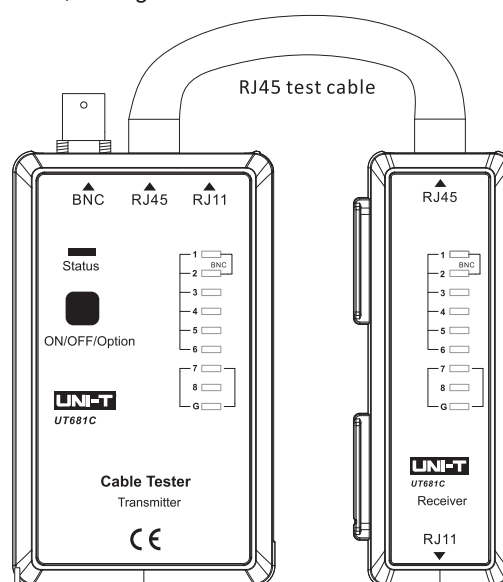
Firstly install the 9V battery, short press ON/OFF/Option key for 0.5 seconds to start up, The instrument enters the Fast - speed Test mode by default (short press can switch to Low - speed Test mode) . The crystal heads of the RJ45 cable to be tested are respectively inserted into the RJ45 ends of the transmitter and the receiver:

1. The RJ45 cable is in good condition.

The indicators from 1 to 8 ( to G , if the cable is STP) on the right side of the transmitter light one by one orderly . The indicators of the receiver will also light in the same mode . Shown as follows :  
Transmitter : 1->2->3->4->5->6->7->8->G cycling  
Receiver: 1->2->3->4->5->6->7->8->G cycling

2. If the RJ45 cable is NG :

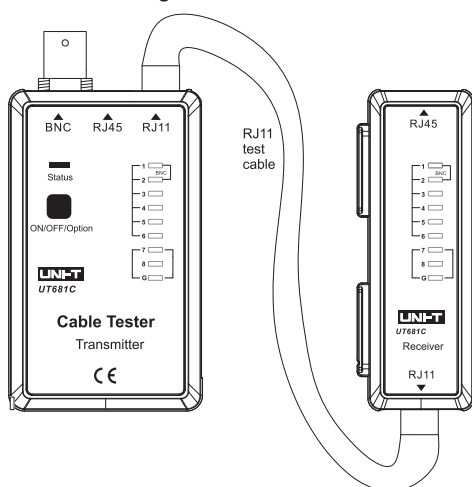
- a. if there is an open circuit to be detected , the corresponding indicator of the transmitter and receiver does not light .
  - b. if there is less than 2 circuits of good conduction and connection , all indicators of the transmitter and receiver will not light.
  - c. When the cable disorders , the display of the transmitter is in order, but the receiver is not in order to display . For an example such as (3, 4 line disorder)  
Transmitter: 1->2->3->4->5->6->7->8->G cycling  
Receiver: 1->2->4->3->5->6->7->8->G cycling
  - d. If there are two or more short circuits to be detected, the display of the transmitter is in order and the light of corresponding indicator will become more brighter , but the corresponding indicator of the receiver doesn't light .
3. After finishing the test , long press the ON/OFF/Option key to shut down , and light of the indicators turns off.



### B) Use UT681L/UT681C to test RJ11/RJ12 cable :

Short press ON/OFF/Option key for 0.5 seconds to start up, The instrument enters the Fast - speed Test mode by default (short press can switch to Low - speed Test mode) . The crystal heads of the RJ11 or RJ12 to be tested are respectively inserted into the RJ11 ends of the transmitter and the receiver:

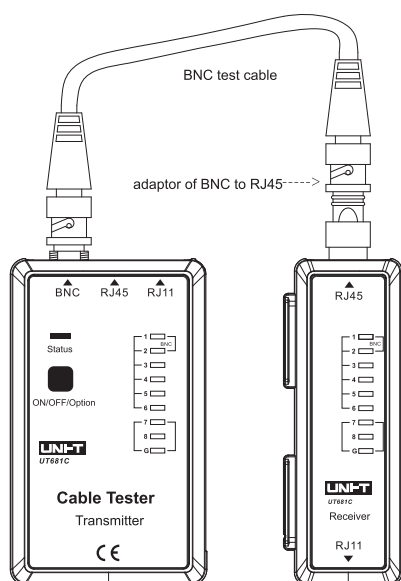
- 1.The RJ11 cable is in good condition ,  
The indicators from 2 to 5 ( 1 to 6, if is RJ12 cable) of the transmitter and receiver light one by one orderly and circularly .
- 2.If the case of short circuit, open circuit, out of order, wrong order is detected , please refer to the method of disposition on RJ45 faults .
- 3.After finishing the test , long press the ON/OFF/Option key to shut down , and light of the indicators turns off .



### C) Use UT681L/UT681C to test BNC cable:

Short press ON/OFF/Option key for 0.5 seconds to start up, Insert the adaptor of BNC to RJ45 into the receiver's RJ45 port after having made BNC joined with the adaptor . The other end of the BNC accesses the transmitter BNC interface .

- 1.If the BNC cable is OK , The indicators from 1 to 2 of the transmitter and receiver light one by one orderly and circularly .
- 2.If the case of short circuit, open circuit, out of order, wrong order is detected , please refer to the method of disposition on RJ45 faults .
- 3.After finishing the test , long press the ON/OFF/Option key to shut down , and light of the indicators turns off.



### III. Product specification

- Working environment: working temperature: 0~40℃
- Storage temperature: -10~50℃
- Working humidity: 20~80% RH
- Storage humidity: 10~90% RH
- Altitude: less than 2000 meters
- Dimensions: Transmitter: 102 mm x 62 mm x 29mm  
Receiver: 102 mm x 37 mm x 28mm
- Product weight: Transmitter: about 87g (bare metal):  
Receiver: about 51g (bare metal)

### IV. Packing list

1. Transmitter -----1PCS
2. Receiver -----1 PCS
3. 9V Battery -----1 PCS
4. Manual Book -----1 PCS
5. BNC to RJ45 adaptor -----1 PCS(UT681C)

### V. Replace Battery

At the Power Off state :

1. Remove the battery cover and the old battery.
2. Install the new battery with correct polarity.
3. Close the battery cover and tighten with screws.

### VI. Maintenance and Clean.

Clean the instrument with a dry soft cloth to avoid moisture. Do not use the agents or other chemicals to clean the unit . This product has passed the strict quality inspection before leaving the factory. If found damages not caused by misuse or vandalism in the course of using , Please contact after-sale service, Do not disassemble to repair it privately .

**UNI-T**  
UNI-TREND TECHNOLOGY (CHINA) CO., LTD.

No6, Gong Ye Bei 1st Road,  
Songsan Lake National High-Tech Industrial  
Development Zone, Dongguan City,  
Guangdong Province, China  
Tel: (86-769) 8572 3888  
<http://www.uni-trend.com>