Инструкция по эксплуатации кабель-тестера VICTOR 668

# Cable tracker

# **Operation Manual**

Thank you for using our product.

In order to learn about the correct operating method, functions and inspection and maintenance essentials of the product and make the product rugged and durable, please read the manual carefully before using the product.

Warning: Incorrect contact with electrical appliances may result in serious injuries or even death because of electric shocks. Thus, you are expected to operate in strict line with the manual to avoid such accidents.

- 1. Please read the whole manual carefully and operate the product in strict line with it, otherwise the protection function designed by the factory will fail or be impaired.
- 2. If the product has any damage such as cracking of its shell or falling of its battery cover or the shell,

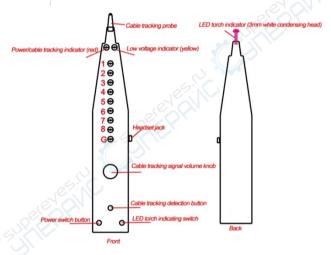
do not use it

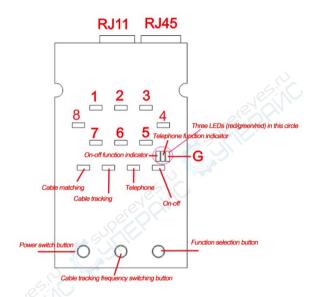
- 3. Do not use the product in electric storms, wet weather or thunderstorm weather.
- 4. Do not detect high-voltage cable lines (such as 220V power supply lines) with the product.
- Do not use the product in a place with any combustible gas or much dust or vapor.
- Keep in mind that safety is the most important thing: Voltages larger than 30VAC or 60VDC highly tend to result in electric shocks.
- Use appropriate personal protection equipment such as safety goggles, mask, insulating gloves, insulating shoes and insulating rubber mat.
- In hot-line work, do not ground by yourself; connect the ground wire and the null line first when using a crocodile clip test line or an adapter jumper.

#### I. Product overview

The handheld multifunctional cable tracker is widely used in networks, telecommunication, broadcasting and TV, security protection, electric power, etc. It applies to detect cable such as network cables, telephone cables

and metallic cables and connectors such as RJ11 connectors and R45 connectors. It is a necessary detection device for the persons taking work in fields including networks, telecommunication, broadcasting and TV, security protection, electric power, etc.





# Safety instruction



Please read the manual carefully to avoid electric shocks, burns and other injuries.

#### II. Technical indexes and specification

Transmission signal distance: < 200m

Low voltage indication: Automatic low battery detection; on status of the low voltage indicator when the battery voltage is lower than the operating voltage

Sampling frequency: 2.5 s/time

Power source: 9V batteries, 006P

Dimensions: 140 mm  $\times$  66 mm  $\times$  28 mm; 265 mm  $\times$  50

 $mm \times 33 mm$ 

Product weight: approximate 280 g

Total weight: approximate 460 g

Standard accessories: a quality certificate, an operation manual, two 9V batteries, a RJ45 cable, a RJ11 cable, a pair of crocodile clip for RJ11 connector, a headset and a bag for portability

Operating temperature:  $0 \sim 4$ °C ( $\leq 80$ %RH)

Storage temperature: -10 ~ 5°C (≤95%RH)

III. Functions

- □ Network cable matching (RJ45)
- □ Telephone cable tracking (RJ11)
- □ Network cable tracking (RJ45)
- □ Power cable tracking (RJ11)
- □ Value and polarity of DC level
- □ Connectivity status and impedance of cable
- □ Switching between two frequencies during cable tracking

IV. Features of functions

### Cable tracking

The product can find out target cables among many cables including telephone cables, network cables and other metallic cables quickly and accurately via RJ11 jacks and RJ45 jacks directly. The product is particularly designed with the function of cable tracking when Ethernet switches, routers and PC terminals are in an on status.

# Cable matching

It can check the sequence, short or open circuit, correctness, reverse connection and crossing of each network cable. This function is visualized and

convenient and can replace a network tester.

The product can be easily used in dim places because of an LED lamp.

The product is provided with a headset for the sake of easy use in noisy places.

The product can prompt an undervoltage status of the batteries.

V. Operation instructions for functions

## 1. Cable tracking

The product can track telephone cables, network cables and other metallic cables via RJ11 jacks and RJ45 jacks directly. It can realize cable tracking when Ethernet switches, routers and PC terminals are in an on status. However, it should never be used for detecting live cables, particularly high-voltage cables.

# Operating method

 Press the power switch button of the transmitter, select the cable tracking function through the function selection button (the cable tracking LED indicator will be lit) and connect the target network

- cable or telephone cable to the corresponding jack (such as RJ11 or RJ45) of the transmitter or connect a target metallic cable to the RJ11 jack via the standard accessory crocodile for RJ11 connector.
- 2) Hold the receiver and press the cable tracking start button. When the target cable is being detected, the indicator (red) at top of the receiver will detect at the other end of the target cable (such as in the space close to the cables of a telephone distribution cabinet, a junction box, a concentrator or a switch) and compare sounds of the receiver. The cable with the loudest sound when the probe is reaching it will be the cable to be tracked.

During detection, the transmission signal frequency switching button can be pressed to switch to another transmission signal frequency.

During detection, the volume can be adjusted through the volume adjustment knob on the receiver. In a noisy place, the headset can be inserted into the headset jack to be used.

# 2. Cable matching

The product can check the sequence, short or open circuit, correctness, reverse connection and crossing of each network cable. It can realize cable tracking when Ethernet switches, routers and PC terminals are in an on status. However, it should never be used for detecting live cables, particularly high-voltage cables.

#### Operating method

- 1) Press the power switch button of the transmitter, select the cable matching function through the function selection button (the cable matching LED indicator will be lit) and connect the target network cable to the RJ45 jack of the transmitter and the RJ45 jack of the receiver. The transmitter will track cables from 1 to 8 and G and the receiver will track cables following the same sequence.
- 3. Telephone or DC level and polarity
- 1) Judge whether a telephone cable is normal or not;
- a) Press the power switch button of the transmitter and select the telephone function through the function selection button (the telephone function LED indicator will be lit);

- b) Insert a local call telephone cable connector into the RJ11 jack of the transmitter. If the 'Telephone' function LED indicator is lit, it suggests that the telephone cable is normal, otherwise it suggests that the telephone cable has a fault.
- 2) Judge the unoccupied, ringing or off-hook status of an operating telephone cable;
- a) Press the power switch button of the transmitter and select the telephone function through the function selection button (the telephone function LED indicator will be lit);
- b) Insert a local call telephone cable connector into the RJ11 jack of the transmitter. If the 'Telephone' function LED indicator is lit, it suggests that the telephone cable is unoccupied; if the 'Telephone' function LED indicator has dimmed, it suggests that the telephone cable is in an off-hook status; if the 'Telephone' function LED indicator is flickering, it suggests that the telephone cable is ringing.
- 3) Detect value and polarity of the DC level (only the transmitter is needed).

- a) Press the power switch button of the transmitter and select the telephone function through the function selection button (the telephone function LED indicator will be lit);
- b) Insert the RJ11 plug of the crocodile clip for RJ11 plug into the RJ11 jack of the transmitter and clamp the detected telephone cable with the red clip and the black clip.
- c) If the 'Telephone' function LED indicator is lit, it suggests that the red clip is the positive electrode and the black clip is the negative electrode, otherwise it suggests that the red clip is the negative electrode and the black clip is the positive electrode, or that the cable is not live (in this case, change the polarity and detect again);
- d) Level value judgment: The lighter the LED, the higher the level value will be; the dimmer the LED, the lower the level value will be. The detectable range is 9VDC to 100VDC.
- 4. Connectivity and impedance of cable
- a) Detect with the transmitter only. Press the power

switch button of the transmitter and select the on-off function through the function selection button (the on-off function LED indicator will be lit). The transmitter will then begin to operate. Insert the RJ11 plug of the crocodile clip for RJ11 plug into the RJ11 jack of the transmitter and clamp the detected cable with the red clip and the black clip. If the on-off function LED indicator is lit, it suggests that the cable is on. The smaller the cable impedance, the brighter the on-off function LED indicator will be.

b) Detect with the cable tracking method. The operating method is the same as that in the cable tracking function. If a voice frequency can be detected at the other end of the cable by the receiver, it suggests that the cable is on.

# 5. Undervoltage status prompt

Both the transmitter and the receiver can indicate an undervoltage status of the batteries.

In the case of an undervoltage status (lower than 6V) of the batteries, the four LED indicators on the transmitter will flicker. In the case of an undervoltage status (lower than 6V) of the batteries, the low voltage LED indicator on the receiver will be in yellow.

#### VI. Product maintenance

Clean the product surface at regular intervals with wet cloth and a little detergent rather than grinder or chemical solvent. Do not put the product in a place with any chemical component or dismantle it without permission because it may result in damage. Check the batteries at regular intervals.

#### VII. Troubleshooting

If the product fails to operate normally, inspect and maintain it with the following methods which can eliminate ordinary faults. If the faults cannot be eliminated with these methods, contact our maintenance center or dealers

Fault Location and method of inspection Detection failure

- 1. Connect the power source; or
- 2. Replace the batteries. Off status of indicator
- 1. Replace the batteries. Failure of the speaker

#### 1. Replace the batteries.

The manual is subject to change without notice.

Content of the manual is believed correct. If you find any mistake or missing content, please contact us.

We will not assume responsibility for the accidents and harms due to improper operation by users.

Users should not regard the functions described in the manual as their causes for using the product for other purposes.