PROSTER WT397A Network Cable Tester with POE Test and NCV Detection User Manual

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Contents

SAFFTY INFORMATION

This series of meter fulfll IEC1010 (International Electrotechnical Commission). Please read the Safety Information before use. Read the technical specifications carefully. Only the model with multi-meter function is allowed to measure DCV/ ACV and Current with 36V or above.
Never measure 36V or above if the model do not have multimeter functions. These voltages pose a shock hazard.

1. For measuring voltage, never input more than 1000V DC or 400V AC(RMS). For measuring current, never input more than 10A. 2.Itis save for 36V or below. To avoid electric shock, check the testleads connection and insulation before measure 36V DC or above and 25V DC or above.
2. Remove the testleads from the testing point before switching functions and ranges.
3. The meter already has full protections. But for safety sake, please select the correct function and range.

5.Safety symbols/A\ Hazardous voltage, please refer user manual  Earth  Low battery voltage.

1. D0 not use the equipment if it looks damaged and/or abnormal. The protection in the meter may be damaged f it looks damaged and/or abnormal.
2. Do not input over the range. Otherwise, user may be injury and the meter may be damaged
3. D0 not use the meter just before, during or just after an electrical storm.
4. Remove the batteries if the meter planned to be stored for long period.If the batteries are not removed, battery leakage can damage the meter.
5. The meter is not allowed to search, check energized cables. Contact with energized cable may hurt the users and cause the meter damaged 6.0nly test leads are allowed to connect to the meter when using the multimeter. User may be hurt and/or meter will be damaged if other ports are connected to energized cable (except PoE equipment).
6. Please check the battery if low battery indicator on LCD of main body tums on and for the red LED on the receiver is flash.
7. Do not open the case. If needed, ask professional to repair the meter.

INTRODUCTION

This meter combines with the cable tracing cable length measuring and multimeter functions. The advantage of this meter is the long tracing distance, clear sound signals, rapid and precise cable length measurement, and accurate multimeter. The meter is good tools for laboratories, factories, radio lover, network installer, and technician,
It can real time measuring network cable length, short circuit and circuit break. The cable tracing function can quickly and efficiently find out the target cable in large number of cables. This function can be used in telephone systems, computer networks, BNC cables and other metallic network cables. Our digital tracing apply the newest digital noise free technology. It give a good experience to users. The meter is essential equipment for computer networking, telecom cabling BNC cabling and other metallic cabling projects.

‘WORKINGPRINCIPAL

Cable length measurement is performed by sending a signal to one of the wire in the cable.By receiving and calculating the reflected pulse to get the cable length. By sending a signal from the MAIN port to the target cable, an analogue signal field will be generated. The receiver willidentify the signal field and find out the target cable.

CHARACTERISTICS

1. Network cable length measurement,max.500m
2. Cable tracing
3. Nice and professional outiook
4. Many cable testing method and PoE Voltage measurement
5. Auto power off6. Flashlight
6. Sensitivity/Sound level adjustment
7. Using rechargeable lithium battery for protecting the environment.

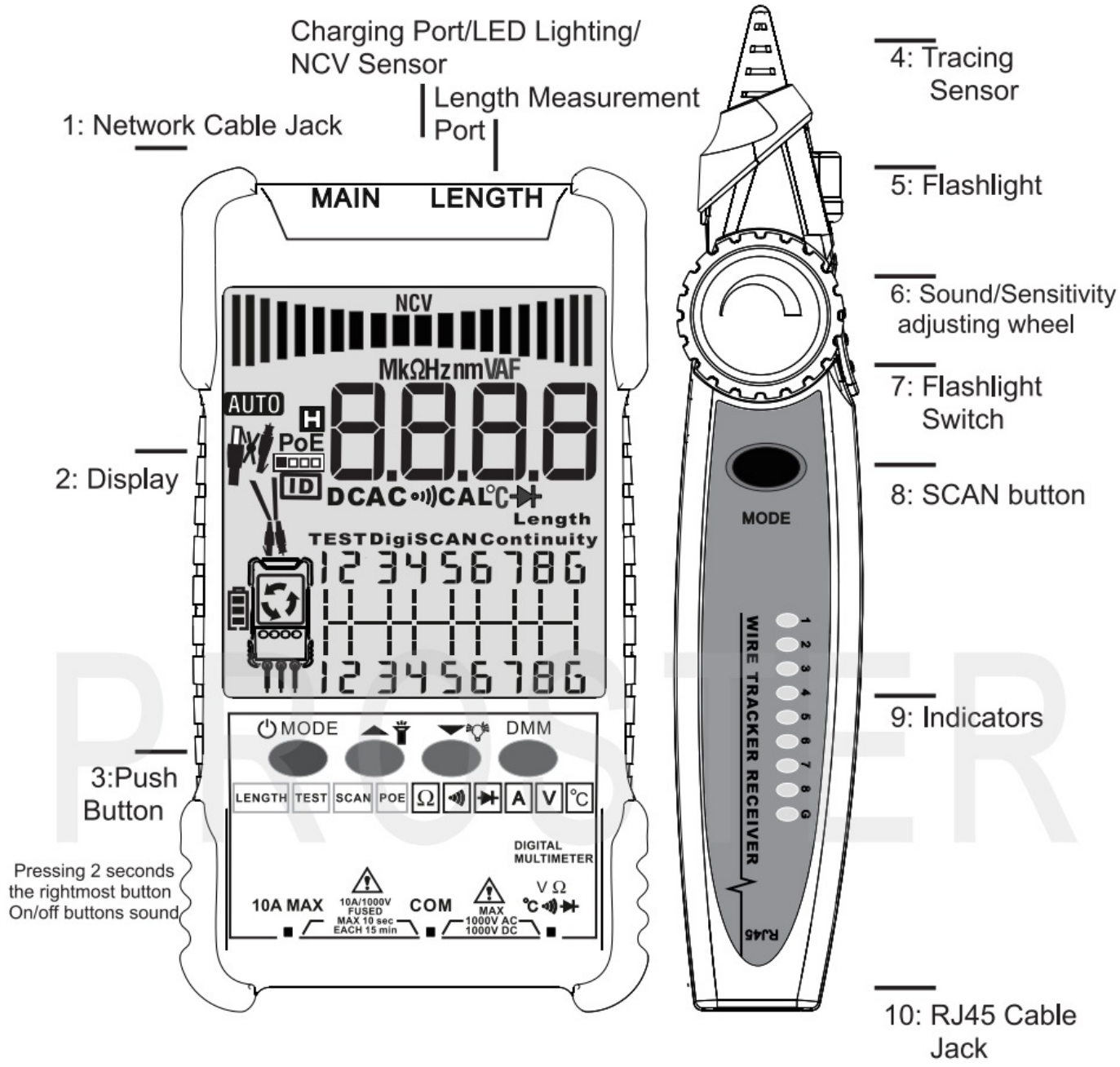
PRODUCT INCLUDE

- Transmitter
- Receiver
- User Manual
- 9V Battery
- 3.7 Lithium Battery
- Alligator Clip
- RJ45 Cable
- USB Transformer

EQUIPMENT OPERATION

Tracing Cables (SCAN)	Find out the target cable in numerouscables.
Cable Pairing Check(TEST)	Test open circuit, short circuit andcable mapping
V (VOLT)	Check the polarity and voltage ofbattery/phone line
Continuity Test (OHM)	Check open circuit or short circuit ofphone line(phone line should not beconnected t o any power source)
ID Pairing	Able to check Network Switches andCables by connecting one end to theRemote I D unit
Flashlight	White flashlight
Sensitivity Adjustable	Able to adjust the soundlevel
Length Measurement	Able to measure cable length, shod circuit and circuit break
Cable Tracing Signal Cha ngable	Able to set the frequency for using on tracing

PRODUCT DESCRIPTION



WARNING

The product will be damaged if . Length Measurement Port is connected to PoE or any energized devices.

1. **MAIN network cable input jack**

   MAIN: Connect network cable, phone line and the alligator clip cable to this jack for checking pairs, tracing cable, battery voltage measurement or ‘continuity;

   LENGTH: Connect to this jack for measuring cable length;
2. **Result Display**

   Displaying the product status, testing result, connection indication… battery power.
3. **Push Button**
   1. **POWERIMODE button:** Pressing 2 seconds to switch on the product; Press to select functions (length – cable pairing – tracing cable -V -continuity – network switch cable pairing – network switch indicator flashing- Remote ID tracing – NCV – Length);

2. ^ **bunion:** Pressing tracing function, switch between analogue and digital signal. During Cable Length measurement, press to change the pair. During pairing function, perform normal pairing function. Keep pressing switch on / off the display backlight;
3. v **bunion :** Press to switch between analogue and digital signal. During cable length measurement, select the cable type. During cable pairing check, select the high speed pair checking function. Keep pressing to switch on/ often display backlight;
4. **SCAN bunion:** press to select the cable tracing function (Only apply to the model without multimeter function) ;

4. **Tracing Sensor :** Move this part towards the target cable (network cable, phone line, BNC cable or other metallic cable). Listen the sound level o position the target cable.
5. **Flashlight :** Location of flashlight. It can be switch on/off by a separate switch;
6. **Sound/ Sensitivity adjusting wheel:** For analogue mode, it used to adjust the sound level. For digital mode, it used to adjust the frequency.
7. **Flashlight Switch :** Switch on/off the flashlight
8. **SCAN Button:** Switch on/off the cable tracing function. Pressing 2 seconds to switch on the product, press to switch between analogue tracing, digital tracing, digital vibrating mode. Pressing 2 seconds again to switch of.
9. **Indicators:** at the cable pairing function, LED on indicating the relative cable s in good condition.
10. **Rj45 Cable Jack**

DIGITAL CABLE TRACING

Productids a noise free digital wire tracker. The product apply the advance digital technology to achieve precious digital noise free cable tracing Following is the comparison of digital wire tracker and analogue wire tracker.

Operation

Operation of the main body is the same. The receiver operation is different. Press SCAN button for 2 seconds to switch on. Press to switch between digital cable tracing, digital tracing with vibration (if the model have), analogue cable tracing. Press 2 for 2 seconds to switch off. The product will automatically switch off if no operations for 10 minutes. After selecting the function of the Receiver by pressing the SCAN button, it is no need to press button. Press SCAN button on the Main Body to select the searching function. Press Hz button to switch to the digital search (L2) mode. In digital search mode, it is not allow to change the searching frequency. To speed up the searching process, it is recommended to maximize the sensitivity by tuming the Sensitivity adjusting wheel. When the target cable is closed, adjust the sensitivty to identify the target cable. To confirm the target cable is the correct cable to be searched, it is recommended to plug the target cable in the RJ45 jack on the Receiver. I all the LED on the Receiver are switch on, the cable connected s the target cable.

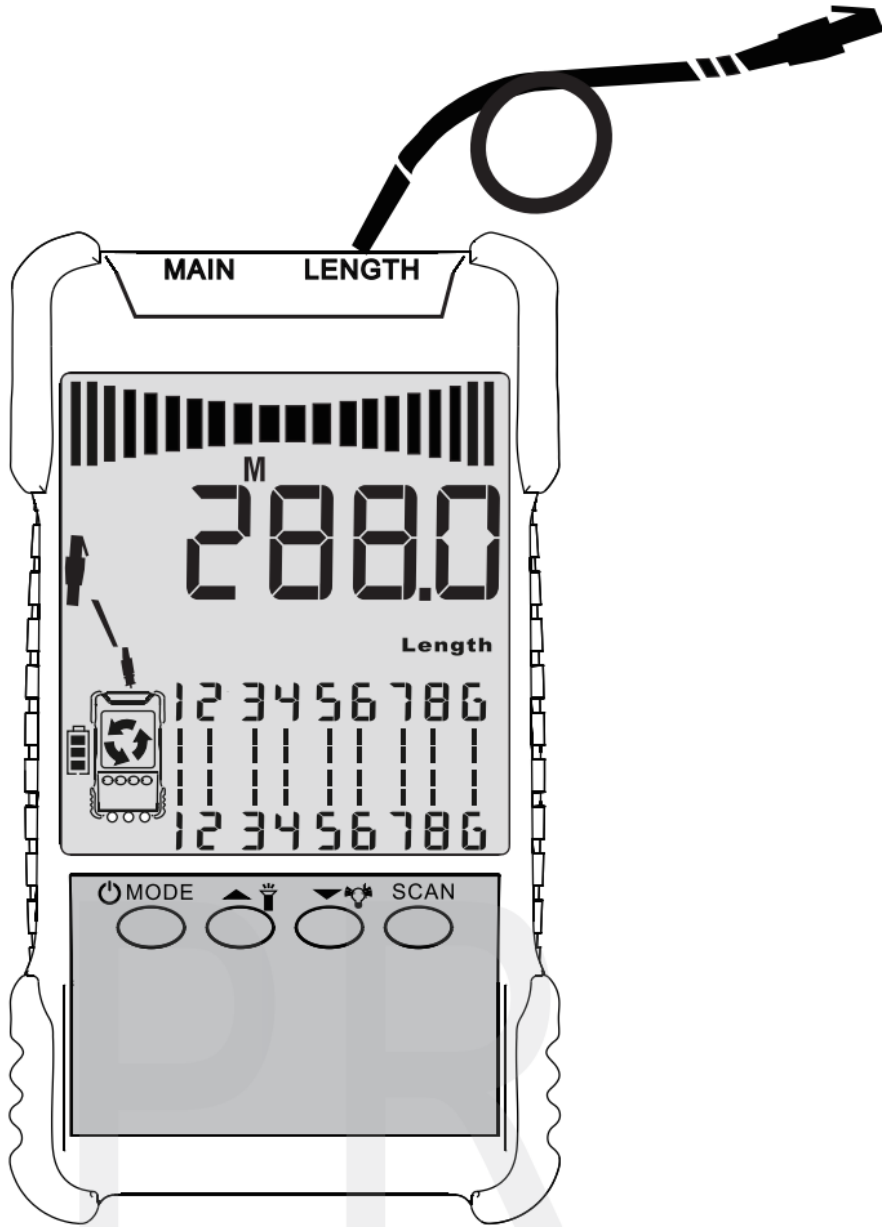
Digital Search (Blue LED indicator)
The latest digital searching technology is applied. The Main Body sends out digital signal. By receiving the digital signal passing through the target cable,the Receiver will have sound response (blue indicator switch on) or vibrating(blue indicator flashing)
Analogue Search (Red LED indicator)
To speed up the searching process, it is recommended to maximize the sensitivity by tuming the Sensitivity adjusting wheel. When the target cable is closed, adjust the sensitivity to identify the target cable.

MEASURING CABLE LENGTH(L ENGTH)

The product is ready for measuring cable length after itis switching on. This function can apply to different metallic

cables (with at least 2m) including network cables, phone lines and BNC cable. To measure length, plug the cable to LENGTH jack. Free the other end of the cable. Itis not allowed to connect to any other equipment.
The product may be damaged if the other end of the cable is connected to any powered equipment. After measuring the length, the product wil display the cable conditions. The status of each cable (in the sequence of 1,2,3,4,5,6,7,8) will be displayed Users can determine the cable is in good conditions or not together with the cable length.

Press ~ button to switch to measure the length of each pair of cables ie. pairof 1and2, 3and 6, 4 and 5.7 and 8). Press button to select the cable type (include 8PBC cables, 4P4C cables, phone lines and BNC cables. The length measurement accuracy is 2%:1m. When measuring non-stan- dard lines, users need to calibrate them first to ensure the acouracy.



WARNING
LENGTH jack is designed to measure cable length.' The product may be damaged if it is connected o POE or any other energized equipment

Operation
Press Power button to switch on the product. Then the product is ready for measuring cable length. At the bottom of display, the 8P8C network cable, 4PAC network cable, phone lines and BNC cable.

LENGTH CALIBRATION (LENGTH & TEMP)

Length Calibration
Due to the conductivity difference of cable made by different materials, the measuring results may not be accurate. To solve the issues, this product allow users to calibrate itself.
Calibration Method

1. After switching on the product, connect a cable with known length to the LENGTH jack on the Main Body. At the cable length measuring mode, press- ing and buttons together for 3 seconds. The product will be ready at the user calibrating mode. The measuring result will be flashing. User can pressor buttons to adjust the measuring result until the displaying value is the same as the actual cable length.
   Then press and MODE button together to save the calibrating result and leave the user calibrating mode.
   Press any other buttons will leave the user calibrating mode without saving the result.
2. After switching on the product, pressing Aand MODE button together to reset the product to the factory setting.
3. The known length cable for using on calibration should have at least 5M long.

Temperature Calibration
The measuring result may be affected by the temperature difference between the environment and product inside. To solve the issue, the product have temperature calibration mode. Following is the calibrating method. 1

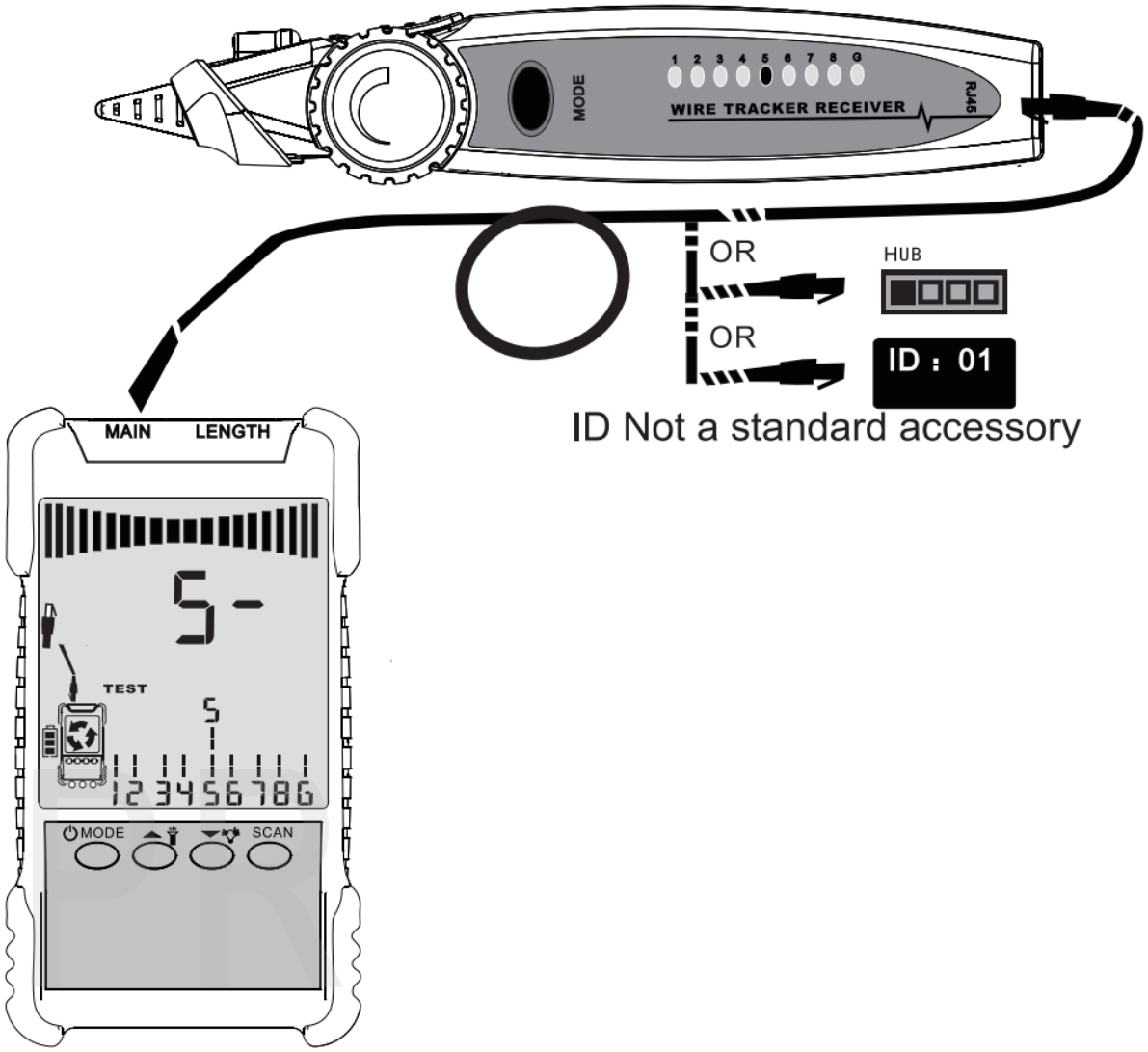
1. After switching on the product, select the measuring mode, pressing ~ and buttons together for 3 seconds. The product will be ready at the temperature calibrating mode. The measuring result will be flashing. User can press ~ or – buttons to adjust the measuring result until the displaying value is the same as the actual cable length. Then press~ and MODE button together to save the calibrating result and leave the user calibrating mode.Press any other buttons will leave the user calibrating mode without saving the resuit
2. After switching on the product, pressing ~ and MODE button together to reset the product to the factory setting.
3. During temperature calibrating, please refer to mercury thermometer with resolution at 0.1C..

CABLE MAPPING(TEST)

By using the cable mapping function, users can check the open circuit and cables' physical connection of the following cables. 1.UTP computer network cables fulill IEEE 10Base-T, EIA/TIA 568A standard; 2 core, 4 core phone lines and other metallic network cables. Plug one end of the cable being tested to the MAIN jack on the Main Body. Press MODE button to switch to the cable mapping mode. Press the other end of the cable to the RJ45 jack on the Receiver. If the indicator on the receiver match with the indicator number showing on the. Main Body, the cable being tested is in good condition. Please refer to the following fiqures for details.

Operation

Press MODE button to switch between Cable Mapping (TEST), switch mapping  checking LED indicators of jacks on switches, and test with remote ID unit. Plug one end of the cable being test to the MAIN jack on the Main Body. Plug the other end to the related jack. For testing cable, plug the other end of the cable in the MAIN jack on the Receiver. The Main Body will display the conductor conditions one by one. Press to_select the fast mode.



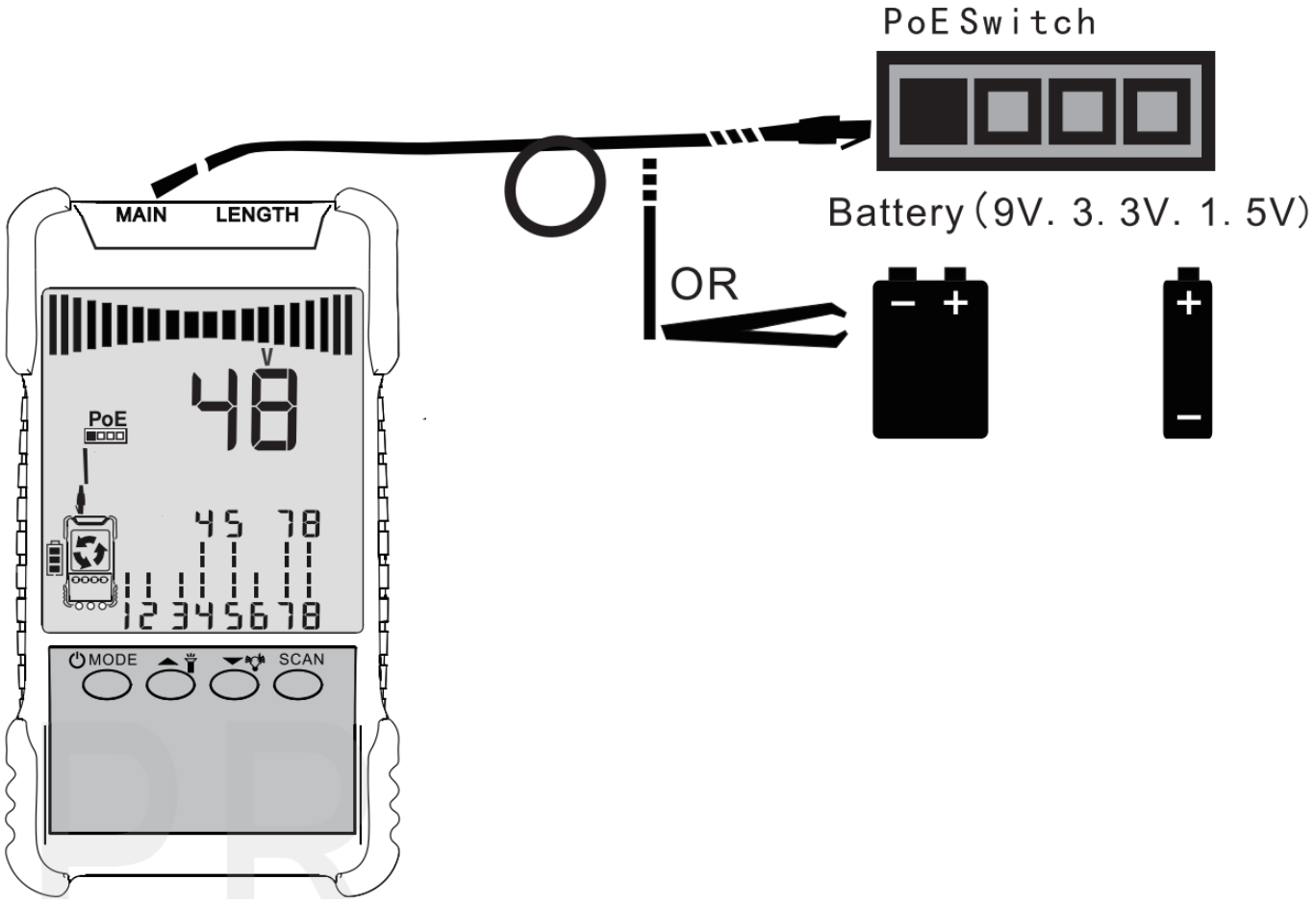
Press Y to select the normal mode. For switch mapping, connect the other end of the cable to the switch. The Main Body will display the conductor conditions one by one. For checking the Switch indicators flashing ( ),connect the other end of the cable to the switch being testing. The indicator of the jack on the switch which is connecting to the Main Body will flash once per second.For testing with the Remote ID Unit, connect the other end of the cable to the Remote ID Unit. The Main Body will show the number of the Remote ID that is connected.

MEASURING VOLTAGE (VOLTAGE)

The product can help to identify some issues on a circuit. The issues include the present of voltage, polarity of voltage. There is no need to use the receiver for this function. Plug the alligator clip cable comes with the product in the MAIN jack on the Main Body. Clip the alligator clips on the objective circuit. If voltage is present on the phone line, conductor 3 and 4 will have a long connection lines. The positive conductor will also flash. If there is no voltage, short connection lines of conductor 3 and 4 will be displayed. Alternatively, user can plug the phone line in the MAIN jack to check if the line is installed with RJ11 plug.. Remarks :It is not allowed to measure AC Voltage and other High Voltage Circuit. Otherwise, it may cause electric shock.

WARNING

It is damages to cone citing PoE or other energized sources to the LENGTH jack. It may cause electric shock

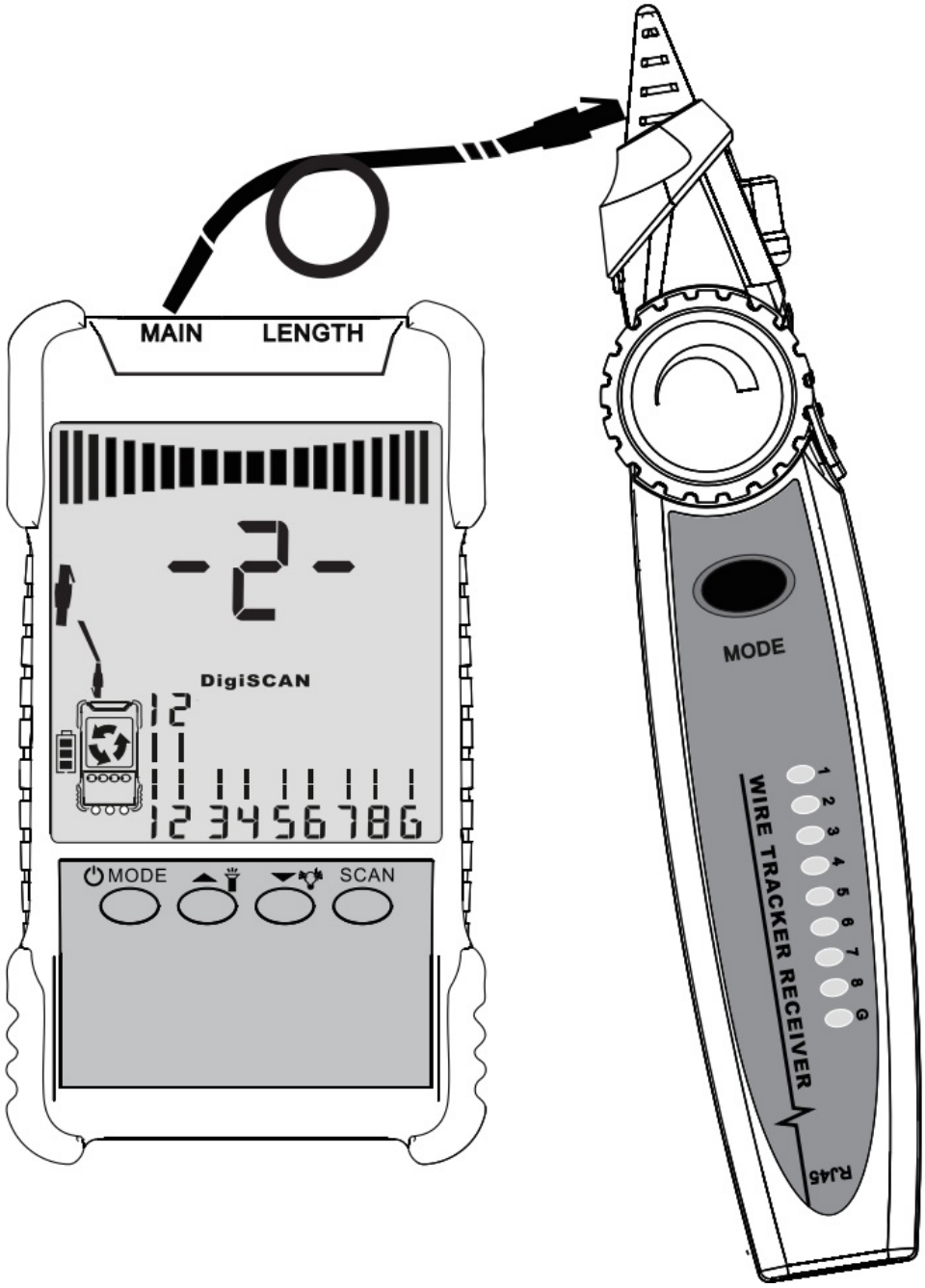


Operation .

After switching on the product, press MODE button untilitis ready at Voltage Testing Mode. Connect the target battery or other power sources by using the alligator clip cables provided. The polarity will be displayed After switching on the product, press MODE bution until V is shown on the display. The product is now ready at Voltage Testing mode. It will display the voltage and polarity. The number of the positive conductor will be flash.

CABLE TRACING (SCAN)

This function can help users to identify the target cable from lots of cables. Plug one end of the target cable (such as network cable, phone line and all BNC cable which can be clipped by the alligator clip provided) in the MAIN jack on the Main Body. Switch on the Main Body. Select the cable tracing function. For the model without multimeter functions, SCAN button is located at the right side. Press to select the cable tracing function. Pressing the SCAN button on the Receiver for 2 seconds, blue indicator (digital searching) or red indicator (analogue searching) will switch on. Move the Receiver around the uncertain cables (including network cable, patch panel of phone system, connector, hub). Listen and compare the sound signal. When the Receiver is closing to the target cable, the sound level will increase. The loudest sound will be obtained if the Receiver is next to the target cable. For working in noisy environment, press button to change signal for easy identification. The product have two analogue signals which indicated by 1 and 3 and one digital signal which indicated by 2 on the display. It can directly plug in the cable if it is installed with registered jack.

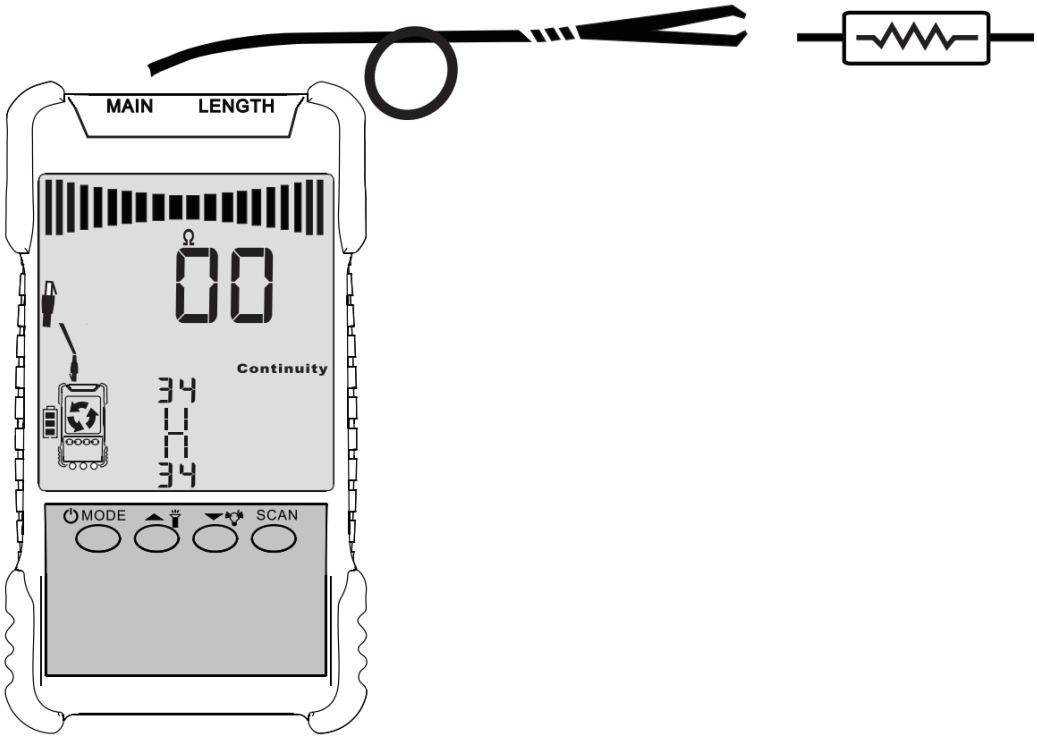


Operation

After switching on the product,- press MODE button to select . the cable tracing function. Plug the testing cable in the MAIN/RJ45 jack or connect the testing cable by the alligator clips provided Press the SCAN button on the Receiver. Blue indicator wil switch on which indicate it is ready for L digital tracing. Press the SCAN B35 button again to select the analogue tracing mode. By listen and compare the sound level to identify the target cable.

CONTINUITY TEST (CONTINUITY)

The function is to test the short circuit of a phone line which is not plug in any networks. Ensure the phone line is not powered before testing. The display will indicate open circuit. For those cables with registered jack, directly plug the cable in the MAIN/RJ45 to test. Otherwise, connect the testing cable by using the alligator clips provided. Continuity.



Operation

After switching on the product, press MODE button until applies. The product now is ready for continuity test. Clip the alligator clips on the testing object. If the resistance is smaller than 10, the display will indicate the circuit is shorted and have sound indication

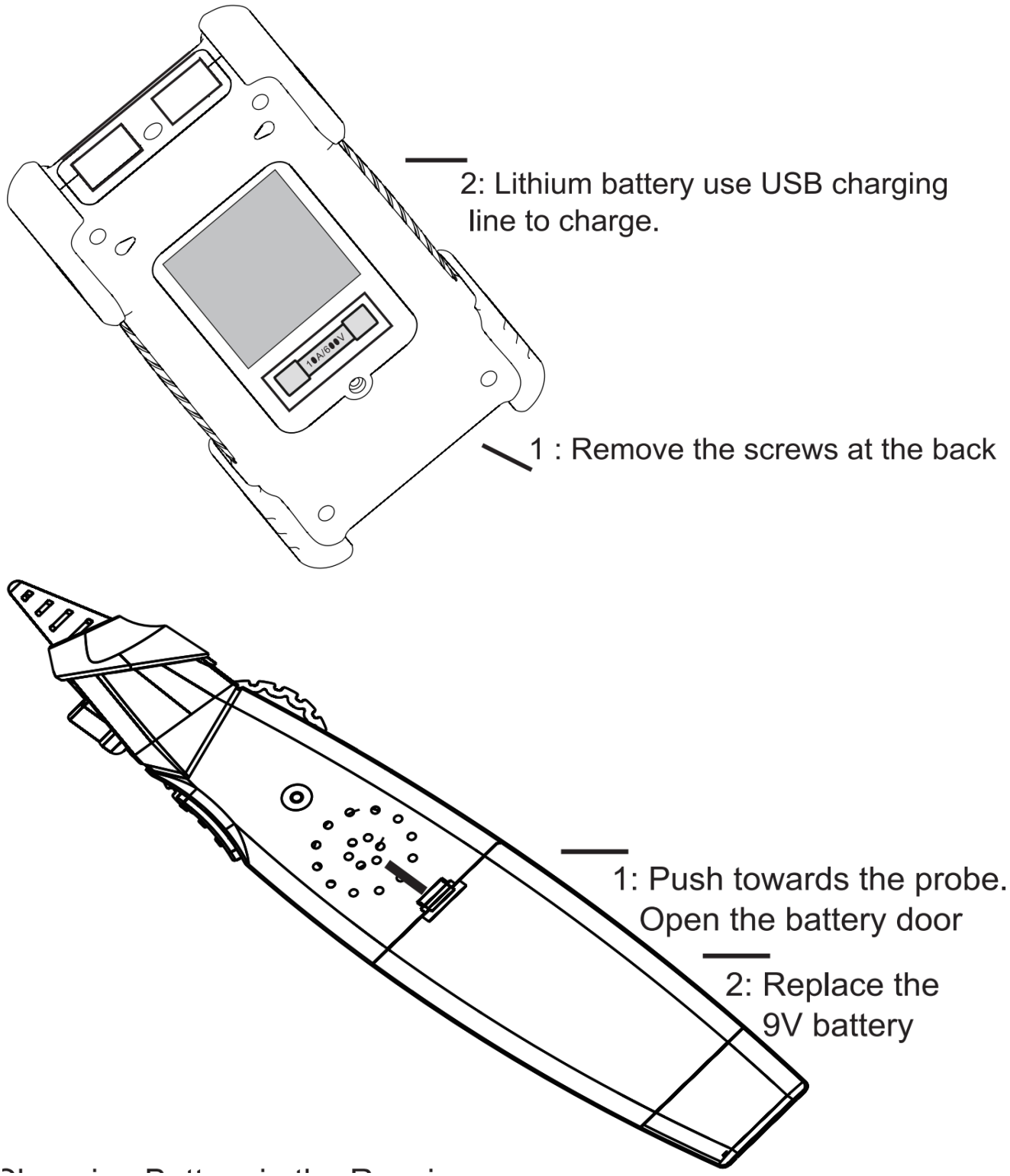
After powering on, click the MODE button to enter the continuity test, and then the display screen will prompt Q. At this time, when both ends of the alligator clip are short-circuited or the network cable/wire/coaxial video cable is connected, the screen displays 0. This function can be commonly used in the path detection of telephone lines, video lines and other lines.

TROUBLE SHOOTING

Main Body
Symptoms : Display is not on or flashing after pressing the Power button
Reasons : Battery gone
Solutions : Charging the Main Body or replace the battery (protected 3.7V lithium battery)
Receiver Symptoms: Press SCAN button but no sound is generated during cable tracing
Reasons : Battery gone or No battery or Receiver is too far away from the target cable
Solutions : Change battery or enlarge the searching area

CHANGING BATTERIES

Changing Battery in the Main Body



Changing Battery in the Receiver

SPECIFICATIONS

Basic Functions	616
Analogue Tracing	⁻V
Continuity	⁻V
Switch Tracing (w/oE)	Al
Cable Mapping	⁻V
Switch indicators flashing	Al
Noisy Free Digital Tracing	Digital
Voltage Testing	Al
Remote ID Mapping	Optional
Analogue Bargraph	Al
NCV Detection	Al

Other Functions	Main Body flash light, LCD display ,white flash light ,analogue tracing sound adjustable, digital tracing sensitivity adjustable, low battery indicator, white back light ,energy saving, tracing distance3km,analogue racing signal selectable
Network Cable Length Measure	400M
BNC Cable Length Measure	-\
Network Cable Short/Open Circuit Test	-\I
Powered by	Main Body 1250mA/H rechargeable Lithium Battery/Receiver:9V Battery
Package	Gift Box/ Manual/ Carrying Bag/RJ45Cable/Alligator Clip Cable
	*Remote **ID** Unit is an optical accessories*The specification listed above is only the best specifications

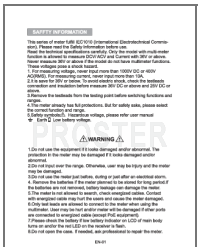
PRODUCT MAINTENANCE

Maintenance
This product is a precision equipment. Please ensure the battery power is good. Follow the instructions, especially to ensure the multimeter input jack is plug in correctly. User is not allowed to change the connection. Otherwise, the product may be damaged and the user may get hurt. Please follow the instruction to maintain the product:

1. Please keep the product away from water, dust. Do not drop the product.
2. Do not operate the product in flammable, explosive, high temperature, high humidity and/or strong magnetic field environment.
3. Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents
4. Remove the batteries if the product planned to be stored for long period.
5. Please recharge the product as soon as possible after the Low Battery Indicator switch on.

Trouble Shooting and Warning If the product cannot work properly, please check the battery, fuse or the power switch. Please have the product serviced if the problems cannot be solved. Al information provided is subject to change without prior notice. We tried our best to keep the information most updated and correct. If user find any mistakes, and/ or information missing, please contact US or your distributor. Our company is not responsible for all damages or hurts caused by the incorrect operations.
Al the functions mentioned should not be used as a reason for special purposes.

Documents / Resources

	PROSTER WT397A Network Cable Tester with POE Test and NCV Detection [pdf] User Manual WT397A Network Cable Tester with POE Test and NCV Detection, WT397A, Network Cable Tester with POE Test and NCV Detection, Cable Tester with POE Test and NCV Detection, Tester with POE Test and NCV Detection, Test and NCV Detection, NCV Detection, Detection

References

- User Manual