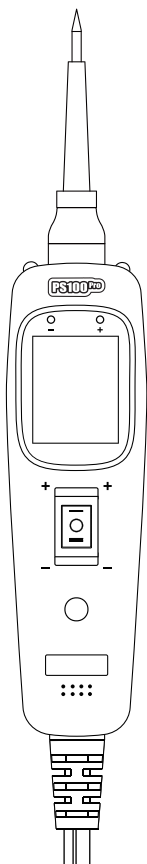


User Manual

Professional Automotive Circuit Testing Tool



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Safety Precautions

This manual includes instructions for using the equipment and operation methods, in order to prevent personal injury and damage to the vehicle or fault diagnostic instrument, please read this user manual carefully first, and observe the following safety precautions when operating the vehicle:

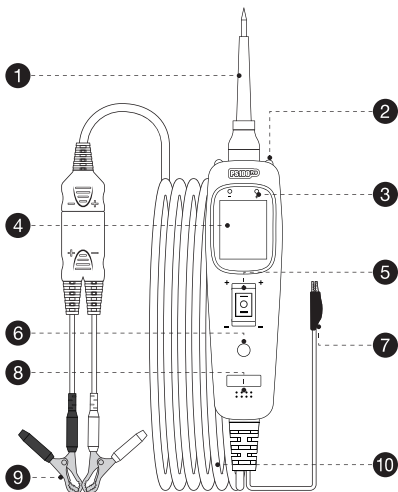
- Please test in a safe environment.
- Do not attempt to operate or observe the tool while driving the vehicle. Operating or observing the tool can cause distraction to the driver and can lead to fatal deaths.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or high-temperature engine parts.
- If there is a malfunction of the instrument (e.g., if it is found that it is damaged, deformed, leaking material, incomplete display, etc.), it cannot be used again.
- Wear safety goggles that comply with ANSI standards.
- Due to the different product versions, the description of the manual, the interface icon, and the interpretation of the icon will be slightly different, so it is hereby explained.

1. Product Overview

This product is a 0–80V automotive circuit tester featuring excellent design, easy operation, and comprehensive functionality. Equipped with a high-resolution TFT color screen, it clearly and intuitively displays testing processes and results, enabling faster, more accurate diagnosis of vehicle issues. An efficient, advanced tool that enhances user productivity.

Main Functions: Voltage Test, Current Test, Resistance Test, Diode Test, P-N Terminal Test, Frequency Test, Component Activation, Continuity Test.

1.1 Panel Description



- 1 **Probe:** Used for contacting wires or components during testing .
- 2 **LED Light:** Provides illumination in dark areas or at night.
- 3 **LED Indicator Light:** Offers light prompts during testing.
- 4 **Display Screen:** 1.8 inch TFT color screen.
- 5 **Boat-shaped Switch:** Used to select functions or positive/negative polarity output (only the up key can be used for function selection).
- 6 **Toggle Switch:** Single click to switch interfaces/enter test mode, double click to lock, long press to rotate the screen by 180°.
- 7 **Ground Clamp:** Assists with grounding for testing purposes.
- 8 **Beeper:** Emits an alert sound based on test results.
- 9 **Battery Clip:** Connects to a battery to power the device.
- 10 **Test Lead:** 5m Main Test Lead

1.2 Parameter Information

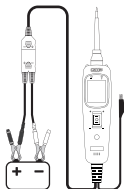
Project	Description
Input Voltage	8 ~ 32V
Test Voltage	0 ~ 80V
Operating Current	80mA
Activation Current	0 ~ 8A
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-40°C~70°C (-40°F~185°F)
Product Dimensions	6.10x1.81x1.30 inch

2. Product Functions

2.1 Operating Methods

This device has two power supply methods:

1. Powered by an external battery or car battery.
2. Powered by the cigarette lighter.

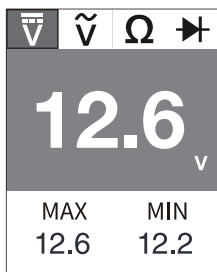


The following example uses battery power: Before starting to test circuits or components, connect the power clip to the positive terminal of the battery.

2.1-1 Voltage Testing

After connecting the battery clip to the positive terminal of the battery:

Touch the probe tip to the positive terminal. The device will read the maximum/minimum voltage. The voltage area on the screen will turn red, the red LED light will illuminate, and the buzzer will emit a beeping sound.



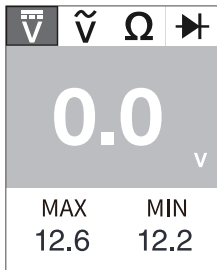
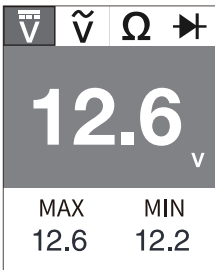
2.1-2 Component Activation

The activation function can be used to activate components such as the engine fuel pump, solenoid valve, blower motor, cooling fan, and headlights.

Connect the ground clip to the negative terminal of the component being tested, and connect the probe tip to the positive terminal of the component. Then press the "up" button. The probe will output a positive voltage, which will be displayed on the screen. The buzzer will emit a continuous beep,

and the red LED light on the screen will illuminate, indicating that the test component has been activated.

The probe can output both positive and negative voltages. Pressing the "up" button will cause the probe to output a positive voltage, with the red LED light illuminating and the voltage value displayed on the screen. Pressing the "down" button will result in the probe outputting a negative voltage, causing the green LED light to illuminate and the buzzer to sound. The maximum activation output current is 8A; exceeding this limit will trigger the circuit breaker protection function, leading to device restart.

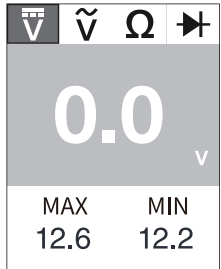


2.1-3 P-N Terminal Test

Connect the ground clip to the vehicle's ground wire, and use the probe to touch the positive and negative terminals of the vehicle system.

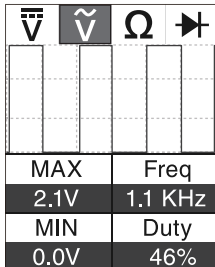
After using the probe to touch the positive and negative terminals of the vehicle system, when a po-

sitive signal is detected, the voltage value and positive electrode (+) will be displayed. When a negative signal is detected, the negative voltage value and negative electrode (-) will be displayed.



2.2 Current Testing (Waveform)

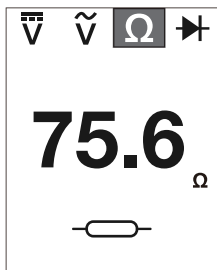
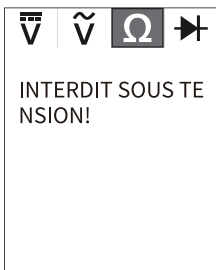
Press the "Toggle" button to enter the current testing mode, then connect the probe tip to the circuit. The display will read and show the maximum voltage, minimum voltage, frequency, and duty cycle.



2.3 Resistance Test

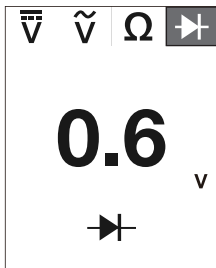
Press the "Toggle" button to enter the resistance testing mode. The screen will display a prompt saying "Do not test under power." Press the "OK" button again to enter the resistance testing interface. (Please turn off the power of the unit being tested before entering the resistance test).

Connect the ground clip (auxiliary grounding wire) to one side of the resistor being measured, and connect the probe tip to the other side. The device will display the resistance value.



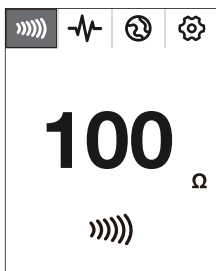
2.4 Diode Test

Press the "Toggle" button to enter the diode testing mode. Connect the ground clip (auxiliary grounding wire) to the negative terminal of the diode being tested, then connect the probe tip to the positive terminal. The measurement value of the diode will be displayed.



2.5 Continuity Test

Press the "Toggle" button to enter the continuity testing mode. Connect the ground clip (auxiliary grounding wire) to one end of the location to be tested, and connect the probe tip to the other end. The measured resistance value will be displayed.

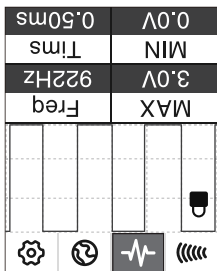
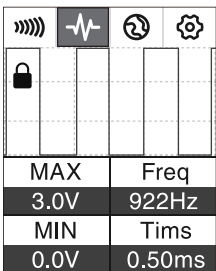


If the resistance between the two measured terminals is $\geq 100\Omega$, it is considered an open circuit, and the buzzer will not sound. If the resistance be-

tween the two measured terminals is $<100\Omega$, it is considered that the circuit has good conductivity.

2.6 Frequency Test

Press the "Toggle" button to enter the frequency testing mode. Connect the ground clip to the vehicle's ground wire, and use the probe to touch the location that needs to be measured. The screen will display the maximum value, minimum value, frequency, and time of the measured signal.

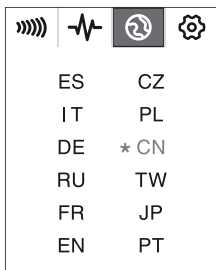


You can double-click the "Toggle" button to lock the current display interface, making it convenient for comparison and observation. Additionally, you can hold down the "Toggle" button to rotate the screen 180° for easier testing. (As shown in the figure above).

2.7 Language Selection

Press the "Toggle" button to enter the language selection interface, then use the rocker swi-

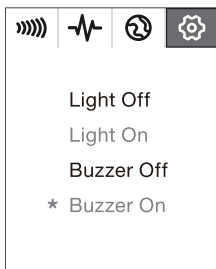
touch "Up" key to select the desired language.



After selecting the required language, hold down the "Toggle" button to confirm your choice. The selected item will be highlighted in red, indicating that the language has been successfully changed.

2.7 Settings

Press the "Toggle" button to enter the settings interface, then use the rocker switch "Up" key to select the on/off status of the light or buzzer.



Hold down the "Toggle" button to switch. The item displayed in red indicates the current status.

3. Warranty and Service

Hello! Thank you for purchasing our product. In order to better serve you, please read this warranty card carefully, fill it out correctly and save it.

Name			
Telephone			
Email			
Purchase Date		Product Number	
Order Number			
Shipping Address			
Maintenance Records	Date	Failure Causes and Solutions	

※ **Warranty Statement:**

If the product requires warranty due to quality problems, please send it back to us together with this warranty card.