

WORKPRO WP295005

WORKPRO Digital Multimeter WP295005 User Manual

Model: WP295005

INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of the WORKPRO Digital Multimeter, model WP295005. Please read this manual thoroughly before using the device to ensure proper function and to prevent potential hazards. Keep this manual for future reference.

SAFETY INFORMATION

Always adhere to the following safety precautions to prevent electric shock, injury, or damage to the multimeter or the equipment under test.

- Do not exceed the maximum input values specified for each range.
- Exercise extreme caution when working with voltages above 60V DC or 30V AC RMS, as these pose a shock hazard.
- Ensure the test leads are in good condition, without any damage to the insulation.
- Verify the function switch is in the correct position for the measurement being performed before connecting the test leads.
- Do not use the multimeter if it appears damaged or if the case is open.
- Replace the battery immediately when the low battery indicator appears to ensure accurate readings.
- Always disconnect the test leads from the circuit before changing the function switch position.
- Do not operate the multimeter in explosive gas, vapor, or dusty environments.
- Use the appropriate terminals, function, and range for your measurements.

PRODUCT FEATURES

The WORKPRO Digital Multimeter WP295005 offers a range of functionalities for electrical testing:

- **NCV Voltage Sensing:** Non-contact voltage detection for safety.
- **Diode Measurement:** For testing diodes and semiconductor junctions.
- **On-off Buzzer Measurement:** Continuity test with audible indication.

- **Flashlight Lighting:** Integrated flashlight for working in dimly lit areas.
- **Backlight:** LCD backlight for improved visibility in low light.
- **Value Lock (Data Hold):** Freezes the displayed reading for convenience.
- **Automatic Shut-down:** Conserves battery life by powering off after a period of inactivity.
- **Maximum Display:** 5999 counts for precise readings.
- **Measurement Ranges:**
 - DC Voltage: 0.1mV to 600V
 - AC Voltage: 1mV to 600V
 - DC Current: 0.01uA to 10A
 - AC Current: 0.01uA to 10A
 - Resistance: 0.1Ω to 60MΩ
 - Capacitance: 1nF to 60000uF
 - Frequency: 10Hz to 10MHz

COMPONENTS AND PARTS IDENTIFICATION

Familiarize yourself with the different parts of your WORKPRO Digital Multimeter:





Figure 1: Front view of the WORKPRO Digital Multimeter WP295005, showing the display, function dial, and input jacks.

1. **LCD Display:** Shows measurement readings, units, and indicators.
2. **Function Dial:** Rotary switch to select measurement functions and ranges.
3. **SEL Button:** Selects between different functions within a single dial position (e.g., AC/DC, Diode/Continuity).
4. **H (Hold) Button:** Activates data hold to freeze the current reading.
5. **Backlight Button:** Turns the LCD backlight on/off.
6. **Flashlight Button:** Activates the built-in flashlight.
7. **VΩmAHZ Input Jack:** Positive input for voltage, resistance, capacitance, frequency, diode, and small current measurements.
8. **COM Input Jack:** Common (negative) input for all measurements.
9. **10A MAX Input Jack:** Positive input for high current (up to 10A) measurements.
10. **NCV Sensor:** Non-contact voltage detection area, located at the top of the device.



Figure 2: Top view of the multimeter, highlighting the NCV (Non-Contact Voltage) sensor.

SETUP

Battery Installation

The multimeter requires two AAA batteries for operation. Ensure the device is powered off before installing or replacing batteries.

1. Locate the battery compartment cover on the back of the multimeter.
2. Use a screwdriver to loosen the screw securing the battery cover.
3. Remove the cover.
4. Insert two AAA batteries, observing the correct polarity (+ and -) as indicated inside the compartment.
5. Replace the battery cover and tighten the screw securely.

Connecting Test Leads



Figure 3: The multimeter shown with its red and black test leads connected to the input jacks.

- Insert the black test lead into the "COM" (Common) input jack.
- For most measurements (voltage, resistance, capacitance, frequency, diode, continuity, and small current), insert the red test lead into the "VΩmAHz" input jack.
- For high current measurements (up to 10A), insert the red test lead into the "10A MAX" input jack.

OPERATING INSTRUCTIONS

Before taking any measurement, ensure the test leads are correctly connected and the function dial is set to the appropriate range.

1. Measuring DC/AC Voltage

1. Set the function dial to the "V" position (DC or AC). Use the "SEL" button to switch between DC and AC voltage if necessary.
2. Connect the red test lead to the positive (+) side of the circuit and the black test lead to the negative (-) side.
3. Read the voltage value on the LCD display.

2. Measuring DC/AC Current (up to 10A)

Caution: Never connect the multimeter in parallel with a voltage source when measuring current, as this can blow the fuse or damage the meter.

1. **For currents up to 600mA:** Insert the red test lead into the "VΩmAHz" jack.
2. **For currents up to 10A:** Insert the red test lead into the "10A MAX" jack.
3. Set the function dial to the "A" position (DC or AC). Use the "SEL" button to switch between DC and AC current if necessary.
4. Open the circuit where you want to measure current.
5. Connect the multimeter in series with the circuit, ensuring the current flows through the meter.
6. Read the current value on the LCD display.

3. Measuring Resistance

Caution: Ensure the circuit is de-energized and all capacitors are discharged before measuring resistance.

1. Set the function dial to the "Ω" (Ohms) position.
2. Connect the test leads across the component or circuit where you want to measure resistance.
3. Read the resistance value on the LCD display.

4. Measuring Capacitance

Caution: Ensure the capacitor is fully discharged before measurement to prevent damage to the meter.

1. Set the function dial to the "F" (Capacitance) position.
2. Connect the test leads across the capacitor terminals.
3. Read the capacitance value on the LCD display.

5. Measuring Frequency

1. Set the function dial to the "Hz" (Frequency) position.
2. Connect the test leads across the signal source.
3. Read the frequency value on the LCD display.

6. Diode Test

1. Set the function dial to the "Diode" symbol position. Use the "SEL" button if necessary to select diode test.
2. Connect the red test lead to the anode and the black test lead to the cathode of the diode. A forward voltage drop will be displayed.

3. Reverse the leads. An open circuit ("OL") should be displayed for a good diode.

7. Continuity Test (On-off Buzzer)

1. Set the function dial to the "Continuity" symbol position. Use the "SEL" button if necessary to select continuity test.
2. Connect the test leads across the circuit or component.
3. If the resistance is below a certain threshold (typically $<50\Omega$), the buzzer will sound, indicating continuity.

8. NCV (Non-Contact Voltage) Sensing

1. Set the function dial to the "NCV" position.
2. Move the top part of the multimeter (where the NCV sensor is located) close to the conductor being tested.
3. The meter will emit an audible beep and the NCV indicator will light up if AC voltage is detected. The frequency of beeps and flashes increases with stronger voltage.

9. Live Wire Detection

1. Set the function dial to the "Live" position.
2. Insert the red test lead into the "V Ω mAHZ" jack.
3. Touch the red test lead to the conductor you suspect is live.
4. If a live wire is detected, the display will show "LIVE" and the meter will emit an audible alarm.

10. Flashlight and Backlight

- Press the **Flashlight button** to turn the built-in flashlight on or off.
- Press the **Backlight button** to turn the LCD backlight on or off.

11. Data Hold (Value Lock)

- During a measurement, press the **"H" button** to freeze the current reading on the display.
- Press the "H" button again to release the hold and resume live readings.

12. Automatic Shut-down

The multimeter will automatically power off after approximately 15 minutes of inactivity to conserve battery life. To reactivate, turn the function dial to OFF and then back to the desired function, or press any button.

MAINTENANCE

Cleaning

- Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents.
- Ensure the multimeter is completely dry before use.

Battery Replacement

When the low battery indicator appears on the display, replace the batteries as described in the "Battery Installation" section under Setup.

Fuse Replacement

If the current measurement function stops working, the fuse may need replacement. This procedure should only be performed by qualified personnel. Refer to the specifications for the correct fuse type.

TROUBLESHOOTING

If you encounter issues with your multimeter, refer to the following table for common problems and solutions:

Problem	Possible Cause	Solution
No display or dim display	Low or dead batteries	Replace batteries.
"OL" (Overload) displayed	Measurement exceeds selected range or meter's maximum capacity.	Select a higher range or ensure the measurement is within the meter's limits.
Incorrect readings	Incorrect function selected, poor test lead connection, or low battery.	Verify function dial setting, check test lead connections, replace batteries.
Current measurement not working	Blown fuse.	Replace the fuse (refer to fuse replacement section).
Multimeter automatically shuts down too quickly	Automatic shut-down feature is active.	This is normal behavior. To disable (if possible, check advanced settings) or simply reactivate by turning the dial.

SPECIFICATIONS

Parameter	Value
Model Number	WP295005
Maximum Display	5999 Counts
DC Voltage Range	0.1mV ~ 600V
AC Voltage Range	1mV ~ 600V
DC Current Range	0.01uA ~ 10A
AC Current Range	0.01uA ~ 10A
Resistance Range	0.1Ω ~ 60MΩ
Capacitance Range	1nF ~ 60000uF
Frequency Range	10Hz ~ 10MHz
Power Supply	2 x AAA Batteries
Automatic Shut-down	Yes
NCV Sensing	Yes
Diode Measurement	Yes

Parameter	Value
Continuity Buzzer	Yes
Flashlight	Yes
Backlight	Yes
Data Hold	Yes
Maximum Operating Voltage	600 Volts
Item Weight	450 g
Package Dimensions	18 x 10 x 5.5 cm



WARRANTY AND SUPPORT

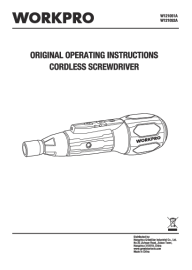

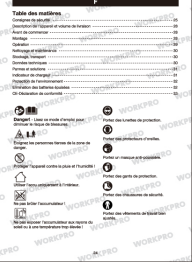
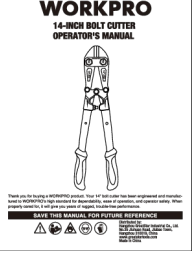
For warranty information or technical support, please refer to the WORKPRO official website or contact your local distributor. Keep your purchase receipt as proof of purchase for any warranty claims.

For further assistance, you may visit the [WORKPRO Store on Amazon](#).

© 2023 WORKPRO. All rights reserved.

Related Documents - WP295005

	<p>WORKPRO 5-Tier Metal Wire Shelving Unit Operator's Manual</p> <p>This manual provides detailed instructions for the safe assembly, use, and maintenance of the WORKPRO 5-Tier Metal Wire Shelving Unit. Learn about safety precautions, product specifications, package contents, step-by-step assembly, and cleaning guidelines.</p>
	<p>WORKPRO 5-Tier Metal Wire Shelving Unit Operator's Manual and Assembly Guide</p> <p>Official operator's manual and assembly guide for the WORKPRO 5-Tier Metal Wire Shelving Unit (Model W082087AE). Includes safety information, specifications, package contents, assembly instructions, and maintenance tips.</p>

	<p>WORKPRO Cordless Screwdriver Operating Instructions</p> <p>Official operating instructions for the WORKPRO Cordless Screwdriver (Models W121051A, W121052A), covering safety, usage, charging, maintenance, and disposal.</p>
	<p>WORKPRO 20V Brushless Cordless Random Orbital Sander - Operating Instructions</p> <p>Official operating instructions for the WORKPRO 20V Brushless Cordless Random Orbital Sander (Model W125228A), covering safety, operation, maintenance, and specifications.</p>
	<p>Manuel d'utilisation de la débroussailleuse sans fil WORKPRO D04003000</p> <p>Manuel d'utilisation complet pour la débroussailleuse sans fil WORKPRO D04003000, couvrant les consignes de sécurité, l'utilisation, la maintenance, le dépannage et les spécifications techniques.</p>
	<p>WORKPRO 14-Inch Bolt Cutter Operator's Manual</p> <p>Operator's manual for the WORKPRO 14-inch Bolt Cutter (Model W017004A), detailing features, operation, safety guidelines, and maintenance instructions. Includes cutting capacities and material compatibility.</p>



[\[pdf\]](#) User Manual Catalog

[illegible]

[WORKPRO 2023 Hand Tools Catalog | Quality Tools for Professionals and DIYers](#)

Explore the WORKPRO 2023 Hand Tools Catalog from GreatStar Industrial, featuring a comprehensive range of high-quality hand tools, power tool accessories, safety equipment, and tool sets for professionals and DIY enthusiasts alike. Discover reliable solutions for every task.

lang:en score:21 filesize: 28.9 M page_count: 133 document date: 2023-02-22

[\[pdf\]](#) Catalog

Untitled CATALOG 4 giorni fa — No 1 industrial diesel engine manufacturer in China GREATSTAR
GROUP COMPANY STAFF 2021 REVENUE LISTED COMPANIES
01WORKPROHANDTOOLSCATALOG 2023 greatstarjapan co jp |||
2023 HAND TOOLS CATALOG COMPANY PROFILE NOT JUST PROFESSIONAL
GREATSTAR GROUP GREATSTAR INDUSTR ... display 5999 Model # DC voltage
AC voltage DC current AC current Resistance Capacitance Frequency **WP295005**
0.1mV-600V 1mV-600V 0.01uA-10A 0.01uA-10A 0.1-60M 1nF-60000uF 10Hz-10MHz
Model # DC voltag...
lang:en **score:9** filesize: 31.96 M page_count: 134 document date: 2022-09-29

