

GOLDEN BLUE ET8101

GOLDEN BLUE ET8101 Professional Digital Multimeter User Manual

Model: WinAPEX ET8101

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your GOLDEN BLUE WinAPEX ET8101 Professional Digital Multimeter. Please read this manual thoroughly before using the device to ensure proper function and to prevent potential hazards. Keep this manual for future reference.

2. SAFETY INFORMATION

WARNING: To avoid electric shock or personal injury, read and understand all safety information before using this multimeter.

- Always ensure the test leads are in good condition and properly connected.
- Do not measure voltage exceeding the maximum rated input of 1000V DC or 750V AC.
- Do not measure current exceeding the maximum rated input of 10A.
- Never use the multimeter if the battery cover is not properly closed.
- Exercise extreme caution when working with voltages above 60V DC or 30V AC RMS.
- Always disconnect the test leads from the circuit before changing functions.
- Replace batteries immediately when the low battery indicator appears.
- Do not operate the meter in explosive gas, vapor, or dusty environments.

3. PRODUCT OVERVIEW

The WinAPEX ET8101 is a professional digital multimeter designed for measuring AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, diode, and continuity. It features a 6000-count display, Non-Contact Voltage (NCV) detection, auto-ranging, and a backlight for clear readings.

ET8101



Figure 3.1: Front view of the WinAPEX ET8101 Digital Multimeter, illustrating the display, function dial, input jacks, and control buttons such as SELECT, HOLD, RANGE, MAX/MIN.

HD BackLight display



Figure 3.2: Close-up of the WinAPEX ET8101's HD backlight display, showing a clear digital readout and screen size of 48x30mm (1.9x1.2in). The backlight ensures visibility in low-light conditions.

3.2. Additional Features

- **Flashlight:** Integrated flashlight for illuminating dark work areas.
- **Data Hold:** Freezes the current reading on the display.
- **MAX/MIN:** Records maximum and minimum values during a measurement.
- **Auto Power Off:** Conserves battery life by automatically turning off after a period of inactivity.
- **Backlight:** Illuminates the display for improved readability.



Figure 3.3: The WinAPEX ET8101 multimeter demonstrating its built-in flashlight, useful for working in dimly lit environments.

4. SETUP

4.1. Unpacking and Inspection

Upon receiving your multimeter, carefully unpack all components. Verify that the following items are present and undamaged:

- WinAPEX ET8101 Digital Multimeter
- Test Leads (one red, one black)
- User Manual (this document)



Figure 4.1: The WinAPEX ET8101 Digital Multimeter, accompanied by its red and black test leads, and the user manual.

4.2. Battery Installation

The WinAPEX ET8101 requires two 1.5V AAA batteries (not included). To install or replace batteries:

1. Ensure the multimeter is turned OFF and disconnect all test leads.
2. Locate the battery compartment on the back of the device.
3. Use a screwdriver to open the battery compartment cover.
4. Insert two 1.5V AAA batteries, observing the correct polarity (+/-).
5. Replace the battery compartment cover and secure it with the screw.

5. OPERATING INSTRUCTIONS

Before any measurement, ensure the test leads are correctly inserted into the appropriate input jacks and the function dial is set to the desired measurement type.

5.1. Auto-Ranging Function

The ET8101 features an auto-ranging function, which automatically selects the appropriate measurement range. This simplifies operation by eliminating the need for manual range selection.

Auto - Range



Figure 5.1: Illustration comparing an auto-range function dial (left) with a traditional non-automatic range dial (right), highlighting the simplicity of auto-ranging.

5.2. Measuring AC/DC Voltage

1. Insert the red test lead into the VΩHzmA input jack and the black test lead into the COM input jack.
2. Turn the function dial to the V~ (AC Voltage) or V— (DC Voltage) position.
3. Connect the test leads in parallel to the circuit or component being measured.
4. Read the voltage value on the display. Use the 'SELECT' button to switch between AC and DC if the dial position covers both.

5.3. Measuring AC/DC Current

1. For current up to 600mA, insert the red test lead into the VΩHzmA input jack. For current up to 10A, insert the red test lead into the 10A input jack. Insert the black test lead into the COM input jack.
2. Turn the function dial to the A~ (AC Current) or A— (DC Current) position.
3. Connect the test leads in series with the circuit.
4. Read the current value on the display. Use the 'SELECT' button to switch between AC and DC if the dial position covers both.

5.4. Measuring Resistance

1. Insert the red test lead into the VΩHzmA input jack and the black test lead into the COM input jack.

2. Turn the function dial to the Ω (Resistance) position.
3. Connect the test leads across the component to be measured. Ensure the circuit is de-energized.
4. Read the resistance value on the display.

5.5. Measuring Capacitance

1. Insert the red test lead into the V Ω HzmA input jack and the black test lead into the COM input jack.
2. Turn the function dial to the $\perp$ (Capacitance) position.
3. Connect the test leads across the capacitor. Ensure the capacitor is discharged before measurement.
4. Read the capacitance value on the display.

5.6. Continuity Test

1. Insert the red test lead into the V Ω HzmA input jack and the black test lead into the COM input jack.
2. Turn the function dial to the $\beth$ (Continuity) position.
3. Connect the test leads across the circuit or component.
4. If continuity exists (resistance below approximately 50 Ω), the buzzer will sound.

5.7. Diode Test

1. Insert the red test lead into the V Ω HzmA input jack and the black test lead into the COM input jack.
2. Turn the function dial to the $\rightarrow|$ (Diode) position.
3. Connect the red test lead to the anode and the black test lead to the cathode of the diode.
4. Read the forward voltage drop on the display. Reverse the leads to check for open circuit.

5.8. Non-Contact Voltage (NCV) Detection

1. Turn the function dial to the NCV position.
2. Move the top end of the multimeter close to the AC voltage source (e.g., a live wire).
3. The meter will indicate the presence of AC voltage through an audible beep and visual indicator on the display.

6. MAINTENANCE

6.1. Cleaning

To clean the multimeter, wipe the case with a damp cloth and a mild detergent. Do not use abrasives or solvents. Ensure the device is completely dry before use.

6.2. Battery Replacement

When the low battery indicator appears on the display, replace the batteries as described in Section 4.2. Prompt battery replacement ensures accurate readings and proper device function.

6.3. Fuse Replacement

If the current measurement function fails, the fuse may need replacement. Refer to the specifications for the correct fuse type and rating. Fuse replacement should only be performed by qualified personnel.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display or dim display	Dead or low batteries	Replace batteries (Section 4.2)
Incorrect readings	Incorrect function selected, poor lead connection, damaged leads	Verify function, check lead connections, replace damaged leads
Current measurement not working	Blown fuse	Replace fuse (Section 6.3)
No continuity beep	Open circuit, high resistance	Check circuit for breaks, ensure resistance is below 50Ω

8. SPECIFICATIONS

Parameter	Value
Display	LCD with Backlight, 5999 counts (5 5/6)
Range Control	Auto Range & Manual Range
Screen Size	48 x 30mm (1.9 x 1.2in)
Operating Environment	IEC61010-1, CAT III 600V
DC Voltage Range	6V/60V/600V/1000V
AC Voltage Range	6V/60V/600V/750V
DC Current Range	600μA/6000μA/60mA/600mA/6A/10A
AC Current Range	600μA/6000μA/60mA/600mA/6A/10A
Frequency Range	10Hz/100Hz/1KHz/10KHz/100KHz/1MHz/10MHz
Resistance Range	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/40MΩ
Capacitance Range	60nF/600nF/6μF/60μF/600μF/6mF/30mF
Duty Cycle	0.1%~99%
Sampling Time	About 3 times/second
Working Temperature/Humidity	0~40°C, <80% RH
Storage Temperature/Humidity	-10~50°C, <70% RH
Power Supply	2 * 1.5V AAA Batteries (Not Included)
Item Size	145 * 70 * 32mm (5.7 * 2.8 * 1.3in)
Item Weight	166g (5.9oz)

9. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or service, please refer to the documentation included with your purchase or contact the manufacturer directly. Specific warranty terms may vary by region and retailer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question