

- Manuals.plus /
- › CSCPEXCZ /
- › CSCPEXCZ GD103B Digital Multimeter User Manual

CSCPEXCZ GD103B

CSCPEXCZ GD103B Digital Multimeter User Manual

Model: GD103B

INTRODUCTION

The CSCPEXCZ GD103B is a high-performance digital multimeter featuring True RMS measurement capabilities. Designed for clarity and ease of use, it offers a superior user experience for professional electricians, hobbyists, and general household applications. This manual provides essential information for the safe and effective operation of your GD103B multimeter.



Image: The CSCPEXCZ GD103B Digital Multimeter shown with its red and black test leads.

SAFETY INFORMATION

To prevent electric shock, personal injury, or damage to the instrument, please read and adhere to the following safety precautions:

- Always observe all safety warnings and operating instructions provided in this manual. Improper use can lead to instrument damage or weakened protection.
- Do not exceed the maximum voltage between terminals and earth ground, which is 600V.
- Exercise extreme caution when working with voltages above 42V AC peak or 60V DC, as these can be hazardous.
- Before each use, inspect the instrument for any cracks or damage to the casing. If any damage is found, do not use the multimeter.
- Ensure the correct fuse is installed for the specified current ranges (F200mA/250V for mA range; F10A/250V for 10A range).

- The multimeter includes a battery protection board. However, always ensure proper battery installation and replacement.
- The instrument automatically displays a "-" for negative input polarity.
- An "OL" display indicates an over-range condition.
- A low battery indication will appear when the battery voltage is insufficient. Replace batteries promptly.

PRODUCT FEATURES

The GD103B Digital Multimeter offers a range of features for accurate and convenient electrical measurements:

- **True RMS:** Provides accurate readings for non-sinusoidal AC waveforms.
- **2000 Counts Display:** High-resolution digital display for precise measurements.
- **Multiple Functions:** Capable of testing DC/AC Voltage, DC Current, Resistance, Diode, and Continuity.
- **Backlight Function:** Illuminates the display for clear readings in low-light conditions.
- **Bracket Design:** Integrated kickstand for convenient hands-free operation.
- **Data Hold:** Freezes the current reading on the display for easy recording.
- **Auto Power Off:** Conserves battery life by automatically shutting down after a period of inactivity.
- **Low Battery Indication:** Alerts the user when batteries need replacement.
- **Manual Mode:** Allows for manual range selection.

Bracket Design



Image: The GD103B multimeter demonstrating its convenient bracket design for angled viewing.

SETUP: BATTERY INSTALLATION

The GD103B multimeter requires two 1.5V AAA batteries for operation. Batteries are not included with the product.

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 battery cover.
4. Insert two 1.5V AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
5. Replace the battery cover and tighten the screw securely.

2*1.5 AAA Batteries

(Battery not include)



Image: The back of the multimeter with the battery compartment open, illustrating the correct placement of two AAA batteries.

OPERATING INSTRUCTIONS

Before taking any measurements, ensure the test leads are properly connected to the multimeter and the circuit under test. Always select the appropriate function and range using the rotary switch.

1. DC Voltage Measurement

- Insert the red test lead into the "VΩmA" jack and the black test lead into the "COM" jack.
- Turn the rotary switch to the DC Voltage (V=) range. Select an appropriate range (200mV, 2V, 20V, 200V, 600V) or use manual mode.
- Connect the test probes across the DC voltage source to be measured.
- Read the voltage value on the display.

2. AC Voltage Measurement

- Insert the red test lead into the "VΩmA" jack and the black test lead into the "COM" jack.
- Turn the rotary switch to the AC Voltage (V~) range. Select an appropriate range (20V, 200V, 600V) or use manual mode.
- Connect the test probes across the AC voltage source to be measured.
- Read the voltage value on the display.



Image: The GD103B multimeter connected to a wall outlet, demonstrating AC voltage measurement.

3. DC Current Measurement

- For current up to 200mA, insert the red test lead into the "VΩmA" jack. For current up to 10A, insert the red test lead into the "10A" jack. Insert the black test lead into the "COM" jack.
- Turn the rotary switch to the DC Current (A=) range. Select an appropriate range (20mA, 200mA, 10A).
- **Important:** Connect the multimeter in series with the circuit to be measured. Do not connect in parallel across a voltage source.
- Read the current value on the display.

4. Resistance Measurement

- Insert the red test lead into the "VΩmA" jack and the black test lead into the "COM" jack.
- Turn the rotary switch to the Resistance (Ω) range. Select an appropriate range (200 Ω , 2k Ω , 20k Ω , 200k Ω , 2M Ω , 20M Ω).
- Ensure the circuit or component is de-energized before measuring resistance.
- Connect the test probes across the component to be measured.
- Read the resistance value on the display.

5. Diode Test

- Insert the red test lead into the "VΩmA" jack and the black test lead into the "COM" jack.
- Turn the rotary switch to the Diode (symbol) position.
- Connect the red probe to the anode and the black probe to the cathode of the diode.
- The display will show the forward voltage drop. Reverse the probes; the display should show "OL" for a good diode.

6. Continuity Measurement

- Insert the red test lead into the "VΩmA" jack and the black test lead into the "COM" jack.
- Turn the rotary switch to the Continuity (symbol) position.
- Connect the test probes across the circuit or component.
- If continuity exists (resistance below a certain threshold), the multimeter will emit an audible beep and display a low resistance value.

7. Backlight Function

- Press the backlight button (often indicated by a light bulb symbol or similar) to turn the display backlight on or off.
- This feature enhances readability in dimly lit environments.

Clear Backlight



Image: The GD103B multimeter's display illuminated by its backlight, showing clear readings in a dark setting.

8. Data Hold Function

- While taking a measurement, press the "HOLD" button to freeze the current reading on the display.
- Press the "HOLD" button again to release the reading and resume live measurement.

MAINTENANCE

- **Cleaning:** Wipe the multimeter casing with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Refer to the "Setup: Battery Installation" section for instructions.
- **Fuse Replacement:** If the current measurement function fails, the fuse may need replacement. Ensure the multimeter is disconnected from all circuits and power off before attempting fuse replacement. Use only specified fuse types (F200mA/250V for mA range; F10A/250V for 10A range).

- **Storage:** If the multimeter is not used for an extended period, remove the batteries to prevent leakage. Store in a cool, dry place away from direct sunlight.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Multimeter does not power on.	Dead or incorrectly installed batteries.	Check battery polarity or replace with new 1.5V AAA batteries.
"OL" (Over Load) displayed.	Measurement exceeds the selected range or maximum input.	Select a higher range or ensure the input does not exceed the multimeter's maximum specifications.
No reading or incorrect reading for current.	Blown fuse or incorrect test lead connection.	Check and replace the fuse if necessary. Ensure test leads are connected in series with the circuit and to the correct current jacks.
Low battery indicator appears.	Batteries are low.	Replace both 1.5V AAA batteries.

TECHNICAL SPECIFICATIONS

- Display:** 2000 Counts
- Input Polarity Indication:** Automatic "-" display
- Sampling Rate:** Approximately 3 times per second
- Over Range Display:** "OL"
- Low Voltage Display:** Low battery indication
- Operating Environment:** Temperature 0°C to 40°C, Humidity <80% RH
- Power Supply:** 2 x 1.5V AAA Batteries (not included)
- Product Size:** 124mm x 65mm x 34mm
- Product Weight:** 109g
- DC Voltage:** 200mV/2V/20V/200V/600V ($\pm(1\%+5)$)
- AC Voltage:** 20V/200V/600V ($\pm(1.0\%+5)$)
- DC Current:** 20mA/200mA/10A ($\pm(1.5\%+5)$)
- Resistance:** 200 Ω /2k Ω /20k Ω /200k Ω /2M Ω /20M Ω ($\pm(1.2\%+5)$)
- Fuse Protection:** F200mA/250V fuse; F10A/250V fuse
- Diode Test:** Yes
- Continuity Measurement:** Yes
- Data Hold:** Yes
- True RMS:** Yes
- Auto Power Off:** Yes
- Backlight:** Yes
- Manual Mode:** Yes

PACKAGE CONTENTS

Upon opening the package, you should find the following items:

- 1 x CSCPEXCZ GD103B Digital Multimeter
- 1 x User Manual (this document)
- 1 x Pair of Test Leads (red and black)
- 1 x Gift Box (packaging)



Image: The GD103B multimeter, its test leads, and the included user manual, as typically found in the package.

WARRANTY AND SUPPORT

For warranty information or technical support regarding your CSCPEXCZ GD103B Digital Multimeter, please refer to the purchase documentation or contact your retailer/seller directly. Keep your proof of purchase for any warranty claims.

© 2024 CSCPEXCZ. All rights reserved.

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

Anonymous

Email

you@example.com

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

Open the live page

<https://manuals.plus/asin/B0D8TN4S5W>

More documents and user manuals: <https://manuals.plus/>