PeakTech P 2035

PeakTech 2035 True RMS Digital Multimeter User Manual

Model: P 2035

Introduction

The PeakTech 2035 is a professional True RMS digital multimeter designed for accurate and reliable electrical measurements. This device features a 3 5/6-digit inverted LCD with backlight, a USB interface for data transfer, and the capability to measure up to 1000 V and 10 A (max 20 A) AC/DC. It includes True RMS and LowZ measurement functions, ensuring precise readings in various applications. This manual provides essential information for the safe and effective operation of your PeakTech 2035 multimeter.

Safety Information

Always adhere to safety precautions when using the multimeter to prevent electric shock or damage to the device.

- The PeakTech 2035 meets safety standard EN 61010-1 and is rated for CAT III 1000 V / CAT IV 600 V.
- Do not attempt to measure voltages or currents exceeding the specified maximum limits.
- Ensure the test leads are in good condition and properly connected before making any measurements.
- Never use the multimeter if it appears damaged or if the battery cover is not securely closed.
- Avoid using the device in wet environments or during electrical storms.
- Always disconnect power to the circuit before connecting or disconnecting test leads for resistance, capacitance, or diode measurements.
- Replace batteries promptly when the low battery indicator appears to ensure accurate readings and proper device function.

Package Contents

Verify that all items listed below are present in your package. If any items are missing or damaged, contact your dealer immediately.

Image: The PeakTech 2035 multimeter and its accessories, including test leads, USB cable, temperature probe, 9V battery, software CD, and a black carrying case.

- PeakTech 2035 Digital Multimeter
- Test Leads (Red and Black)
- USB Connection Cable
- Temperature Probe
- 9V Battery
- Software CD (for data logging)
- Carrying Case
- User Manual (German and English)

Product Overview and Features

The PeakTech 2035 is equipped with a range of features for comprehensive electrical testing.

Image: A detailed view of the PeakTech 2035 multimeter highlighting its measurement capabilities including AC/DC voltage, AC/DC current, resistance, LowZ, frequency, temperature, and USB.

- **True RMS Measurement:** Provides accurate readings for non-sinusoidal waveforms.
- **LowZ Function:** Low impedance voltage measurement to eliminate ghost voltages.
- **Display:** 3 5/6-digit (6000 counts) inverted LCD with bright backlight for clear visibility in all conditions.
- **USB Interface:** Allows data transfer to a computer for logging and analysis using the included software.
- **Measurement Ranges:** Capable of measuring up to 1000 V AC/DC and 10 A AC/DC (20 A for short durations).
- **Safety Rating:** CAT III 1000 V / CAT IV 600 V according to EN 61010-1.
- **Additional Functions:** Includes MAX/MIN, HOLD, REL (Relative measurement), Hz/Duty Cycle, Diode Test, and Continuity Test.

Image: Diagram illustrating the various components of the PeakTech 2035 multimeter, including the 3 5/6-digit LCD, Hz/Duty button, MAX/MIN button, SELECT switch, HOLD/BL button, RANGE button, USB/REL function, rotary switch, 10A input jack, mA input jack, V/Hz/Ω/CAP/TEMP input jack, and COM input jack.

Setup

1. Battery Installation

The PeakTech 2035 is powered by a 9V battery.

1. Ensure the multimeter is turned off.
2. Locate the battery compartment on the back of the device.
3. Unscrew the retaining screw(s) and remove the battery cover.
4. Connect the 9V battery to the battery clips, observing correct polarity.
5. Place the battery inside the compartment and replace the cover, securing it with the screw(s).

2. Connecting Test Leads

Proper connection of test leads is crucial for accurate and safe measurements.

- Always connect the black test lead to the "COM" (Common) input jack.
- For voltage, resistance, frequency, capacitance, diode, and temperature measurements, connect the red test lead to the "V/Hz/Ω/CAP/TEMP" input jack.
- For current measurements up to 600mA, connect the red test lead to the "mA" input jack.
- For high current measurements (up to 10A, or 20A for short durations), connect the red test lead to the "10A" input jack.

Operating Instructions

This section details how to perform various measurements using your PeakTech 2035 multimeter.

1. Power On/Off

Turn the rotary switch from "OFF" to any desired measurement function to power on the device. To power off, turn the rotary switch back to "OFF". The device also features an Auto Power Off (APO) function to conserve battery life.

2. Voltage Measurement (AC/DC)

1. Connect the black test lead to "COM" and the red test lead to "V/Hz/Ω/CAP/TEMP".
2. Turn the rotary switch to the "V~" (AC Voltage) or "V-" (DC Voltage) position.
3. Touch the test probes to the circuit points where you want to measure voltage.
4. The measured voltage will be displayed on the LCD. Use the "SELECT" button to switch between AC and DC if the range includes both.

3. Current Measurement (AC/DC)

Caution: *Never connect the multimeter in parallel to a voltage source when measuring current. Always connect it in series with the load.*

1. Connect the black test lead to "COM".
2. For currents up to 600mA, connect the red test lead to "mA". For currents up to 10A (20A peak), connect the red test lead to "10A".
3. Turn the rotary switch to the "mA~" / "mA-" or "A~" / "A-" position, depending on the expected current range and type (AC/DC).
4. Open the circuit where you want to measure current and connect the multimeter in series.
5. The measured current will be displayed. Use the "SELECT" button to switch between AC and DC.

4. Resistance Measurement (Ω)

1. Connect the black test lead to "COM" and the red test lead to "V/Hz/Ω/CAP/TEMP".
2. Turn the rotary switch to the "Ω" position.
3. Ensure the circuit under test is de-energized.
4. Touch the test probes across the component or circuit section.
5. The resistance value will be displayed.

5. LowZ Measurement

The LowZ function provides a low impedance voltage measurement, which helps to drain ghost voltages that can appear on unused wires or open circuits.

1. Connect the black test lead to "COM" and the red test lead to "V/Hz/Ω/CAP/TEMP".
2. Turn the rotary switch to the "LoZ V~" or "LoZ V-" position.

3. Apply the test probes to the circuit. The multimeter will display the voltage with reduced ghost voltage effects.

6. Frequency (Hz) and Duty Cycle Measurement

1. Connect the black test lead to "COM" and the red test lead to "V/Hz/Ω/CAP/TEMP".
2. Turn the rotary switch to the "Hz" position.
3. Apply the test probes to the signal source.
4. Press the "Hz/Duty" button to toggle between frequency and duty cycle display.

7. Temperature Measurement (°C/°F)

1. Connect the temperature probe to the "V/Hz/Ω/CAP/TEMP" and "COM" input jacks, observing polarity.
2. Turn the rotary switch to the "°C/°F" position.
3. Place the tip of the temperature probe on the object or area whose temperature you wish to measure.
4. The temperature will be displayed. Use the "SELECT" button to switch between Celsius and Fahrenheit.

8. USB Interface and Data Logging

The PeakTech 2035 features a USB interface for connecting to a computer and using the included "PeakTech DMM Tool" software for data logging and analysis.

1. Install the "PeakTech DMM Tool" software from the provided CD onto your computer.
2. Connect the multimeter to your computer using the supplied USB cable.
3. Turn the rotary switch to a measurement function that supports data logging (e.g., V, A, Ω).
4. Launch the software on your computer and follow the on-screen instructions to establish a connection and begin data logging.

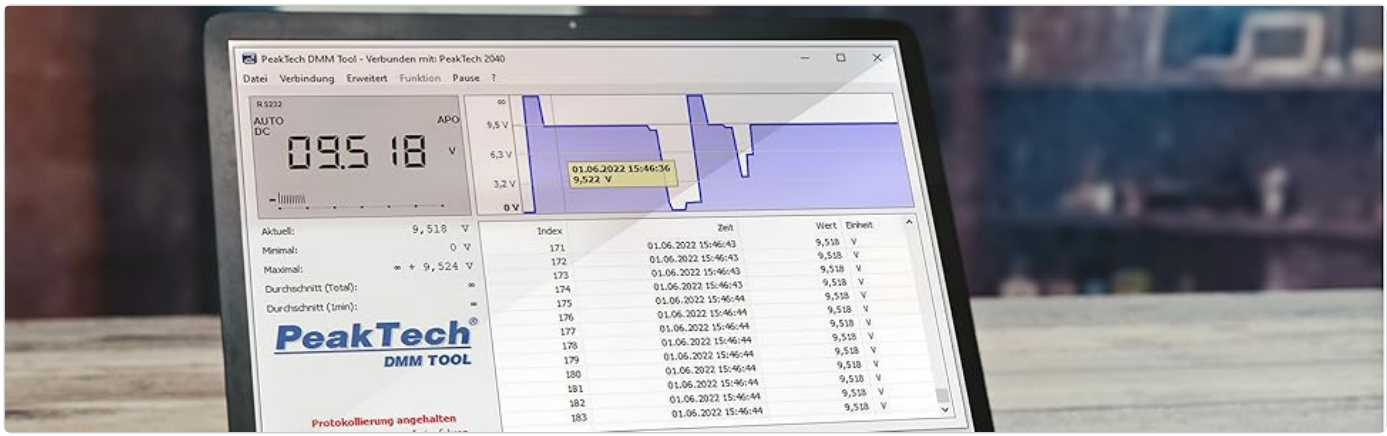

Image: A laptop screen showing the "PeakTech DMM Tool" software interface, displaying a graph and table of logged measurement data, indicating the multimeter's data transfer capability.

Maintenance

1. Battery Replacement

When the low battery indicator appears on the display, replace the 9V battery immediately to ensure accurate readings. Follow the battery installation steps outlined in the "Setup" section.

2. 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.

3. Fuse Replacement

If the current measurement function fails, the fuse may need replacement. Refer to the full user manual for detailed instructions on fuse replacement, as this typically requires opening the device and should only be performed by qualified personnel.

Troubleshooting

- **No display or faint display:** Check battery charge. Replace the 9V battery if necessary.
- **Incorrect readings:**
  - Ensure test leads are correctly connected to the appropriate input jacks.
  - Verify the rotary switch is set to the correct measurement function and range.
  - Check for damaged test leads.
  - For current measurements, ensure the fuse is intact.
- **"OL" or "OVER" displayed:** The measured value exceeds the selected range. Switch to a higher range or verify the circuit is within the device's capabilities.
- **USB connection issues:**
  - Ensure the USB cable is securely connected to both the multimeter and the computer.
  - Verify that the "PeakTech DMM Tool" software is correctly installed and running.
  - Check device manager for proper driver installation.

Specifications

Feature	Specification
Display	3 5/6-digit (6000 counts) inverted LCD with backlight
True RMS	Yes
LowZ Function	Yes
DC Voltage (V DC)	Up to 1000 V
AC Voltage (V AC)	Up to 1000 V
DC Current (A DC)	Up to 10 A (20 A for max. 30 sec)
AC Current (A AC)	Up to 10 A (20 A for max. 30 sec)
Resistance (Ω)	Yes
Frequency (Hz)	Yes
Duty Cycle	Yes
Capacitance (F)	Yes
Temperature (°C/°F)	Yes
Diode Test	Yes
Continuity Test	Yes
USB Interface	Yes, for data transfer

Feature	Specification
Power Source	9V Battery
Safety Rating	EN 61010-1; CAT III 1000 V / CAT IV 600 V
Dimensions	Approx. 22.7 x 16.1 x 7.6 cm
Weight	Approx. 860 g

Warranty and Support

Warranty Information

The PeakTech 2035 Digital Multimeter comes with a **3-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

Image: A badge indicating "3 Years Manufacturer Warranty".

Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact PeakTech customer support. Refer to the official PeakTech website or the contact information provided in your product packaging for the most up-to-date support details.
Note: Guaranteed software updates until: unknown.

Product Videos

No official product videos from the seller are available for embedding at this time. Please refer to the written instructions and diagrams for guidance.