

Southwire AMMW1

Woods AMMW1 Analog Multimeter Instruction Manual

Model: AMMW1 | Brand: Southwire

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective operation, maintenance, and troubleshooting of the Woods AMMW1 Analog Multimeter. Please read this manual thoroughly before using the device and retain it for future reference.

The Woods AMMW1 is a versatile analog multimeter designed for basic electrical measurements, offering 5 functions with up to 16 measuring ranges. It is rated CAT II 500V UL.

2. SAFETY INFORMATION

WARNING: To avoid electric shock or personal injury, always follow basic safety precautions when using this instrument.

- Always ensure the test leads are in good condition and properly connected.
- Do not attempt to measure voltages or currents exceeding the maximum rated values for each range.
- Always turn off power to the circuit under test before connecting or disconnecting test leads.
- Be cautious when working with voltages above 30V AC RMS, 42V peak, or 60V DC, as they pose a shock hazard.
- Replace the battery and fuse only with the specified types.
- Do not operate the multimeter if it appears damaged or if the case is open.

3. PRODUCT OVERVIEW

The Woods AMMW1 Analog Multimeter features a clear analog display and a rotary selector for various measurement functions.

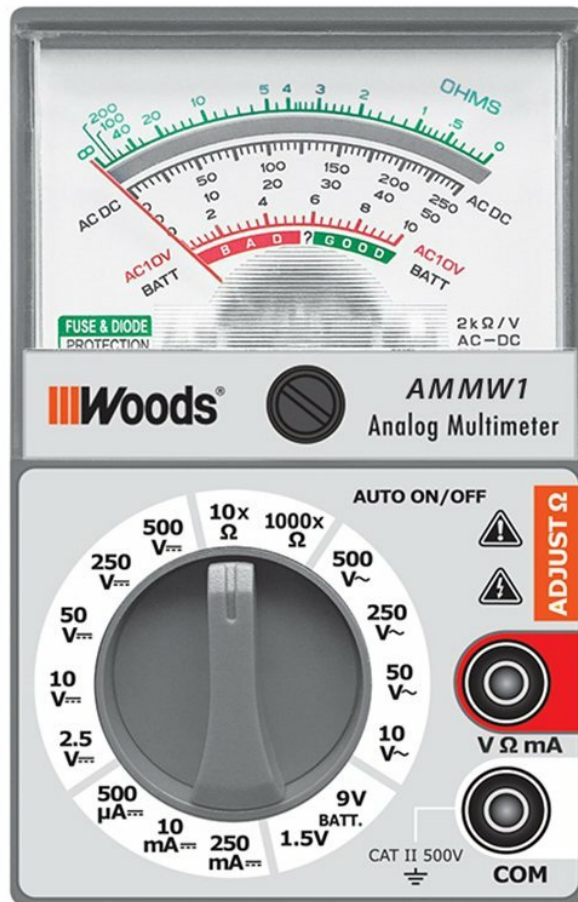


Figure 1: Woods AMMW1 Analog Multimeter. This image displays the front of the multimeter, showing the analog display with various scales (OHMS, AC DC, AC10V BATT), the Woods logo, the model number AMMW1, the rotary function selector switch, and the input jacks for VΩmA and COM. An 'ADJUST Ω' knob is visible on the right side, and 'FUSE & DIODE PROTECTION' is indicated below the display.

3.1 Key Components

1. **Analog Display:** Shows measurement readings using a needle against various scales.
2. **Rotary Function Selector:** Used to select the desired measurement function and range (e.g., ACV, DCV, Resistance, Current, Battery Test).
3. **VΩmA Input Jack:** Positive (+) input for voltage, resistance, and current measurements.
4. **COM Input Jack:** Common/Negative (-) input for all measurements.
5. **OHMS Adjustment Knob:** Used to zero the meter for resistance measurements.
6. **Battery Test Sockets:** Dedicated sockets for testing 1.5V and 9V batteries.

4. SETUP

4.1 Battery Installation

The Woods AMMW1 requires 1 AA battery (included) for operation. To install or replace the battery:

1. Ensure the multimeter is turned off (selector switch to OFF position, if available, or a non-measurement

range).

2. Locate the battery compartment cover on the back of the unit.
3. Remove the screw(s) securing the cover and carefully open it.
4. Insert the AA battery, observing the correct polarity (+ and - markings).
5. Replace the cover and secure it with the screw(s).

4.2 Connecting Test Leads

- Insert the black test lead into the **COM** (Common) jack.
- Insert the red test lead into the **VΩmA** jack for most measurements (voltage, resistance, current).

5. OPERATING INSTRUCTIONS

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

5.1 Measuring DC Voltage (V-)

1. Set the rotary selector to the desired DC Voltage (V-) range (e.g., 2.5V, 10V, 50V, 250V, 500V). Choose a range higher than the expected voltage.
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 from the appropriate DCV scale on the analog display.

5.2 Measuring AC Voltage (V~)

1. Set the rotary selector to the desired AC Voltage (V~) range (e.g., 10V, 50V, 250V, 500V). Choose a range higher than the expected voltage.
2. Connect the test leads across the AC voltage source.
3. Read the voltage value from the appropriate ACV scale on the analog display.

5.3 Measuring Resistance (Ω)

1. Set the rotary selector to the desired Resistance (Ω) range (e.g., 10x Ω, 1000x Ω).
2. Short the red and black test leads together.
3. Adjust the **OHMS ADJUST** knob until the needle points exactly to '0' on the OHMS scale. This zeros the meter.
4. Connect the test leads across the component whose resistance you wish to measure. Ensure the component is de-energized.
5. Read the value from the OHMS scale and multiply it by the range multiplier (e.g., x10, x1000).

5.4 Measuring DC Current (mA, μA)

1. **WARNING:** Never connect the multimeter in parallel with a voltage source when measuring current. Always connect it in series with the circuit.
2. Set the rotary selector to the desired DC Current (mA or μA) range (e.g., 500 μA, 10 mA, 250 mA).
3. Break the circuit where you want to measure current.
4. Connect the multimeter in series with the circuit, ensuring the red lead is towards the higher potential and the black lead towards the lower potential.
5. Read the current value from the appropriate scale.

5.5 Battery Testing (1.5V, 9V)

1. Set the rotary selector to the **1.5V BATT** or **9V BATT** position.
2. Insert the battery to be tested into the corresponding battery test sockets, observing polarity.
3. Read the battery condition from the dedicated "BAD / GOOD" scale on the analog display.

6. MAINTENANCE

6.1 Cleaning

Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents. Keep the test leads clean and free of debris.

6.2 Fuse Replacement

The multimeter is equipped with fuse and diode protection. If the current measurement function stops working, the fuse may need replacement.

1. Ensure the multimeter is turned off and test leads are disconnected.
2. Open the back cover of the multimeter (refer to battery installation).
3. Carefully remove the old fuse.
4. Replace with a fuse of the exact same type and rating (consult the device's internal markings or specifications for fuse type).
5. Securely close the back cover.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No reading / Needle doesn't move	Dead battery; Incorrect range selected; Open circuit; Faulty test leads.	Check/replace battery; Select appropriate range; Verify circuit continuity; Check test leads for damage.
Inaccurate readings	Incorrect range; Poor contact; OHMS not zeroed (for resistance).	Select a more appropriate range; Ensure good contact with test points; Zero OHMS before resistance measurement.
Current measurement not working	Blown fuse.	Replace the fuse (refer to Maintenance section).

8. SPECIFICATIONS

- **Model:** AMMW1
- **Brand:** Southwire (Woods)
- **Measurement Type:** Analog Multimeter
- **Functions:** 5 (DC Voltage, AC Voltage, DC Current, Resistance, Battery Test)
- **Measuring Ranges:** Up to 16
- **Maximum Operating Voltage:** CAT II 500V
- **Battery:** 1 AA battery (included)
- **Battery Test:** 1.5V, 9V
- **Product Dimensions:** 21.79 x 12.9 x 5.59 cm
- **Item Weight:** 136 g






- **Compliance:** UL
- **UPC:** 032886958403

9. WARRANTY AND SUPPORT

For warranty information or technical support, please contact Southwire customer service. Retain your proof of purchase for warranty claims.

Note: Specific warranty terms and contact details may vary by region. Please refer to the packaging or manufacturer's website for the most current information.

Related Documents - AMMW1

	<p>Woods 24-Hour Outdoor Mechanical Timer with 2 Outlets - Models 50123 & 50124</p> <p>User manual and specifications for the Woods 24-Hour Outdoor Mechanical Timer, featuring two grounded outlets. Includes installation instructions, programming guide, electrical ratings, warranty information, and FCC compliance details for models 50123 (1/2 HP) and 50124 (3/4 HP).</p>
	<p>Woods Outdoor 24 Hour Mechanical Timer with Photocell - Models 50121 & 50122</p> <p>User guide for the Woods 24-hour mechanical outdoor timer with photocell. Includes installation instructions, timer settings, troubleshooting tips, specifications, warranty information, and FCC compliance details for models 50121WD and 50122WD.</p>
	<p>Woods Wireless Remote Control Outlet 50125/50125-R User Manual</p> <p>User manual for the Woods 50125/50125-R Wireless Remote Control Outlet. Provides instructions on installation, pairing, troubleshooting, specifications, safety warnings, and warranty information.</p>
	<p>Woods 50101WD 24-Hour Mechanical Timer with 1 Polarized Outlet: User Instructions</p> <p>User manual for the Woods 50101WD 24-hour mechanical timer. Provides detailed instructions on setting time, programming schedules, connecting devices, specifications, warnings, warranty, and FCC compliance for this single polarized outlet timer.</p>
	<p>Southwire Grasshopper Pipe Dolly Operator's Manual</p> <p>Operator's manual for the Southwire Grasshopper Pipe Dolly, detailing instructions for attaching and detaching pipe, safety information, and product specifications.</p>



OPERATOR'S MANUAL

Cricket™ Pipe Dolly



READ AND UNDERSTAND ALL OF THE INSTRUCTIONS AND
SAFETY INFORMATION IN THIS MANUAL BEFORE OPERATING
OR REPAIRING THIS TOOL.

[Southwire Cricket Pipe Dolly Operator's Manual](#)

This manual provides operating instructions, safety information, and product specifications for the Southwire Cricket Pipe Dolly. It includes assembly details and warranty information.