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› [Runleader](#) /

› Runleader HM009 DC 6V-80V Mechanical Hour Meter Instruction Manual

Runleader HM009

Runleader HM009 DC 6V-80V Mechanical Hour Meter Instruction Manual

Model: HM009

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Runleader HM009 DC 6V-80V Mechanical Hour Meter. Please read this manual thoroughly before use to ensure proper function and longevity of the device.

PRODUCT OVERVIEW

The Runleader HM009 is a reliable mechanical hour meter designed to track the operating hours of various DC-powered equipment. It features a snap-in design for easy installation and a clear 6-digit display.

Key Features:

- **Wide Voltage Range:** Operates on DC 6V to 80V.
- **Total Hours Accumulation:** Tracks total running hours up to 99999.9 hours with 0.1-hour resolution.
- **Clear Display:** 6-digit display with 7 mm digits for easy readability.
- **Snap-in Installation:** Designed for simple panel mounting into a 2-inch round hole.
- **Data Retention:** Automatic data storage for over 25 years, even without external power.
- **Durable Construction:** Features a PC display window and ABS housing.



Figure 1: Front view of the Runleader HM009 Mechanical Hour Meter, showing the 6-digit display and "HOURS QUARTZ" labeling.

SPECIFICATIONS

Operating Voltage	DC 6V-80V
Resolution	0.1 hours
Display Range	0 to 99999.9 hours
Display Digits	6 digits, 7 mm height
Data Storage	Automatic, up to 25+ years
Material	PC (display window), ABS (housing)

Mounting Cut-out	2-inch round hole (approx. 50.8 mm)
Meter Depth (behind panel)	1.5 inches (approx. 38.1 mm)
Dimensions (L x W x H)	Approx. 2.36 x 2.36 x 1.71 inches (60 x 60 x 43.4 mm)
Item Weight	72 Grams (2.54 ounces)



Figure 2: Diagram illustrating the dimensions and working voltage range of the Runleader HM009 Hour Meter.

INSTALLATION INSTRUCTIONS

- 1. **Prepare Mounting Hole:** Cut a 2-inch (approximately 50.8 mm) round hole in the desired mounting panel. Ensure the panel material thickness does not exceed 9/32 inch (approximately 7.1 mm).
- 2. **Insert Meter:** Gently push the hour meter into the prepared hole from the front of the panel.
- 3. **Secure with Retainer Clip:** Use the adjustable retainer clip (included) to secure the meter from the back of the panel. Ensure it is

firmly seated to prevent movement.

4. Wiring:

- Identify the positive (+) and negative (-) pins on the back of the hour meter.
- Connect the positive (+) terminal of your DC power source (6V-80V) to the positive (+) pin of the hour meter.
- Connect the negative (-) terminal of your DC power source to the negative (-) pin of the hour meter.
- For controlled operation, you can integrate a key-switch, thermostat, automatic switch, or manual switch into the positive power line to turn the meter on or off.

5. **Verify Connection:** Double-check all connections to ensure they are secure and correctly polarized before applying power.

Snap-in Design

Keep the mount more stable

PC

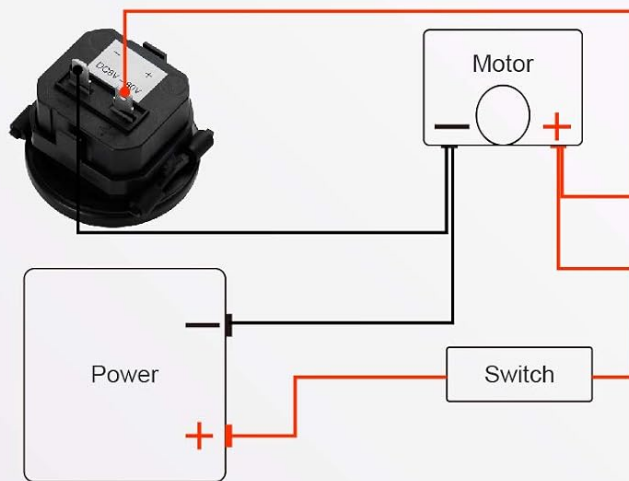
Display window

ABS

Whole Housing



Figure 3: Illustration of the snap-in design for stable mounting of the hour meter.



Working data will be retained up to 25 years+.

Figure 4: Basic wiring diagram for the Runleader HM009 Hour Meter, showing connections to power and an optional switch. Data is retained for over 25 years.

Included Accessories:

- Mounting bracket (retainer clip)
- Insert spring (2)
- Spring sheath (2)



Product*1
Insert spring*2
Spring sheath*2

Figure 5: The Runleader HM009 Hour Meter shown with its included accessories: insert springs and spring sheaths.

OPERATING INSTRUCTIONS

The Runleader HM009 hour meter operates automatically once correctly wired and powered. It is a mechanical timer that accumulates total operating hours whenever power is supplied within its specified voltage range (DC 6V-80V).

- **Power On:** When the meter receives power, the internal mechanism will begin to count and display the accumulated hours.
- **Reading Display:** The 6-digit display shows the total accumulated hours. The last digit (after the decimal point) represents tenths of an hour. For example, "00000.1" means 0.1 hours.
- **Power Off:** When power is removed, the meter stops counting. The accumulated data is automatically stored and retained for over 25 years, ensuring no loss of recorded hours.
- **Resetting:** This mechanical hour meter does not have a reset function. It is designed to provide a continuous, non-resettable record of total operating hours.

MAINTENANCE

The Runleader HM009 Mechanical Hour Meter is designed for maintenance-free operation. Follow these general guidelines to ensure its longevity:

- **Cleaning:** Wipe the display window and housing with a soft, dry cloth. Avoid using abrasive cleaners or solvents, which may damage the plastic.
 - **Environmental Conditions:** Ensure the meter is installed in an environment within its specified operating temperature range and protected from excessive moisture or direct water spray, unless specifically rated for such conditions.
 - **Wiring Inspection:** Periodically check the wiring connections for any signs of corrosion or loosening. Ensure all connections remain secure.
 - **No Internal Servicing:** The meter contains no user-serviceable parts. Do not attempt to open or repair the unit, as this will void any potential warranty.
-

TROUBLESHOOTING

If your Runleader HM009 hour meter is not functioning as expected, consider the following common issues and solutions:

- **Meter Not Counting:**
 - **Check Power Supply:** Verify that the DC power source is providing voltage within the 6V-80V range.
 - **Inspect Wiring:** Ensure the positive (+) and negative (-) connections are correctly wired and secure. Loose or incorrect wiring will prevent operation.
 - **Check for Breaks:** Look for any breaks or damage in the power wires.
- **Inaccurate Reading:**
 - The meter is mechanical and designed for high accuracy (0.1 hour). If you suspect inaccuracy, re-verify the power supply is stable and within the specified voltage range.
 - Note that the meter accumulates hours only when powered. Ensure the power source is consistently active during the desired measurement period.
- **Display Not Visible:**
 - Ensure adequate lighting for the mechanical display.
 - If the display appears stuck or damaged, the unit may require replacement.

If troubleshooting steps do not resolve the issue, please contact Runleader customer support for further assistance.

TYPICAL APPLICATIONS

The Runleader HM009 Mechanical Hour Meter is suitable for a wide range of equipment requiring accurate tracking of operating hours for maintenance scheduling, warranty purposes, or usage monitoring. Common applications include:

- Lawn Mowers and Garden Equipment
- Generators and Compressors
- ATVs, UTVs, and Snowmobiles
- Tractors and Agricultural Machinery
- Vehicles, Cars, Trucks, and Fork Lifts
- Marine Equipment
- Other DC-powered industrial or recreational equipment

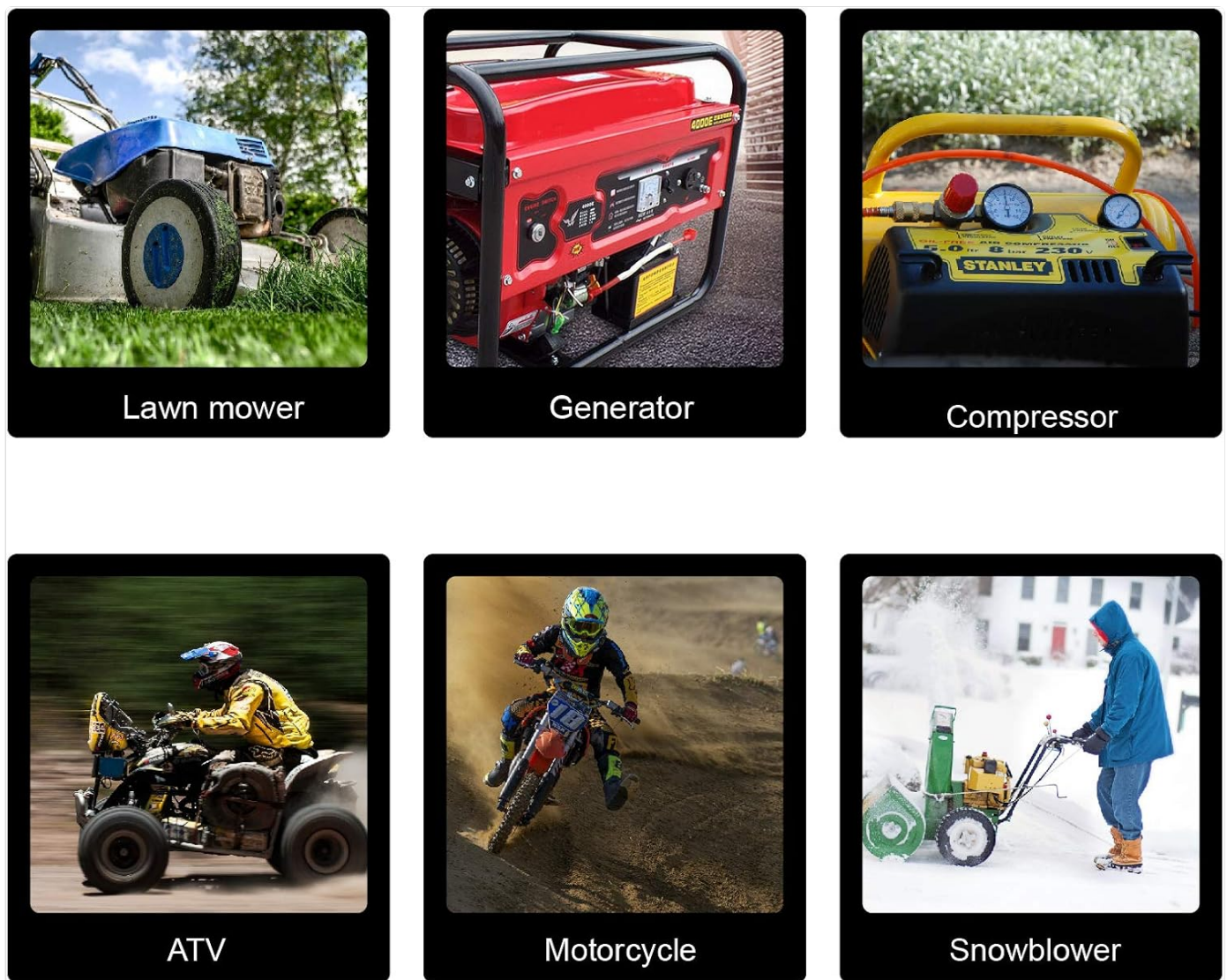


Figure 6: Visual examples of various equipment types compatible with the Runleader HM009 Hour Meter, including lawn mowers, generators, compressors, ATVs, motorcycles, and snowblowers.

WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your Runleader HM009 Mechanical Hour Meter, please refer to the official Runleader website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.

Manufacturer: Ningbo Jiangbei Run Leader Electronics Co., Ltd

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

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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