**Extech MM750W**

# Extech MM750W Datalogging True RMS Multimeter User Manual

Model: MM750W

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## 1. INTRODUCTION

This manual provides instructions for the safe and effective use of the Extech MM750W Datalogging True RMS Multimeter. The MM750W is a robust, full-featured multimeter designed for professional use, offering 14 functions including non-contact AC voltage detection and Type K temperature measurements. Its CAT IV safety rating ensures protection in industrial environments. A key feature is its wireless datalogging capability via Bluetooth, allowing real-time data transmission to smart devices using the ExView W-Series app.
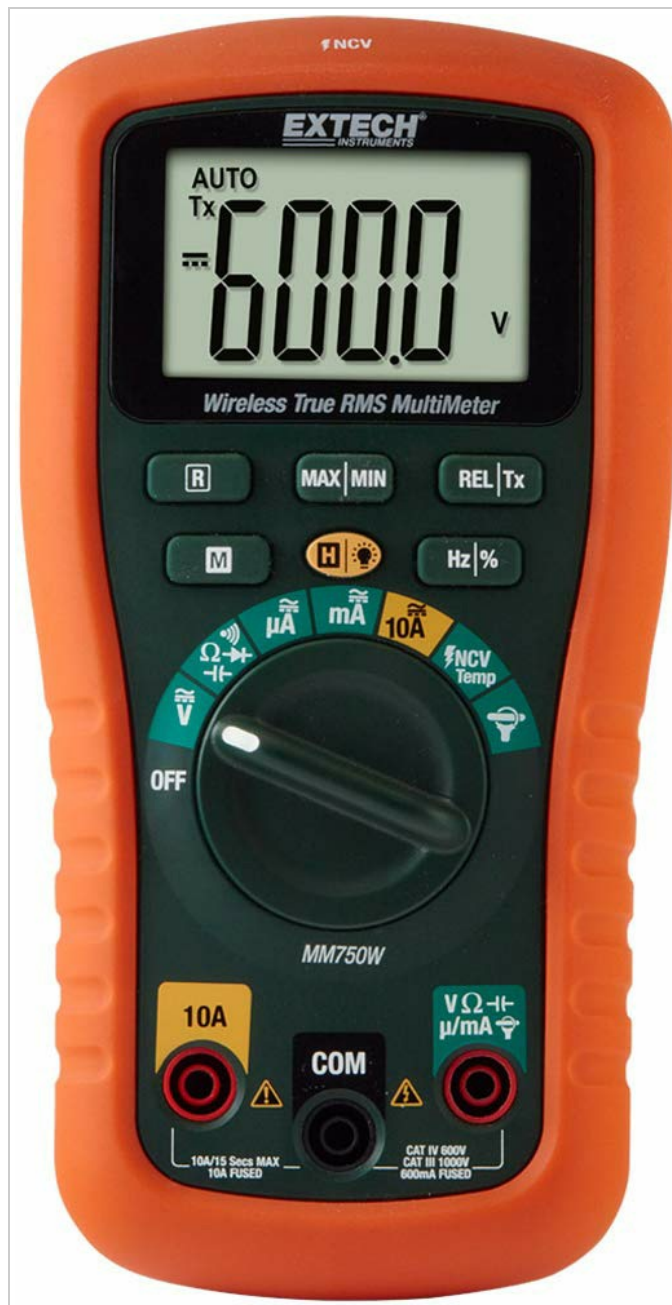
Figure 1: Front view of the Extech MM750W Datalogging True RMS Multimeter, showing the display, function dial, and input jacks.

## 2. SAFETY INFORMATION

**WARNING: Read and understand all safety information and operating instructions before using this meter. Failure to do so may result in serious injury or death.**

- Always adhere to local and national safety codes.
- Do not use the meter if it appears damaged or if the test leads are damaged.
- Ensure the function switch is in the correct position for the measurement being performed.
- Observe all terminal ratings and never exceed the maximum input limits.
- Use caution when working with voltages above 30V AC RMS, 42V peak, or 60V DC, as these pose a shock hazard.
- Wear appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves.
- The MM750W is rated for CAT IV 600V and CAT III 1000V. Understand the implications of these categories for safe measurement.

## 3. KEY FEATURES

- **Wireless Datalogging:** Records and transmits over 15,000 readings to iOS and Android devices via Bluetooth Datalogging Module (DAT12) for remote viewing using the free ExView W-Series app.
- **14 Measurement Functions:** Includes AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency, Duty Cycle, Diode Test, Continuity, Non-Contact AC Voltage (NCV), and Type K Temperature.

- **True RMS:** Provides accurate AC measurements for non-sinusoidal waveforms.
- **AC μA Function:** Ideal for HVAC flame rod current measurements.
- **Data Capture:** Allows snapshots of the measurement area with a connected smartphone or tablet camera to document date/time stamps and measurement data.
- **CAT IV Safety Rating:** Provides enhanced protection in industrial environments.

# 4. WHAT'S IN THE BOX

Verify that all items are present and undamaged upon unpacking:

- Extech MM750W Multimeter
- Test Leads (one red, one black)
- Type K Bead Wire Temperature Probe
- Bluetooth Datalogging Module (DAT12)
- 9V Battery (installed or separate)
- Soft Carrying Case



Figure 2: The Extech MM750W Multimeter shown with its complete set of accessories, including test leads, a Type K temperature probe, the DAT12 Bluetooth module, and a soft carrying case.

# 5. SETUP

## 5.1. Battery Installation

1. Ensure the meter is turned OFF.

2. Locate the battery compartment on the rear of the meter.

3. Use a screwdriver to remove the screw securing the battery cover.

4. Carefully remove the battery cover.

5. Connect a 9V battery to the battery clips, observing correct polarity.

6. Place the battery into the compartment and replace the cover, securing it with the screw.

## 5.2. Test Lead Connection

Always connect the test leads correctly for the desired measurement function.

- For most voltage, resistance, continuity, and diode measurements, insert the red test lead into the VΩµA input jack and the black test lead into the COM input jack.
- For current measurements up to 600mA, insert the red test lead into the VΩµA input jack and the black test lead into the COM input jack.
- For current measurements up to 10A, insert the red test lead into the 10A input jack and the black test lead into the COM input jack.



Figure 3: Rear view of the Extech MM750W Multimeter, showing the integrated test lead holders and the battery compartment cover. The test leads are shown connected and stored.

## 5.3. Bluetooth Datalogging Module (DAT12)

The DAT12 module enables wireless communication with smart devices.

1. Insert the DAT12 module into the dedicated port on the top of the multimeter.
2. Download the free ExView W-Series app from your device's app store (iOS or Android).
3. Enable Bluetooth on your smart device.
4. Open the ExView W-Series app and follow the on-screen instructions to pair with the MM750W.

# 6. OPERATION

## 6.1. Basic Measurements

Turn the rotary switch to the desired function. The display will show the measurement value.

- **Voltage (V~, V-):** Select AC or DC voltage. Connect test leads in parallel with the circuit.
- **Current (A~, A-):** Select AC or DC current. Connect test leads in series with the circuit. Ensure correct input jack (µA/mA or 10A).
- **Resistance (Ω):** Turn off power to the circuit. Connect test leads across the component.
- **Continuity ()))):** Turn off power. Connect test leads across the circuit. A tone indicates continuity.
- **Diode Test (→|):** Turn off power. Connect test leads across the diode.



Figure 4: An electrician safely measuring voltage within an electrical panel using the Extech MM750W Multimeter. The meter's display is visible, showing a reading.

## 6.2. Advanced Functions

- **Non-Contact AC Voltage (NCV):** Position the top of the meter near an AC voltage source. The NCV indicator will illuminate, and an audible tone will sound if AC voltage is detected.
- **Type K Temperature (Temp):** Insert the Type K bead wire probe into the VΩµA and COM jacks (observing polarity). Select the temperature function.
- **MAX/MIN:** Press the MAX/MIN button to record the maximum and minimum readings during a measurement session.
- **Relative Mode (REL):** Press the REL button to store the current reading as a reference and display subsequent measurements as a deviation from this reference.
- **Frequency/Duty Cycle (Hz/%):** Select the appropriate function to measure frequency or duty cycle of an AC signal.



Figure 5: A technician using the Extech MM750W Multimeter with its Type K temperature probe to measure the temperature of a furnace flue, demonstrating the meter's temperature measurement capability.

## 6.3. Datalogging and Bluetooth Connectivity

The ExView W-Series app enhances the functionality of your MM750W.

1. Ensure the DAT12 module is connected and the meter is paired with your smart device via the ExView W-Series app.
2. Within the app, you can view real-time readings, initiate datalogging sessions, and configure logging intervals.
3. The app allows you to generate reports, analyze collected data, and add notes or photos (taken with your smart device camera) to specific readings for comprehensive documentation.

4.  Your smart device can also serve as a second display for convenient viewing or sharing of measurements from a safe distance.

## 7. Maintenance

### 7.1. Cleaning

Wipe the meter's case with a damp cloth and mild detergent. Do not use abrasives or solvents. Ensure the meter is completely dry before use.

### 7.2. Battery Replacement

When the battery symbol appears on the display, replace the 9V battery as described in Section 5.1. Prompt battery replacement ensures accurate readings and proper meter function.

## 8. Troubleshooting

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
| Meter does not power on. | Dead or improperly installed battery. | Replace or correctly install the 9V battery. |
| Inaccurate readings. | Incorrect function selected; damaged test leads; low battery. | Verify function switch position; inspect/replace test leads; replace battery. |
| Bluetooth connection issues. | DAT12 module not properly inserted; Bluetooth disabled on smart device; app not open. | Ensure DAT12 is fully inserted; enable Bluetooth; open ExView W-Series app and retry pairing. |
| "OL" displayed. | Overload, measurement exceeds meter's range. | Ensure measurement is within the meter's specified range for the selected function. |

## 9. Specifications

| Parameter | Value |
|-----------|-------|
| Model Number | MM750W |
| Brand | Extech |
| Product Dimensions | 2.2 x 7.7 x 3.7 inches |
| Item Weight | 16 ounces (1 Pound) |
| Power Source | Battery Powered (9V) |
| Safety Rating | CAT IV 600V, CAT III 1000V |
| Datalogging Capacity | 15,000 readings |
| Connectivity | Bluetooth (via DAT12 module) |
| True RMS | Yes |
| Non-Contact AC Voltage (NCV) | Yes |
| Temperature Measurement | Type K |

## 10. Warranty and Support

Extech Instruments provides a warranty for this product against defects in materials and workmanship. Specific warranty terms and duration may vary by region and purchase date. Please refer to the warranty card included with your product or visit the official Extech website for detailed warranty information.

For technical support, service, or replacement parts, please contact Extech Customer Service. Contact information can typically be found on the Extech website or in the documentation accompanying your product.