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UEi Test Instruments EM720SPKIT

UEi EM720SPKIT Static Pressure Hi-Res Differential Manometer Kit User Manual

Model: EM720SPKIT

1. Product Overview and Kit Contents

The UEi EM720SPKIT is a comprehensive kit designed for precise measurement of static and differential pressure, crucial for HVAC/R technicians and professionals. It includes the EM720 manometer and various accessories to facilitate accurate readings in diverse applications.

Figure 1: The EM720SPKIT includes the EM720 manometer, various probes, tubing, fittings, and a soft carrying case for convenient transport and storage. The manometer displays pressure readings and temperature.

1.1. What's in the Box

- EM720 Manometer (High resolution differential manometer with temperature compensation)
- Stepped T Fitting (2)
- Static Pressure Probe (2)
- Pressure Tubing with Brass Fitting (2)
- Step Connector with 3.15-inch Tubing (2)
- 60-inch Pressure Tube
- Batteries (pre-installed or included)
- Soft Carrying Case
- User Manual (this document)

2. Safety Information

Please read and understand all safety warnings and operating instructions before using this instrument. Failure to do so may result in injury or damage to the instrument.

- Always wear appropriate personal protective equipment (PPE) when working with pressure systems.
- Do not exceed the maximum pressure rating of ±80 in WC.
- Ensure all connections are secure before applying pressure.
- Do not expose the instrument to extreme temperatures, humidity, or corrosive environments.
- Remove batteries if the instrument is not used for an extended period to prevent leakage.
- Refer to local regulations and industry standards for specific application safety guidelines.

3. Setup

3.1. Battery Installation

1. Locate the battery compartment cover on the rear of the EM720 manometer.
2. Open the cover by sliding or unscrewing it.
3. Insert the included batteries, observing the correct polarity (+ and -) as indicated inside the compartment.
4. Replace the battery compartment cover securely.

3.2. Connecting Probes and Tubing

The EM720SPKIT includes various accessories for different measurement scenarios:

- **Static Pressure Measurement:** Connect one static pressure probe to an input port (P1 or P2) on the top of the manometer using the pressure tubing.
- **Differential Pressure Measurement:** Connect tubing from two different pressure points to both input ports (P1 and P2). Ensure P1 is connected to the higher pressure side and P2 to the lower pressure side for positive differential readings.
- **Using Fittings:** Utilize the stepped T fittings and step connectors as needed to adapt to different port sizes or to

create a manifold for specific test setups.

Always ensure connections are snug to prevent pressure leaks, which can affect measurement accuracy.

4. Operating Instructions

4.1. Power On/Off

- To power on the EM720, press the **POWER** button (typically marked with a circle and vertical line symbol).
- To power off, press and hold the **POWER** button until the display turns off. The instrument may also have an auto-power off feature to conserve battery life.

4.2. Zeroing the Manometer

Before taking measurements, it is crucial to zero the manometer to ensure accuracy. Disconnect all pressure tubing from the input ports (or ensure both ports are open to ambient air) and allow the instrument to stabilize.

- Press the **DIF ZERO** button. The display should show a reading close to zero.
- If the reading does not zero, ensure no pressure is applied to the ports and repeat the zeroing process.

4.3. Selecting Measurement Units

The EM720 supports multiple pressure units.

- Press the **UNITS** button to cycle through available pressure units (e.g., in WC, Pa, kPa, psi, mbar, mmHg).
- Select the unit appropriate for your application.

4.4. Data Hold, Min/Max/Avg Functions

- **HOLD:** Press the **HOLD** button to freeze the current reading on the display. Press again to release.
- **MIN/MAX/AVG:** Press the **REC MAX/MIN** button to enter recording mode. Subsequent presses will cycle through Minimum, Maximum, and Average readings captured since entering the mode. Press and hold to exit recording mode.

4.5. Temperature Measurement

The EM720 also provides ambient temperature measurement, displayed alongside pressure readings. This feature aids in understanding environmental conditions that may affect pressure readings.

5. Maintenance

5.1. Cleaning

- Wipe the instrument's exterior with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents.
- Ensure no moisture enters the pressure ports or other openings.

5.2. Storage

- Store the EM720SPKIT in its soft carrying case when not in use to protect it from dust, dirt, and physical damage.
- Store in a cool, dry place, away from direct sunlight and extreme temperatures.
- Remove batteries if storing for extended periods to prevent battery leakage and potential damage to the

instrument.

5.3. Calibration

For continued accuracy, it is recommended to have the EM720 manometer calibrated periodically by a qualified service center. Refer to UEi Test Instruments' official website or contact customer support for calibration services and recommended intervals.

6. Troubleshooting

Problem	Possible Cause	Solution
Instrument does not power on.	Dead or incorrectly installed batteries.	Check battery polarity; replace with fresh batteries.
Inaccurate or fluctuating readings.	Unstable pressure source, leaky connections, or instrument not zeroed.	Ensure stable pressure; check all tubing and probe connections for leaks; perform zeroing procedure.
Display shows "OL" or "OVER".	Pressure input exceeds the instrument's range.	Disconnect from pressure source immediately. Do not exceed ±80 in WC.
Auto-power off too quickly.	Auto-power off feature enabled.	Refer to the full manual for instructions on disabling or adjusting auto-power off settings, if available.

If the problem persists after attempting these solutions, please contact UEi Test Instruments customer support.

7. Specifications

Feature	Detail
Product Dimensions	1 x 1 x 1 inches; 1 Pounds
Item Model Number	EM720SPKIT
Manufacturer	UEI.
Pressure Measurement Range	±80 in WC
Temperature Compensation	Yes
Functions	HOLD, MIN/MAX/AVG, Ambient Temperature Measurement
Kit Contents	EM720 manometer, stepped T fitting (2), static pressure probes (2), pressure tubing with brass fittings (2), step connector with 3.15-inch tubing (2), 60-inch pressure tube, batteries, soft case, manual

8. Warranty Information

UEi Test Instruments products are designed for reliability and performance. For specific warranty terms and conditions applicable to the EM720SPKIT, please refer to the warranty card included with your product or visit the official UEi Test Instruments website. Keep your proof of purchase for warranty claims.

9. Customer Support

For technical assistance, troubleshooting, or service inquiries, please contact UEi Test Instruments customer support:

- **Website:** Visit the official UEi Test Instruments Store on Amazon or their corporate website for FAQs, product documentation, and contact information.
- **Phone/Email:** Refer to the contact details provided in your product packaging or on the official website.

When contacting support, please have your product model number (EM720SPKIT) and purchase date available.

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Related Documents - EM720SPKIT

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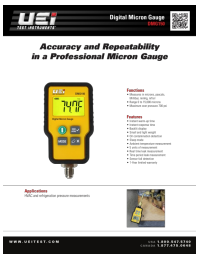	UEI DMG150 Digital Micron Gauge: Accurate HVAC & Refrigeration Pressure Measurement Explore the UEI DMG150 Digital Micron Gauge, a professional tool for precise pressure readings in HVAC and refrigeration. Features include instant response, oil contamination detection, and a durable design.
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	[UEi EM720 Hi-Res Differential Manometer Instruction Manual] Instruction manual for the UEi EM720 Hi-Res Differential Manometer, detailing its features, specifications, safety guidelines, operating procedures, and maintenance information.
	[UEi EM720 Hi-Res Differential Manometer: User Manual & Specifications] Comprehensive instruction manual for the UEi EM720 Hi-Res Differential Manometer, covering features, specifications, safety warnings, operating instructions, and warranty information.
	[UEi EM700 Differential Manometer Instruction Manual] Comprehensive instruction manual for the UEi EM700 Differential Manometer, covering features, safety warnings, specifications, operating instructions, and maintenance.