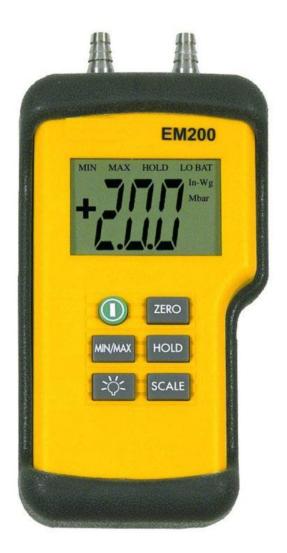




#### **INSTRUCTION MANUAL**

#### **ELECTRONIC MANOMETER**

#### EM 151 / EM 201





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## INTRODUCTION

The EM151 and EM201 provide a simple, timesaving alternative to U-tube pressure measurements. Use the UEi EM151 & EM201 to measure gas supply and draft pressures in residential or light commercial properties. The EM201 differential mode provides a convenient method to measure pressure drops.



### SAFETY RULES



Before every use, check to be sure the meter and its tubing are free from breaks or blockage. While using the meter, if you suspect gas is leaking, or if you can smell gas, close off the gas supply and ventilate the occupied space. Identify and repair the source of the leak before continuing with the test.

In the interest of safety, this instrument should only be used by trained, competent professionals who know the hazards and consider the risks of working on and with industrial equipment.

These meters do not measure water pressures; under these conditions they will fail. Do not exceed 10 PSI input pressure



# FEATURES

#### EM151

- Single input to measure pressure to ±20" wg
- Triple Scale: inWG, mBar and PSI
- Ruggedized, including rubber boot with integral magnet
- Simple two-button operation
- Measures in inches water gauge
- Auto power-off after 20 minutes
- 3 year limited warranty

### EM201

- Dual input differential measurement to ±60" wg
- Triple Scale: inWG, mBar and PSI
- Ruggedized, including rubber boot with integral magnet
- Measures in inches water gauge and mBar
- Auto power-off after 20 minutes
- Min/Max value capture
- Data Hold
- Back-lit display
- 3 year limited warranty



# **OPERATING INSTRUCTIONS**

#### **1. Zero the meter**

Prior to use, the meter must be zeroed. To do this, ensure the meter is in a non-pressurized area, and press and hold the 'ZERO' button for approximately four seconds. The display will show '888' to indicate that the zero function has occurred.

#### **2. Measure Pressure**

Connect the flexible tube between the meter and the pressure source.

The EM201's positive input is to the right when looking at the front of the instrument. Applying a positive pressure to this port will display a positive reading. The input to the left is the negative port. (Applying a positive pressure here will display a positive reading). Use either input to measure a single source by venting the unused input to atmosphere. The instrument will continually provide a differential reading of the two inputs.



### 3. SCALE

To select mBar press the "SCALE" button on the EM201. Press "Scale" again to return to inches of water gauge. To select scale on the EM151briefly press the green button.

### 4. MIN/MAX (EM201 Only)

The EM201 will capture values for both the minimum and maximum values read. To reset zero the instrument or simply power the meter off, then back on. Captured values can be displayed in either inches water gauge or mBar.

#### 5. HOLD (EM201 only)

The EM201 has a display hold feature. Press this during reading to freeze the display. Press again to return to actual measurement.

### 6. BACKLIGHT (EM201 only)

The EM201 has a backlit display. Press  $: \stackrel{\sim}{O}$ : to turn on or off the back light feature.

#### 7. Over-range

If the input exceeds the meter range "OL" will be displayed. Immediately disconnect from the pressure supply safely to reduce chances of damage to the instrument.



### SPECIFICATIONS

### EM151

Measurement range: Minimum pressure displayed: Accuracy:

**Resolution:** 

Operating range:

Battery life:

### EM201

Measurement range: Minimum pressure displayed: Accuracy:

**Resolution:** 

**Operating range:** 

Battery life:

-20" to +20" WG 0.01" WG  $\pm 0.02$ " < 2"  $\pm 1\%$ rdg > 2" 0.01" -9.99" to +9.99" WG 0.1" < -10", > +10" wg 0 - 40°C, 10 - 90% RH non condensing 50 hours min with alkaline battery

-60 to +60" WG 0.01" WG ±0.02" < 2"WG ±1%rdg > 2"WG 0.001" -9.999" to +9.999"WG 0.01" < -10", > +10" wg 0 - 40°C, 10 - 90% RH non condensing 40 hours min with alkaline battery



### PRESSURE CONVERSIONS

Multiply	Ву	To Get
In. of H2O	1.868	mmHG
In. of H2O	0.074	in HG
In. of H2O	0.249	kPa
In. of H2O	249.1	Pascals
In. of H2O	2.491	mBar
In. of H2O	0.036	PSI
In. of H2O	25.40	mmH2O



IMR Environmental Equipment, Inc.

#### Warranty

IMR Environmental Equipment ,Inc. states the following:

IMR hereby grants the following worldwide IMR warranty for an IMR analyzer purchased from an authorized dealer.

1. The IMR warranty shall entitle every IMR customer to demand a free replacement or repair of the defective parts from any IMR dealer authorized for the respective IMR unit.

2. The IMR warranty shall be granted on the factory new unit and shall commence on the date of the delivery of the original IMR unit to the customer. It shall last for a period of twelve months regardless of the type and the intensity of use and regardless of any change of owner, which may occur during this warranty period.

3. The IMR warranty shall refer to absence of faults with respect to the state of the art nature of the sold unit in terms of material and finish. The warranty for all parts fitted during the twelve-month warranty period shall end with the unit warranty.

4. After the establishment of a material or production fault by IMR or the authorized IMR dealer, the faults will be eliminated by means of free repair or replacement. Replaced parts shall become the property of IMR.

5. No warranty claims may be made for maintenance and setting work, cleaning or other utility materials required for the function of the unit and other wear parts unless they have a direct bearing on work performed under the warranty.

6. The terms and conditions for the acknowledgement of this warranty shall be the presentation of the fully completed warranty card, which must contain the confirmation from the authorized IMR dealer on its delivery and, if applicable, the prescribed maintenance work.

7. The IMR warranty shall only be applicable if

a. The analyzer has been maintained in accordance with the instructions issued by the manufacturers and the operating instructions by an authorized IMR dealer.

b. Only original IMR spare parts have been used for any repairs.

c. The unit has been used properly, the operating instructions observed and the unit has not been used for a purpose other than the one for which it has been designed.

d. The IMR unit has been left in its original design and meets the original IMR specifications.

e. The fault is not due to external influences or use for a purpose other than the one for which it has been designed.

f. Exclusively authorized IMR dealers have made repairs to the IMR unit.

g. The IMR unit has been sent to an authorized IMR dealer immediately after the fault was discovered.

8. Warranty time for the analyzer, including electrochemical sensors is 12 months.

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