

## Start Up



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### WARNING

**Perform all procedures in a “fresh air” environment (environment known to be free of combustibles and toxic gases and of normal oxygen content).**

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1. Press and hold the **ON/OFF** button for one second. Once **WARMUP COMPLETE** is shown, hold down the **AIR** button for 3 seconds to adjust the Innova to “fresh air” readings (“**demand zero**”). Once **DONE** is shown, the instrument is in the Normal Operation Mode.
2. If applicable, verify that the display reads **0** in the LEL, Toxic 1, and Toxic 2 fields, and **20.9%** in the O<sub>2</sub> field. Any unused channel is blank (if applicable).
3. If applicable, confirm normal operation of the O<sub>2</sub> section. Blow into the probe until the display reaches 19.5%, triggering the alarm.
4. Place the probe into the area to be monitored.



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### WARNING

**Never “demand zero” in a non-fresh air environment.**

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## Operation

In normal operation, your Innova monitors the environment and displays current gas or oxygen concentrations. You can press any button in dimly-lit or dark monitoring area to illuminate the LCD display.

## Operator Indications and Suggested Actions

When conditions cause the Innova to reach a preset warn or alarm level, the condition is sensed, and your Innova alerts you with audible and visual indications. Descriptions of common indications, probable (or possible) cause(s), and recommended actions are covered in this section.



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### CAUTION

**Always follow established procedures for an alarm condition. If procedures do not exist, please establish an appropriate plan of action.**

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## Warn Indication

A warn indication occurs when a preset warn level is reached.

**Visual/audible indications:** The reading of the applicable channel blinks. The red LEDs blink and the buzzer sounds in an even, slow pulsing pattern.

**Action:** Your Innova resets its alarms when normal gas levels return (if at the default setting **AUTO RESET**), or press **ON/OFF** button momentarily if the alarm latch (**MANUAL RESET**) has been enabled.

ALWAYS investigate the cause of any warn indication.

## Alarm Indication

An alarm indication occurs if the gas concentration continues to increase (or decrease) to a preset alarm level.

**Visual/audible indications:** The reading of the channel in alarm blinks, with the red LEDs and the buzzer sounds at a rapid rate.

**Action:** Your Innova resets its alarms when normal gas levels return (if at the default setting **AUTO RESET**), or press **ON/OFF** button momentarily if the alarm latch (**MANUAL RESET**) has been enabled.

ALWAYS investigate the cause of any alarm indication.

## Fail Indication

A fail indication occurs when a sensor or other circuitry no longer functions normally.

**Visual/audible indications:** The display for a sensor(s) read XXX. The red LEDs are on, and the buzzer sounds continuously.

**Possible causes:** A sensor may be bad, missing or have a loose connection. An internal circuit fault may have occurred.

**Action:** Remove the Innova from the monitoring area. Investigate and determine the cause, refer to the Troubleshooting section of your Operator's Manual for specific instructions.

## Low Flow Indication

A low flow indication occurs when normal flow is interrupted. The Innova's pump automatically shuts off.

**Visual/audible indications:** The words PRESS →TO CLEAR are shown, and alternates with the normal and **PUMP FAILED** screens. An X appears where the spinning icon was. The red LEDs alternate, and the buzzer sounds in a pulsing pattern.

**Possible causes:** Liquid has been drawn into the probe, or an obstruction is present. An internal circuit fault may have occurred. A sensor may not be properly installed. The hydrophobic filter in the probe may be dirty.

**Action:** Clear away visible obstructions, then press →(ON/OFF) to restart the pump. If the problem remains, troubleshoot the probe, hose, sensor(s) or internal flow system for obstructions.

## Low Battery Indication

A low battery indication occurs when the battery voltage drops below the battery alarm threshold.

**Visual/audible indications:** The words **LOW BATTERY** are shown. The red LEDs are on, and the buzzer sound emits a double pulse every 60 seconds.

**Probable cause:** The batteries have reached the end of useful life.

**Action:** You must replace alkaline or recharge or replace NiCd batteries before continuing. Refer to the Maintenance Chapter of your Operator's Manual for specific instructions.



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## **CAUTION**

**This quick reference card does not adequately replace your operator's manual. Refer to the manual for detailed information, or for other indications not covered on this card, such as TWA, PEAK, and STEL, and all other functions.**

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