<u>GEM</u>²

Model OI-9100 Signal Strength Meter The View

Operation Manual

Revision 1.1





Product Overview

The WireFree Gen II *View* OI-9100 is a hand held signal strength meter specifically engineered to show the status of any WireFree Gen II gas detection device within range.

The *View* features a 4-line scrollable display. Using a 4-column read, the *View* is capable of revealing the Channel, Reading, Signal Strength, and Time Since Last Message of any WireFree device on site, as well as the Sensor, Gas, and Battery. The *View* contains a 2.4 GHz ISM, 100 mW or 900 MHz, 200 mW radio, ensuring prompt and accurate communication with other WireFree devices.

The ability of the *View* to continuously notify the user of each WireFree device's status at a particular site make the device a truly phenomenal safety product to be introduced into the industry.



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Introduction

This document is an Operation Manual containing diagrams and step-by-step instruction for proper operation of the Otis Instruments, Inc. WireFree Gen II *View* OI-9100. This document should be read before initial operation of the product.

Should a question arise during the use of the product, this document will serve as a first reference for consultation. If further questions arise, or if the device is not working properly, please contact the sales representative of this product.

Signal Strength Guideline

The following guideline's should be used to achieve optimal performance.

- The OI-9100 can receive and display a reading as low as 5%, but for proper site setup Otis Instruments recommends a reading of at least 40%. Changing the antenna type or placement at the transmitter (gas sensor) or the receiver may be necessary to achieve this.
- To properly test an monitor's received signal strength that is using a remote antenna, the monitor's antenna cable must be connected to the OI-9100 antenna connector (located on the right side of the unit).

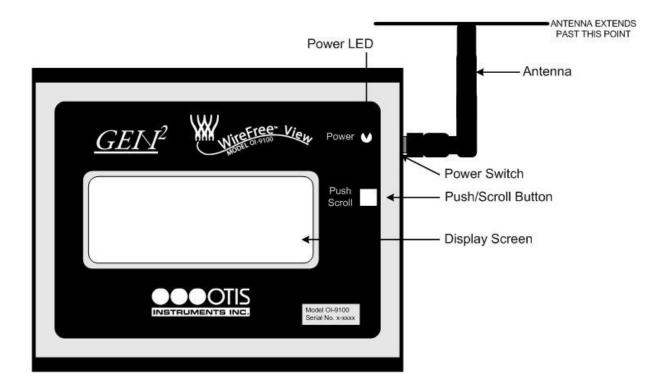
NOTE: 40% is an approximate figure. Environmental factors, such as rain or fog, may alter the effectiveness of the device as this strength.

NOTE: While a sensor assembly with a signal-strength below the minimally needed guideline may not always be seen, it may be seen occasionally.

Complete System Diagrams

The following diagram should be consulted for identification of the device and any other system part that may be referred to in this Operation Manual.

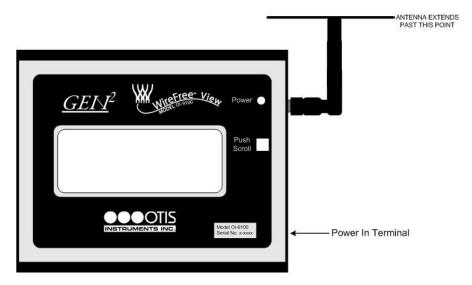
Front Panel



Device Recharge

Charging the device before initial operation, as well as regularly recharging the device between use, is necessary for reliable operation.

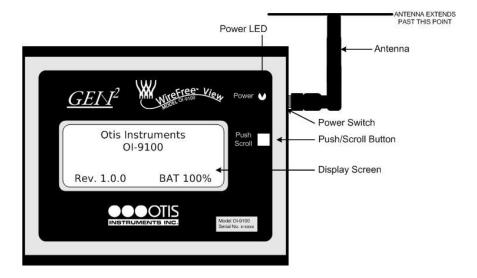
1. Locate the Power In Terminal on the right side of the device.



- 2. Plug the Otis Instruments, Inc. supplied AC adapter into the Power In Terminal.
- 3. Plug the other end of the Otis Instruments, Inc. supplied AC adapter into a wall socket.

NOTE: The device will remain "On" when the device is being charged.

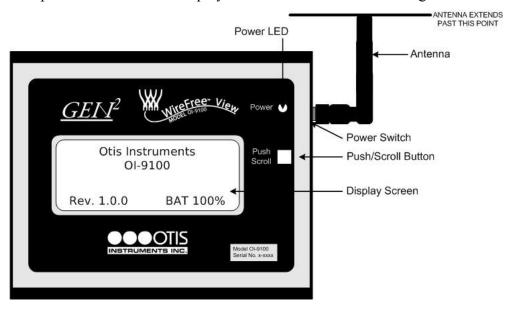
4. Wait until the device shows "BAT 100%" when powered Off and then back On to unplug the device.



Power On

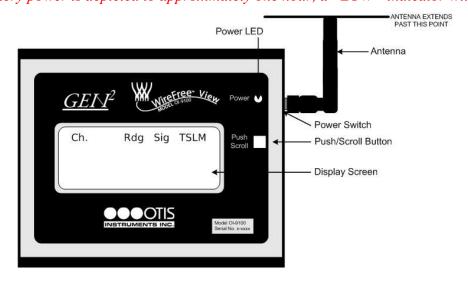
Powering on the device activates its functions. When powered on, the device is fully functional and access to system and settings menus is allowed.

- 1. Locate the Power Switch on the upper right side of the device's Right Side Panel.
- 2. Slide the Power Switch up.
- 3. The boot up information on the Display Screen will show the following for about five seconds:



4. After boot up the device is in Normal Operating Mode and should look like the screen below.

NOTE: "BAT" indicates the battery power (percentage) that is remaining. When the battery power is depleted to approximately one hour, a "LOW" indicator will appear.

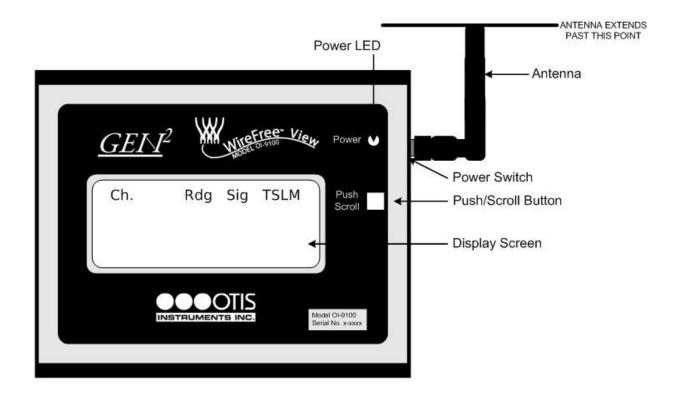


Power Off

Powering off the device shuts down this monitor. When powered off, the device will no longer receive or display readings from WireFree devices.

To power off the device, simply slide the Power Switch down.

NOTE: All menus should be exited before the device is powered off.

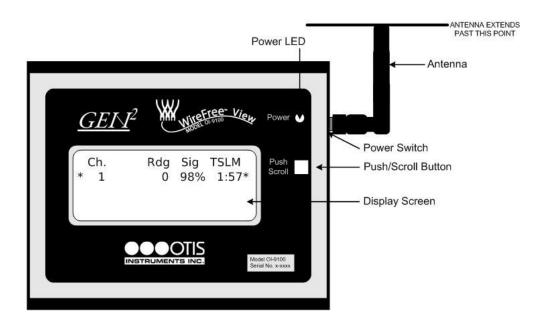


Main Display

The Main Display consists of a numerically ordered (by channel address) scrollable list showing the Address, Reading, Signal Strength, and Time Since Last Message of each WireFree Sensor Assembly that is being detected.

Viewing Multiple Detected Channels

1. Locate PUSH/SCROLL.



2. Twist *PUSH/SCROLL* to scroll through and view the status (Reading, Signal Strength, and Time Since Last Message) of all detected channels.

NOTE: Each "click" that is achieved by twisting PUSH/SCROLL changes the selection (*....*) by one line.

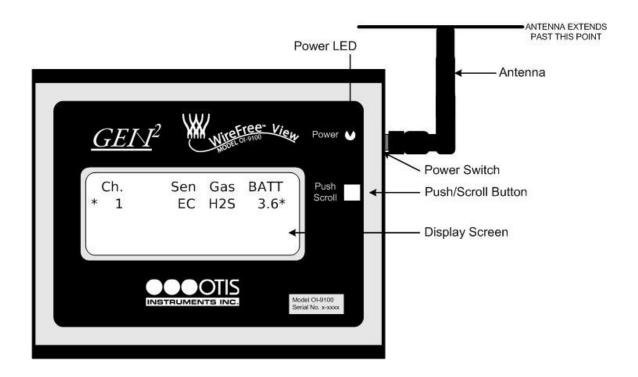
NOTE: If a new address number does not appear when PUSH/SCROLL is twisted three times, there is not more than three channels being detected. If it is believed that another address should be present, wait up to six minutes and then try (twist) again.

Conversely, if a signal is not received from a displayed sensor assembly within six minutes, the sensor will no longer show on the display.

Secondary Display

The Secondary Display consists of a numerically ordered (by channel address) list showing the Sensor, Gas, and Battery Voltage of each WireFree Sensor Assembly that is being detected.

1. Locate PUSH/SCROLL.



2. Push (and hold) *PUSH/SCROLL* to view the sensor, gas, and battery voltage of the sensors. Twist (while holding down PUSH/SCROLL) to scroll through all detected channels.

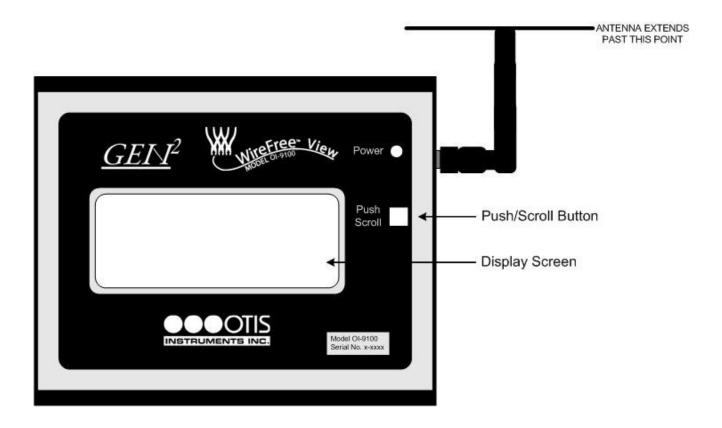
NOTE: If a new address number does not appear when PUSH/SCROLL is twisted three times, there is not more than three channels being detected. If it is believed that another address should be present, wait up to six minutes and then try (twist) again.

Conversely, if a signal is not received from a displayed sensor assembly within six minutes, the sensor will no longer show on the display.

Elevated Gas Level Alert

The OI-9100 features a red flashing light for indication of gas sensors whose detected gas level has risen above the background gas level (set at the sensor assembly).

- The red flashing light will be activated when two elevated gas level transmissions are sent to the OI-9100 within 25 consecutive seconds.
- When the OI-9100's red light is flashing, only the channels for sensor assemblies reading elevated gas levels will be displayed on the screen.
- If several sensor assemblies are sending reports of elevated gas levels, simply turn the Push/Scroll Button to view the other channels.
- When the gas level drops below the background, the light will stop flashing red and the unit will return to Normal Operating Mode.

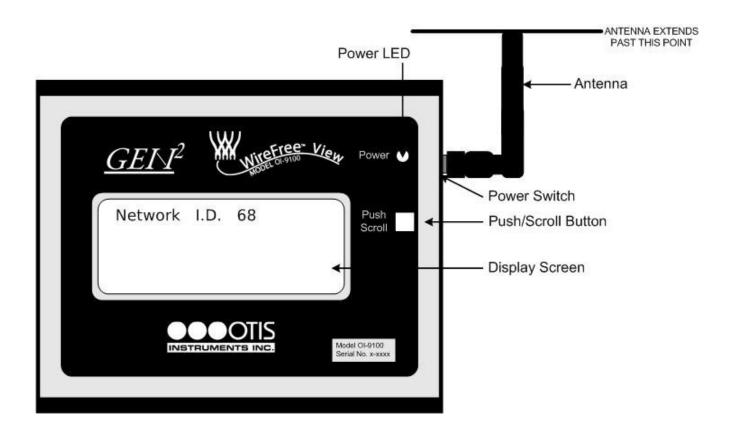


Setting Network ID

In order to read the status of any sensor assembly, the sensor assembly, monitor, and OI-9100 must all be set to the same Network ID.

- 1. Power off the unit
- 2. Power on the unit
- 3. Press *PUSH/SCROLL* during boot up.
- 4. The display screen will show the following:

NOTE: The actual Network I.D. value displayed on the unit will vary depending on what the user has previously selected.



- 5. Turn *PUSH/SCROLL* several rotations to the left/right to increase/decrease the Network I.D. value.
- 6. Once the desired Network I.D. value has been selected, press *PUSH/SCROLL* to return to the Main Display.

Specifications

Operating Power:	Two 3.7V Lithium Ion batteries; rechargeable
Battery Life:	16 hours (continuous use); time will vary with battery life
Radio:	2.4 GHz ISM, 100 mW 900 MHz, 200 mW
Enclosure:	Black aluminum; powder coated
Enclosure Dimensions:	4.875" x 4" x 1.188"
Display:	4 x 20 character alpha/numeric LCD
Fuses:	PTC (automatic resettable) Non end-user replaceable
Warranty:	Hardware: One-year (limited)

Warranty Statement for The View OI-9100

Hardware

Otis Instruments, Inc. (Manufacturer) warrants its products to be free of defects in workmanship and materials—under normal use and service—from the date of purchase from the manufacturer or from the product's authorized reseller. The hardware for this device is under a one-year limited warranty.

The manufacturer is not liable (under this warranty) if its testing and examination disclose that the alleged defect in the product does not exist or was caused by the purchaser's (or any third party's) misuse, neglect, or improper installation, testing or calibrations. Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the range of the intended use, including damage by fire, lightening, water damage or other hazard, voids liability of the manufacturer.

In the event that a product should fail to perform up manufacturer specifications during the applicable warranty period, contact the product's authorized reseller or return the product directly to the manufacturer with a Return Material Authorization (RMA). This number will be assigned upon contacting our service department at 903.566.1300 or service@otisinstruments.com. The manufacturer will—at its option and expense—repair or replace the product, or deliver an equivalent product or part to the purchaser at no additional charge.

Any replaced or repaired product or part has either a 90-day warranty or the remainder of the initial warranty period (whichever is longer).



Otis Instruments, Inc.

301 S Texas Ave.

Bryan, TX 77803

Service Department: 903.566.1300

Corporate Office: 979.776.7700

service@otisinstruments.com

www.otisinstruments.com