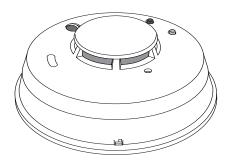
1164/1164NS WIRELESS SMOKE DETECTOR Installation Guide



DESCRIPTION

1164/1164NS Wireless Smoke
Detectors are 3.0 V battery
powered, wireless, low-profile,
photo-electric smoke detectors
used with 1100 Series DMP Wireless
Receivers. The 1164 synchronizes
its Temporal 3-alarm cadence with
other 1164s installed on the same
fire system.

Any fire zone that is tripped on the panel will cause the sounder to initiate. The 1164NS has the same functionality as the 1164, except the 1164NS does not have a built-in sounder. The 1164NS is intended for use in installations with existing notification devices.

The 1164/1164NS features an optional tamper switch to send a trouble message to the panel if the detector is removed from the mounting base.

What is Included?

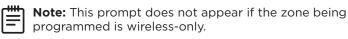
- One 1164/1164NS wireless smoke detector
- One 3.0 V Lithium CR123 Battery
- Hardware pack



PROGRAM THE PANEL

When programming an 1164/1164NS smoke detector, refer to the appropriate panel programming guide, as needed.

- At a keypad, enter 6653 (PROG) to access the Programmer Menu.
- In ZONE INFORMATION, enter the wireless ZONE NO: and press CMD.
- 3. At *UNUSED*, enter the zone name.
- 4. At **ZONE TYPE**, select **FI** (fire).
- 5. At the **NEXT ZONE?** prompt, select **NO**.
- 6. At the WIRELESS ZONE? prompt, select YES.



- 7. At **SERIAL** #, enter the eight-digit serial number found on the device and press **CMD**.
- 8. At **SUPRVSN TIME**, enter **3**, then press **CMD**.
- 9. At the **NEXT ZONE?** prompt, select **YES**.
- Press the BACK ARROW KEY until BELL OPTIONS displays, then press a select key or area.
- 11. To enable cadence synchronization with other 1164s on the system, at **FIRE TYPE:** select **T** (temporal) as the action type.

SELECT A LOCATION

The detector can be mounted to any of the following surfaces:

- A single gang box
- A 3.5- or 4-inch octagonal box
- A 4-inch square box with a plaster ring
- A ceiling using drywall fasteners

Use the LED survey operation to select a proper location for the smoke detector. The LED survey operation allows one person to confirm communication with the wireless receiver or panel while the cover is removed. Because the smoke detector's transmitter LED is not visible, use a separate 1100 Series transmitter for the LED survey operation, such as the 1106 Universal Transmitter.

- 1. Hold the 1106 in the exact desired location.
- 2. Press the tamper switch on the 1106 to send data to the panel and determine if communication is confirmed or faulty.
 - Confirmed: If communication is confirmed, for each press or release of the tamper switch the LED blinks immediately on and immediately off. Repeat this test to confirm five separate consecutive LED blinks. Any indication otherwise means proper communication has not been established.
 - Faulty: If communication is faulty, the LED remains on for up to eight seconds or flashes multiple times in a quick succession. Relocate the wireless receiver until the LED confirms clear communication.

Do Not Install the Detector:

- Where particles of combustion are normally present such as in kitchens or garages (vehicle exhaust) or near furnaces, hot water heaters, or gas space heaters.
- In very cold or very hot areas.
- In wet or excessively humid areas or next to bathrooms with showers.
- In dusty, dirty, or insect-infested areas.
- Near fresh air inlets or returns or excessively drafty areas. These can drive smoke away from the detector.
- In dead-air spaces at the top of peaked ceilings or corners where walls and ceiling meet.
- Near air conditioners, heating registers, or any other ventilation source that may interfere with smoke entering the detector.
- Near fluorescent light fixtures (smoke detectors should be at least 10 feet away).

INSTALL THE DETECTOR

MOUNT THE BASE

After selecting a location, mount the smoke detector on a flat wall or ceiling. The ensure optimum performance, mount the smoke detector away from large metal objects.

- Grasp the detector and twist counterclockwise to remove the detector from the mounting base. See Figure 1.
- 2. Use the supplied screws and anchors to mount the base to the surface.

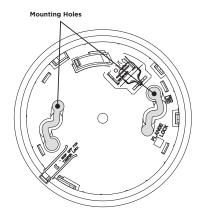


Figure 1: Mounting Hole Locations

REPLACE THE BATTERY

The battery comes pre-installed and is located in the battery compartment in the detector. When the LOBAT message appears on the keypad, replace the battery and perform a sensor reset by following the process below:

- Remove the battery from the smoke detector's battery compartment. See Figure 5. 1.
- Observing polarity, place the new 3.0 V lithium battery (Panasonic Model CR123A or DMP Model CR123-FIRE) into the battery compartment in the detector. The green and red LEDs located on the 1164 cover will simultaneously flash four times, and then the green LED will flash every ten seconds indicating the detector is in standby.

Sensor Reset to Clear LOBAT

- Once the battery is replaced, a sensor reset is required at the keypad to clear the LOBAT message.
- On an LCD keypad, press and hold 2 for two seconds. On a graphic touchscreen keypad, press RESET. Enter your user code, if required. The keypad displays SENSORS OFF followed by SENSORS ON.



TEST THE 1164

Use a tool with a diameter of 0.18 inches or less to press the test button. If the smoke detector is operating in it's proper sensitivity limits and not in low battery condition, then the green LED turns off and the red LED stays on continuously while the test button is being pushed. No signal is sent to the alarm panel during this test. Verify the control panel alarm and all auxiliary functions to perform a complete test of the system.

Test/Silence Button

The Test/Silence button performs the following functions:

Testing: Pressing the Test/Silence button tests the function of the circuits, sensitivity limits, and battery condition. If pressed and held for 2.5 seconds or longer, the sounder is enabled (1164 only). When released, the sounder is silenced (1164 only) and the detector returns to the state prior to the test button being pressed. Additionally, when the Test/Silence button is pressed, the red LED turns on and remains steady until the button is released. No signal is sent to the alarm panel during this test.

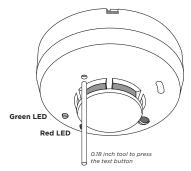


Figure 2: Test Button Location

Silence Alarm: (1164 only) When pressed during an alarm, the sounder is disabled for five minutes.

Silence Trouble Chirp: (1164 only) Press to silence a trouble chirp for 12 hours. If the test button is pressed during the silence period, the detector does not respond. If an alarm condition occurs during the silence period, the sounder enables as per alarm requirements. The trouble chirp resumes after 12 hours if the trouble condition is not corrected.

Smoke Testing

Smoke detectors should be smoke tested in-place annually.

- 1. Hold a can of smoke close to the smoke entry openings.
- 2. Aim the smoke into the detector for 20 secs or until the detector goes into alarm.

Q

Caution: Remember to stop the smoke after testing. The detector's red LED stays on and the control panel recognizes an alarm. Perform a sensor reset to reset the detector after the canned smoke is blown out of the detector.

LED OPERATION	
Green LED blinks every 10 seconds	Standby
Red LED is steady	Smoke Detected or Test Success while Test Button Pressed
Red LED blinks every 45 seconds	Low Battery
Red LED blinks every 5 seconds	Maintenance Needed

Table 1: LED Operation

ADDITIONAL INFORMATION

Location Advice

Consult the Local Authority Having Jurisdiction (AHJ) and NFPA 72 for specific installation information about smoke detector spacing, placement, location, and special applications.

Maintenance and Cleaning

This detector should be tested and maintained regularly following NFPA 72 requirements. At a minimum, cleaning should be performed annually.

Before performing maintenance on the detector, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the circuit undergoing maintenance to prevent any unwanted alarms. Power must be removed from the detector before performing maintenance of any kind.

- 1. Remove the detector cover by turning counterclockwise.
- 2. Vacuum the cover or use canned air to remove any dust or debris.
- 3. Remove the top half of the screen/sensing chamber by lifting straight up. See Figure 3.
- 4. Vacuum or use canned air to remove any dust particles that are present on both chamber halves.
- 5. Replace the top half of the screen/sensing chamber by aligning the arrow on the screen/sensing chamber with the arrow on the housing. Press down firmly until the screen/sensing chamber is fully seated.
- 6. Replace the detector cover by placing it over the screen/sensing chamber and turning it clockwise until it snaps into place.
- 7. Reinstall the detector and test. (See Test the 1164.)

Removable Detector Cover Screen/Sensing Chamber (Top Half) Detector Housing

Figure 3: Detector Cover and Sensing Chamber

Wiring Specifications

DMP recommends using 18 or 22 AWG for all LX-Bus and Keypad Bus connections. The maximum wire distance between any module and the DMP Keypad Bus or LX-Bus circuit is 1,000 feet. To increase the wiring distance, install an auxiliary power supply, such as a DMP Model PS12-5. Maximum voltage drop between a panel or auxiliary power supply and any device is 2.0 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit.

To maintain auxiliary power integrity when using 22-gauge wire on Keypad Bus circuits, do not exceed 500 feet. When using 18-gauge wire, do not exceed 1,000 feet. Maximum distance for any bus circuit is 2,500 feet regardless of wire gauge. Each 2,500 foot bus circuit supports a maximum of 40 LX-Bus devices.

For additional information refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031) and the 710 Bus Splitter/Repeater Module Installation Guide (LT-0310).

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be located or operated in conjunction with any other antenna or transmitter.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INDUSTRY CANADA INFORMATION

This device complies with Industry Canada Licence-exempt RSS standards. Operation is subject to the following two conditions:

- 1. This device may not cause interference, and
- this device must accept any interference, including interference that may cause undesired operation of the device.

This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General Population limits.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le

L'exposition aux radiofréquences de ce système a été évaluée selon la norme RSS-102 et est jugée conforme aux limites établies par le Code de sécurité 6 de Santé Canada. Le système doit être installé à une distance minimale de 7.87 pouces (20 cm) séparant l'antenne d'une personne présente en conformité avec les limites permises d'exposition du grand public.

1164/1164NS WIRELESS **SMOKE DETECTOR**



Specifications

Battery Life Expectancy At least 1 year

Battery Type 3.0 V lithium Panasonic CR123A or DMP CR123-FIRE

Low Battery Threshold 2.65 V

1 every 30 seconds ± 2 Low Battery Beep Rate

seconds

Sounder Pattern (1164 Only) 85 dBa at 10 feet Temporal

Sensitivity 2.0%

Frequency Range 905-924 MHz **Detector Dimensions** 5.6"x 2.4"

(14.3 cm x .046 cm)

Rase Dimensions 5.4" x 0.46"

(13.7 cm x .46 cm)

Color White

Compatibility

1100DH Series Wireless Receiver Version 203 or higher

1100XH Series Wireless Receiver

Version 203 or higher

XTL Series Control Panels

XT30/XT50 Control Panels

Version 123 or higher

XT75 Control Panels

XR Series Control Panels Version 108 or higher

XF6 Series Fire Control Panels

Certifications

California State Fire Marshal (CSFM)

FCC Part 15 Registration ID CCKPC0104

IC Registration ID 5251A-PC0104

New York City (FDNY)

Underwriters Laboratories (UL) Listed

ANSI/UL 268 7th Edition Smoke-Automatic Fire Detectors

Patents

U.S. Patent No. 7,239,236



Designed, engineered, and manufactured in Springfield, MO using U.S. and global components.

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