



Photoelectric Wireless
Smoke Detector
OMN-SMK1



Instructions
Instrucciones

OMNSMK1-T100
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P ▲ R ▲ D O X
S E C U R I T Y S Y S T E M S

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English

Installation

The OMN-SMK1 should be mounted on the ceiling (or wall if necessary) in accordance with the NFPA Standard 74 (National Protection Association, Batterymarch Park, Quincy, MA 02169) outlined on reverse. The OMN-SMK1 is a wireless detector designed to work with the OMN-RCV3 wireless receiver and cannot be linked to other smoke detectors.



The detector will not warn people who are deaf or hard of hearing. Special-purpose detectors with light or vibrating devices should be installed.

For optimal detection, the unit should be mounted as close to the center of the ceiling as possible. Always test the unit before it has been powered and after installation as outlined in “Testing the Smoke Detector”. After selecting the detector's location, drill or punch out holes for the screws as shown in Figure 2 on reverse and follow the steps outlined below.

Mounting the Detector

1. Use two of the eight keyhole slots to mark where you will drill the mounting holes and insert the plastic wall plugs.
2. Align the mounting bracket to the wall plugs and partially insert the screws.
3. Once the mounting bracket is positioned, secure it and tighten both screws.
4. Join the detector to the mounting bracket, by aligning the lock tab to the preferred lock slot (Figure 2 on reverse), then turn counter-clockwise to lock detector into place.



The mounting bracket comes with two “tamper proof” threads. Remove these threads in order to change the battery or if you wish to mount the detector to an alternative location.

Unmounting the Detector

Remove the detector from the mounting bracket by gently pulling the detector, then turning clockwise as shown in Figure 2 on reverse.

Alternative Locations

If a ceiling installation is not possible, the following alternative locations are recommended:

- Ceiling mount no closer than 10cm (4”) from any wall or corner as shown in Figure 6 on reverse.
- Wall mount (permitted by your local and state codes) between 10 and 15cm (4 to 6”) from the ceiling as shown in Figure 6 on reverse.
- For sloped or peaked ceiling, try to mount the detector 1m (3.2ft) measured horizontally from the highest point of the ceiling as shown in Figure 6 on reverse.



The OMN-SMK1 is designed to give early warning of developing fires by sensing smoke. It will not sense gas, heat and flame sources.

Residential Installations

The detector is designed for use inside a *single* residential unit such as a family home or apartment. For complete coverage in residential units, smoke detectors should be installed in the following locations:

- In any hallway outside bedroom areas. Additional detectors should be installed for every bedroom area as shown in Figure 3 on reverse.
- On every floor of a multi-floor home or apartment as shown in Figure 5 on reverse.
- At both ends of a bedroom hallway if the hallway is more than 12m (40ft) long.
- At the bottom of a basement stairwell.
- At the top of the first to second floor stairwell and subsequent stairwells in multi-floored residential units.



Detectors should be installed as close to the center of the ceiling as possible. If this is not practical refer to Figure 6 on reverse for alternative locations.

Non-residential Installations

The detector is not intended for non-residential installations. The following locations are not recommended:

- Warehouses.
- Industrial or commercial buildings.
- Places where people may live and work such as motels, hotels, dormitories, nursing homes, group homes even if they were previously used as family homes.
- Special non-residential buildings that require specific fire/smoke detection systems.
- Lobbies or hallways or basements of multi-family buildings.



Please refer NFPA 101, the Life Safety Code, NFPA71, 72A, 72B, 72C, 72D and 72E for smoke detector requirements for fire protection in buildings not defined as “households”.

Detection Parameters

Installation in the following areas may cause *false alarms* or *impede* with the detector's ability to provide sufficient early warning. Avoid the following areas:

- Dusty areas such as a garage or attic.
- Areas where the temperature may fall below 4°C (40°F) or rise above 38°C (100°F).
- Near fluorescent electrical lights. If this cannot be avoided, ensure a minimum installation distance of at least 1.5m (5ft).
- Areas with poor ventilation or obstructions that may prevent smoke from reaching the detector. These can be the top of a peaked (sloped) roof or ceiling (Figure 5 on reverse) and a partially or completely closed bedroom door.
- Near furnaces or hot water heaters.
- Humid or damp areas such as a washroom or shower. If this cannot be avoided, ensure a minimum installation distance of at least 3m (10ft).
- Near ventilated areas that may draw smoke away from the detector.
- Insect-infested areas.
- Areas less than 6m (20ft) away from the kitchen or cooking appliances.



Never remove the batteries to stop a false alarm. Allow sufficient ventilation to reach the detector until the false alarm stops. If false alarms persist, clean out the detector.

Powering the Detector

Insert the battery in the compartment located under the detector. You can insert an optional screw to secure the compartment door. Align the terminals on the end of the (alkaline) battery to those of the detector (Figure 1 on reverse). When the detector first makes contact with the battery, the LED will flicker and the horn will sound for one second. This means that the battery is properly connected. Close the cover and hold down the test button for five seconds. The horn will emit a loud pulsating sound to indicate that the unit is working.

LED Smoke Signal Indication

Once smoke is detected, the OMN-SMK1 will emit three continuous alarms, pause and repeat this alarm pattern until the smoke condition has stopped. In addition, during an alarm, the red LED will flicker rapidly.

Upon detection of an alarm condition (smoke) the OMN-SMK1 will transmit the alarm signal every 30 seconds to the OMN-RCV3 receiver until the condition stops.

Once the alarm condition has stopped, the detector will wait 5 seconds then transmit a restore signal to the receiver. The restore signal is transmitted only once to the receiver after an alarm condition has stopped.

Testing the Smoke Detector

Test the detector by pushing firmly on the test button with your finger until the horn activates. Horn activation may take up to 20 seconds to occur. If the detector does not emit an alarm, verify that the battery is connected or that any old batteries have been replaced then re-test the unit. If the detector does not respond, contact your distributor.



Do not use an open flame to test the detector.

Low Battery

The OMN-SMK1 transmits a supervision (self-test) signal to the receiver every 12 hours. If the detector experiences a low battery condition, it will wait 5 minutes then transmit a low battery signal to the receiver. The detector will continue to transmit a low battery signal every 12 hours until the battery is replaced.

Taking Care of Your Detector

Your smoke detector requires little maintenance. To optimize your detector's performance, the following guidelines are recommended.

- Test the detector once a week.
- Replace the battery once a year or upon hearing the “weak battery” signal.
- Use only 9V alkaline batteries. Carbon zinc batteries are *not acceptable*.
- Open the cover and remove any accumulated dust at least once a year. This includes the detector's sensing chamber as shown in Figure 1 on reverse.

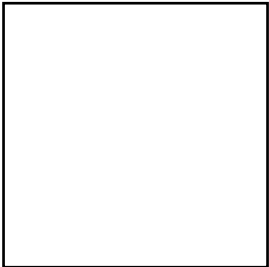


Figure 1: Detector Overview

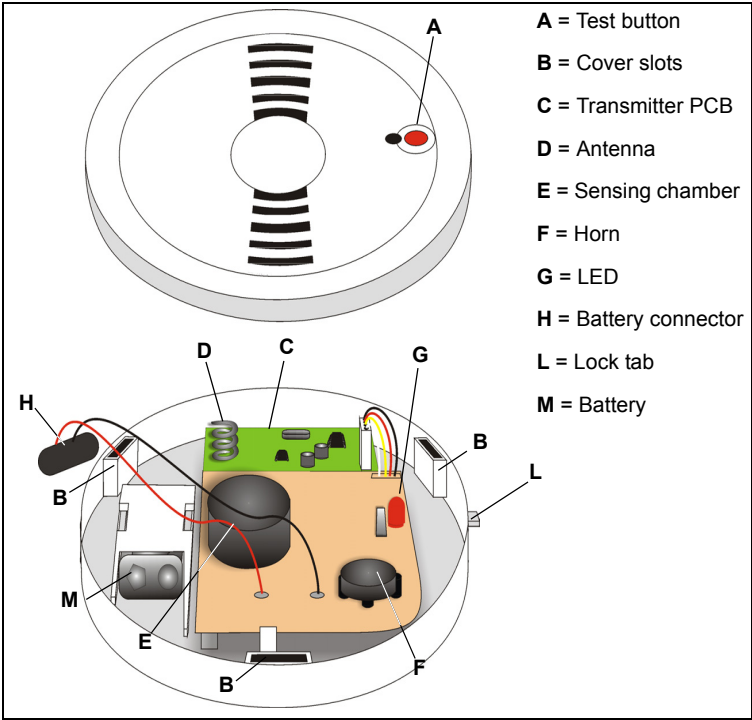


Figure 2: Mounting

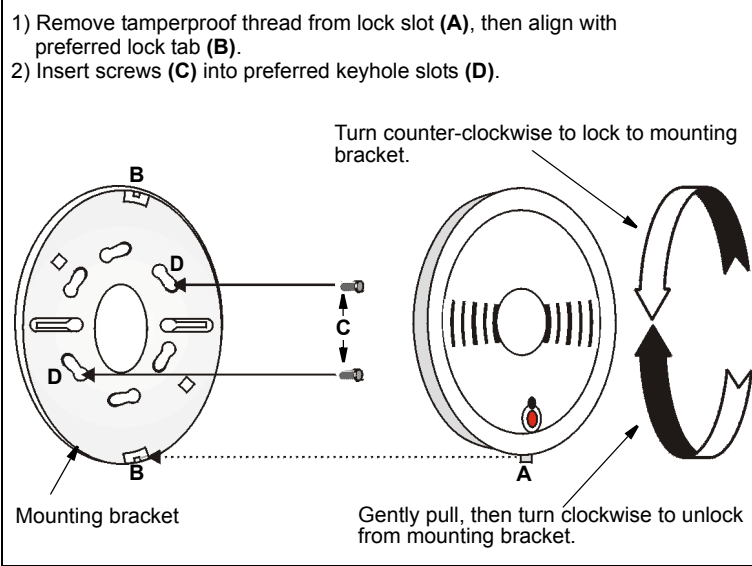


Figure 3: Single Residence with One Sleeping Area

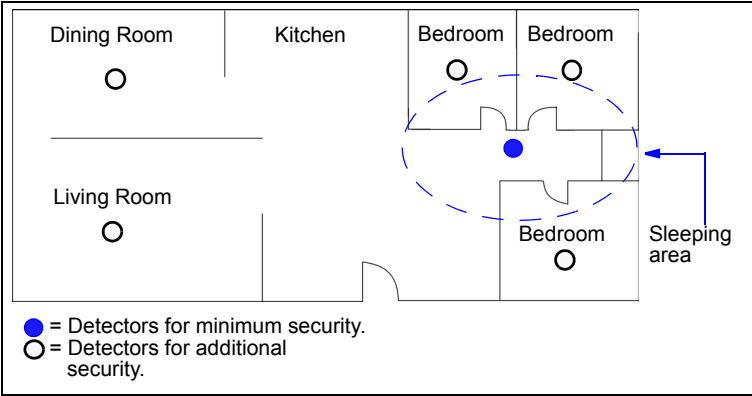


Figure 4: Single Residence with Two Sleeping Areas

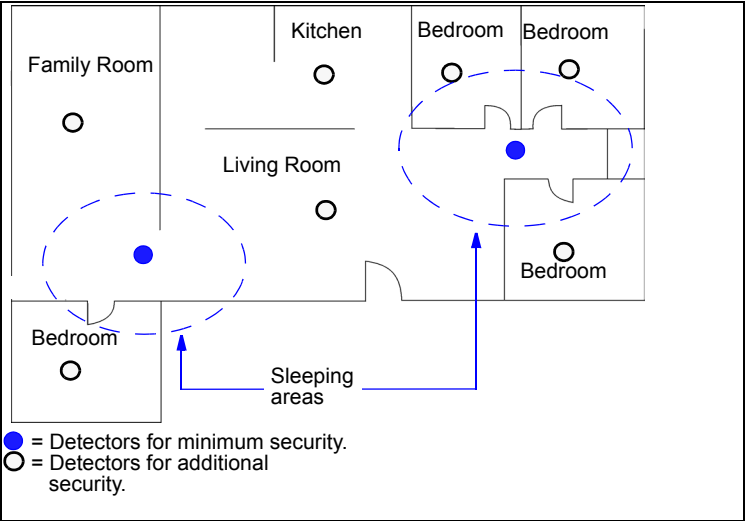


Figure 5: Locations for Multi-floor Residence

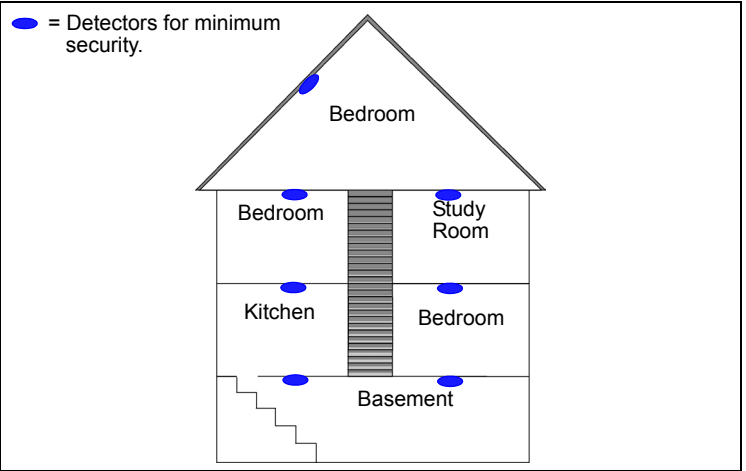
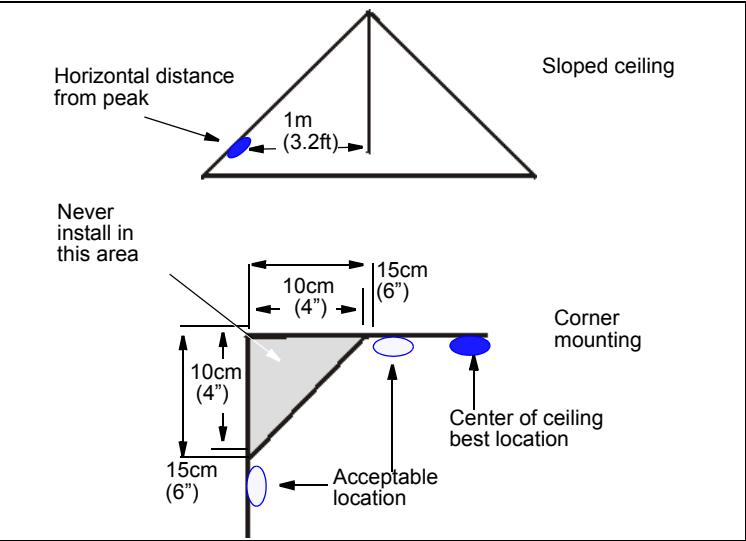


Figure 6: Alternative Mounting Locations



The following caution is required by the California State Fire Marshall:

“Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: (1) A smoke detector installed in each sleeping area (in the vicinity, but outside of the bedrooms) and (2) Heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages.”

For your information, NFPA Standard 74, Section 2-4 reads as follows:

“2-4.1.1 Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics.

The provisions of 2-4.1.1 represent the minimum number of detectors required by this standard. It is recommended that the householder consider the use of additional smoke detectors for increased protection for those areas separated by a door from the areas protected by the required smoke detectors under 2-4.1.1 above. The recommended additional areas are living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace rooms, utility room, basement, integral or attached garage and hallways not included in 2-4.1.1 above. However, the use of additional remains the option of the householder.”

We recommend complete coverage and use of additional smoke detectors.

Locations to Install the Smoke Detector in Mobile Homes and RVs

Mobile homes and RVs built after 1978 were designed and insulated to be energy-efficient. In mobile homes and RVs built after 1978, smoke detectors should be installed as outlined above. Older mobile homes and RVs may have little or no insulation compared to current standards. Outside walls and roofs are often made of non-insulated metal which can transfer thermal energy flow from outdoors. This makes the air right next to them hotter or colder than the rest of the inside air. These layers of hotter or colder air can keep smoke from reaching the smoke detector. Therefore, install smoke detectors in such units only inside walls. Place them between XCM (4”X) and XCM (6”) from the ceiling. If you are not sure how much insulation is in your mobile home or RV, then install the detector in each room for security. Before you install any detector, please read the section “Detection Parameters” on page 1.

FCC Compliance Statement



Changes or modifications not expressly approved by Paradox Security Systems could void your authority to use this equipment.

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer’s instructions, may cause interference to radio or television reception. It has been type tested and found to comply with the limits of Class B device in accordance with the specifications in Subpart “B” if Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio 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:

- Re-orient the receiving antenna.
- Relocate the alarm control with respect to the receiver.
- Move the alarm control away from the receiver.
- Connect the alarm control into a different outlet so that alarm control and receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: “How to Identify and Resolve Radio/Television Interference Problems”. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock # 004-000-00345-4.

Industry Canada Compliance Statement

This Class “B” digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

IC: 2438A-0MnS7K1

“The term “IC:” before the radio certification number only signifies that Industry Canada technical specifications were met.”

TECHNICAL SPECIFICATIONS

Detector Type	
Power	9Vdc Alkaline battery*
Sensitivity	2.3±1.2%ft
Alarm Sound Output	85dB at (Xcm) (10ft)
Indicator Light	Red LED flashed once every 45 sec.
Low Battery Life	Up to 30 days
Relative Humidity	10% to 85%
Dimensions	140mm (5.5”) X 45mm (1.47”)
Supervisory Transmission Frequency UL, ULC	64 minute intervals
Supervisory Transmission Frequency ULC	12 minute intervals
Sounder Alarm Pattern UL, EU	Evacuation temporal pattern
Sounder Alarm Pattern ULC	Continuous beeps

*The following batteries are acceptable for proper smoke detector operation: Eveready #522, #1222, #216, Duracell #MN1604 and Gold Peak #1604P, #1604S.

Specifications may change without prior notice.

For the latest information on product approvals, such as UL and CE, please visit our Web site at www.paradox.ca. One or more of the following US patents may apply: 6215399, 611256, 5077549, 5751803, 5721542, 5287111, 5119069, and 5077549. LODIFF® lens: patent #4,787,722 (U.S.). Canadian and International patents may also apply: LODIFF® a registered trademark of Fresnel Technologies Inc. Digigard and Shield are trademarks of Paradox Security Systems.

Warranty

The Seller warrants its products to be free from defects in materials and workmanship under normal use for a period of one year. Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Because Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller’s option, any products not meeting the specifications. In no event shall the Seller be liable to the buyer or any other person for any losses or damages whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

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