PARADOX

SD760M10

10 Year Smoke Detector

INSTALLATION MANUAL

FW: V1.02.036

Introduction

The SD760M10 is a single-station photoelectric smoke detector with up to 10 years of battery life, designed to detect smoke particles and provide early warning of potential fires. It communicates with the Paradox M systems using 2-way wireless communication and incorporates the latest Gaussian Frequency Shift Keying (GFSK) technology with frequency and encryption hopping. These features ensure superior wireless range, enhanced encryption for security, reliable communication, and extended battery life.

Equipped with a built-in alarm horn, it alerts occupants with a loud audible signal, offering a crucial time for evacuation. This alarm is intended for use in single-family homes and residential units when installed and maintained as per the guidelines in this manual.

The SD760M10 does not detect gas or flames and should not be used as a substitute for specialized fire detection systems in commercial or multi-unit buildings.

Quick Installation - Experienced Installers

If you are an experienced installer, follow these steps to install SD760M10.

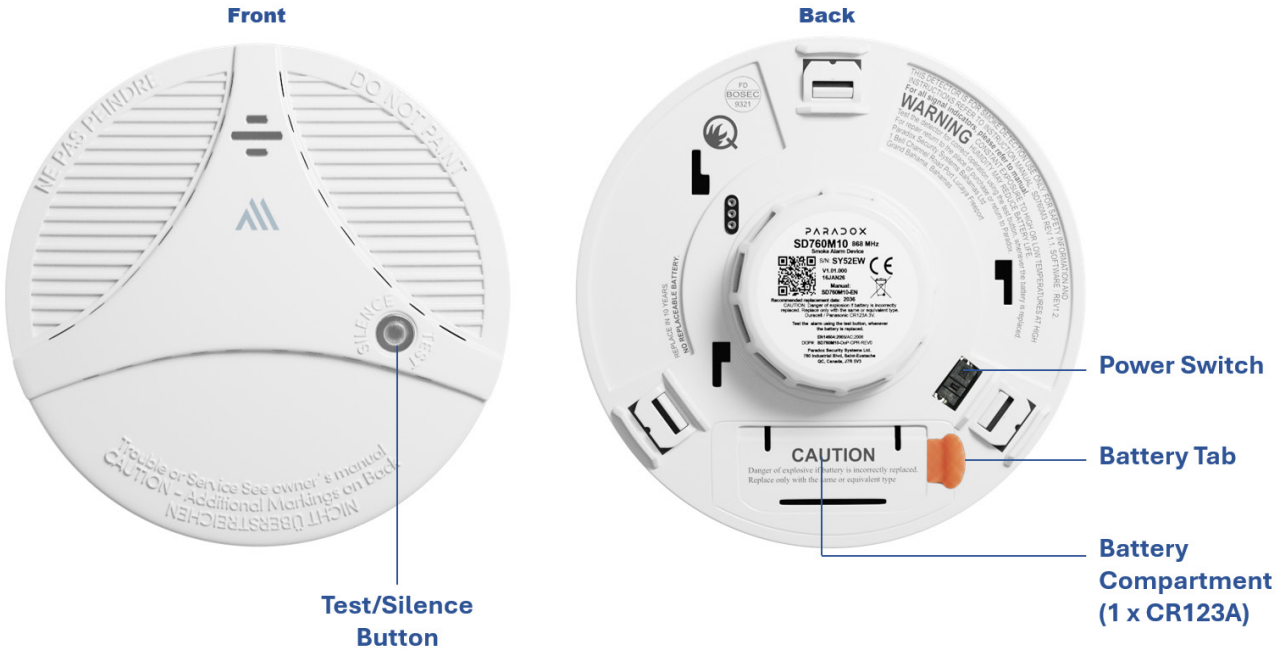
1. Remove the mounting bracket from the detector.
2. Fix the bracket.
3. Remove the battery tab from the detector.
4. Attach the detector to the backplate by rotating it clockwise.
5. Pair SD760M10 with the console (Using the BlueEye application):
    - Go to: **Hardware** > Tap **Add Devices** on the top-right of the page > **Wireless Devices Auto learn** (or, scan QR code or add wireless devices manually by entering the serial number).
      NOTE: *If the device is paired by scanning the QR code or entering the serial number before power-up, it appears as **Pending** in the BlueEye application. The device status in BlueEye changes to **Online** after power-up.*
6. Configure SD760M10 (Using the BlueEye application):
    - Go to: **Hardware** > Tap SD760M10 from the device list > Enter the necessary details > **Save**.

IMPORTANT: When one SD760M10 enters a fire alarm state, all other paired SD760M10 detectors will also sound the fire alarm.

For information about the LED indications on the detector, see the **LED Indications** section in this manual.

Components of SD760M10

The following figure displays the components of SD760M10.



Components of SD760M10

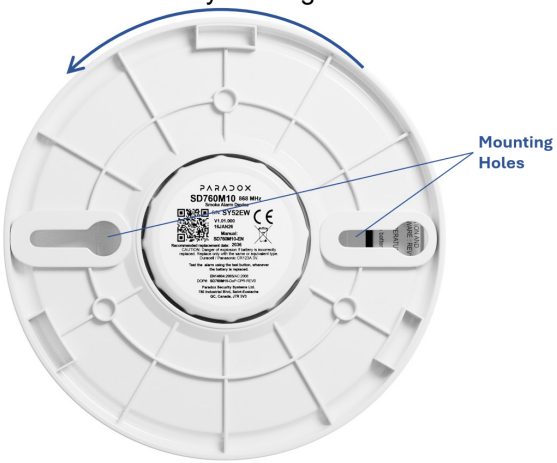
Physical Mounting

IMPORTANT:

- **Residential Use Only:** This smoke detector is designed for single-family homes or apartments, not common areas of multi-family buildings. It may not be suitable for **Commercial or Industrial Use.**

To mount the SD760M10 detector:

1. At the installation location, draw a horizontal line approximately six inches (15 cm) long.
2. Remove the mounting bracket from the detector by rotating it counterclockwise.



3. Position the bracket on the horizontal line, ensuring that the two longest hole slots are aligned with the line. Mark the keyhole slots to indicate the positions for the mounting screws.
4. Remove the bracket.
5. Using a 3/16-inch (5 mm) drill bit, drill two holes at the marked positions and insert the provided plastic wall plugs.
   NOTE: *Keep the smoke detector away from plastic dust when drilling.*
6. Secure the bracket to the ceiling using the provided screws and plastic wall plugs.

7. Remove the battery tab from the detector.
8. Align the slot of the mounting bracket with the detector. Push the detector onto the bracket and rotate it clockwise until it locks into place.
   IMPORTANT: If the detector is not properly mounted on the bracket, smoke detection will not trigger an alarm.

After the battery tab is removed, the detector will beep once within 2–4 seconds, indicating proper operation. Press and hold the **Test/Silence** button for 3 seconds—if a loud, pulsating alarm sounds, the unit is functioning correctly.

Optimal Locations and Locations to Avoid for Installing

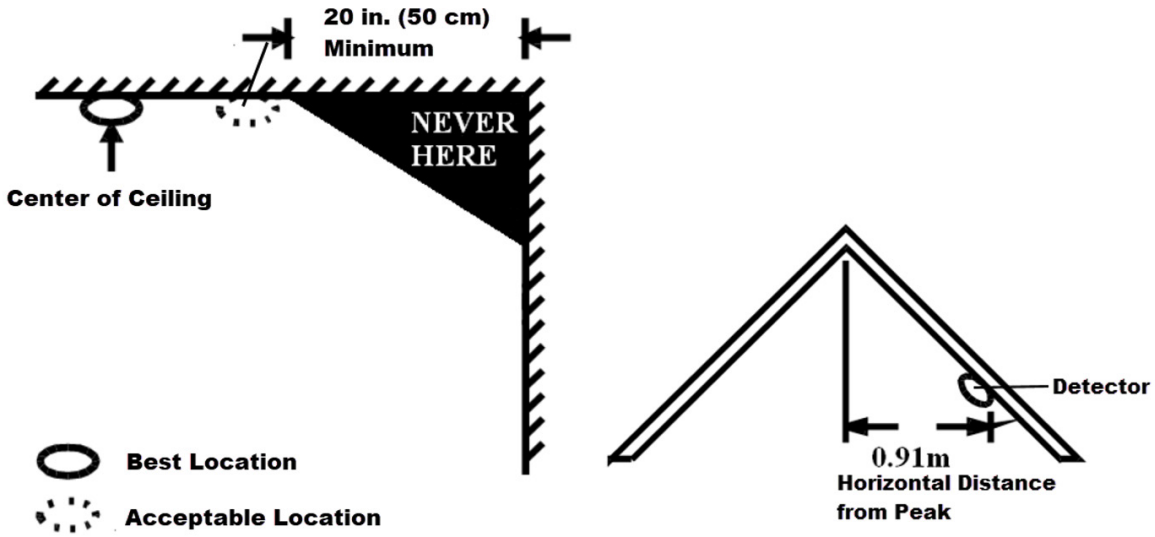
Smoke alarms should be installed following NFPA Standard 72 for optimal fire detection and safety.

Safety Recommendation: According to California State Fire Marshall and NFPA 72 standards, install smoke alarms outside each sleeping area and on every floor. Consider additional alarms in living spaces, kitchens, utility rooms, and garages for enhanced protection.

The following table lists the recommended locations for installing the smoke detector.

Table 1: Recommended Locations

Category	Recommended Locations
Minimum Protection	One smoke detector per floor and one in each sleeping area.
Enhanced Protection	Install detectors in all rooms (except kitchens and bathrooms), hallways, storage areas, basements, and attics.
Bedroom Coverage	Install a separate smoke detector in every bedroom.
Hallways	If a hallway exceeds 40 feet (12 meters), install detectors at both ends.
Stairwells	• Basement: Install at the bottom of the stairwell. • Upper Floors: Install at the top of the stairwell.
Living Spaces	Install additional detectors in living rooms, dining rooms, family rooms, attics, utility, and storage rooms.
Ceiling Placement	Install as close to the center of the ceiling as possible, at least 20 inches (50 cm) from walls or corners.
Sloped Ceilings	Place detectors 0.91 meters (3 feet) horizontally from the highest point.



Ceiling Locations

The following table lists the locations to avoid when installing the smoke detector.

Table 2: Locations to Avoid

Locations to Avoid	Reason
Near Cooking Areas	Keep at least 20 feet (6 meters) away from stoves and ovens to prevent false alarms.
High Humidity Areas	Moisture can enter the sensor and cause false alarms; install at least 10 feet (3 meters) away from bathrooms.
Extreme Temperatures	Avoid areas below 40°F (4.4°C) or above 100°F (37.8°C), as detectors may not function properly.
Dusty or Dirty Areas	Dust buildup can block smoke detection or trigger false alarms.
Drafty Areas	Avoid vents, fans, and air conditioners that could push smoke away from detectors.
Dead Air Spaces	Corners of ceilings or peaked rooftops may trap air and prevent smoke from reaching the detector.
Insect-Infested Areas	Insects inside the sensing chamber can trigger false alarms.
Near Fluorescent Lights	Electrical interference may cause nuisance alarms; keep at least 5 feet (1.5 meters) away.
With Smoke Alarm Guards	Guards can obstruct proper smoke detection.

Pairing SD760M10 with the Wireless M Console

The pairing and configuration settings of SD760M10 are managed through the BlueEye application.

Prerequisites

You must ensure the following before pairing:

1. The SD760M10 is within the range of the console.
2. The BlueEye application is installed on your mobile and connected to the site.
3. The M console is powered on (Paradox logo color - white, red, or green).

Pairing SD760M10

To pair the SD760M10 with the wireless console by an installer:

1. In BlueEye, when in the **Hardware** tab, tap **Add Devices** on the top-right of the page, and then tap **Wireless Devices Auto learn**.
   The wireless console searches for new devices and a rotating radar icon is displayed. All unpaired devices pair within 6 minutes and appear at the top of the device list with a ***new*** tag and voice announcements.

NOTE: *For immediate pairing, perform the following:*

- *Start the Auto-learn in the application, and remove the battery tab. Do not mount the detector on the mounting bracket during pairing. After pairing is complete, mount the detector on the mounting bracket.*

Pairing Previously Used Devices

You can enroll used devices under the following conditions:

- **When the previously used device is not online with another wireless console:** Start auto-learn. Then pair the device using the immediate pairing method or wait up to 6 minutes for automatic pairing.

- **When the previously used device is online with another wireless console:** Delete the device, reset it, and then initiate Auto learn. To reset the device, see the ***Resetting*** section in this manual.

Configuring the SD760M10

To configure the SD760M10 settings:

1. When in the **Hardware** tab, tap the **SD760M10** device.
2. On the page that opens, enter the necessary details for the parameters and then tap **Save**. For details about each parameter displayed on the page, see the following table.

The following table lists the parameters displayed for configuring the SD760M10, along with their descriptions.

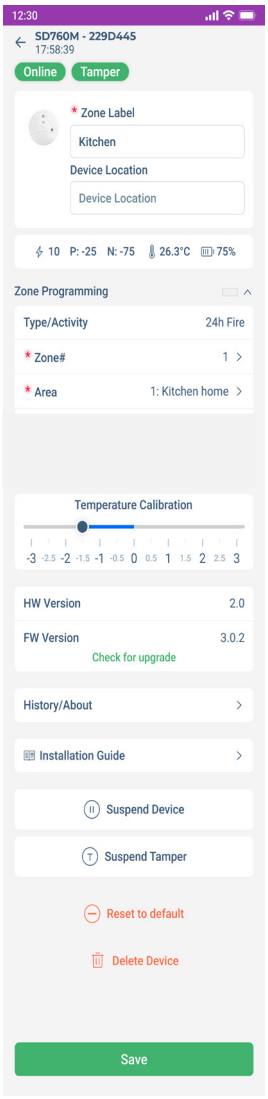


Table 3: Parameters

Parameter		Description
Zone Label		Enter a label for the device.
Zone Programming	**Zone#** and **Area**	Assign a zone number to a specific area or zone in the security system.
	Type/Activity	The smoke detector operates on the 24-fire zone type, that is, it triggers a fire alarm that cannot be reset until the system is disarmed.
Activate Sprinkler		Assign a programmable output or water valve that activates during a fire alarm.
Temperature Calibration		Allows manual calibration of the device's reported temperature to match the actual ambient temperature.
About		This tab displays details such as the installation date, production date, last programming date, battery replacements, battery history, and upgrade history.
Suspend Device		Disables monitoring of the device in the system.
Reset to Default		This will reset the device to the factory default settings. **NOTE**: *Only an installer can reset the device.*
Delete Device		This option deletes the device from the system completely. After deletion, the system generates a push notification only if the owner registration is complete, not during installation. **NOTE**: *Only an installer can delete the device.*

Features

The main features and warnings of the SD760M10 are listed in the table below.

Table 4: Features and Warnings

Features & Warnings	Description
Smoke Alarm	The alarm pattern is three 3 short alarm sirens with three 3 corresponding flashes of the red LED light. This pattern repeats until the smoke is cleared.
Silence	The silence feature temporarily mutes the alarm for up to 8 minutes while the LED continues to flash according to the alarm status. Press the **Test/Silence** button to activate. If smoke is still present after 8 minutes, the alarm will sound again.
Test	Press the **Test/Silence** button to test the smoke detector after installation and at least test once a week to ensure proper functionality. The test alarm pattern is three short alarms with three corresponding flashes of the red LED light.
Low Battery Warning	When the non-replaceable battery on the PCB board is low, the device will beep, and the yellow LED light will flash once every 50 seconds. This warning lasts for up to 30 days. **NOTE:** *When the Low Battery Warning is displayed, the detector must be replaced immediately.*
Smoke Trouble Warning	The trouble pattern consists of three beeps with one yellow LED flash every 50 seconds, indicating that the unit needs to be replaced.
Smoke Clean Me Warning	The high-sensitivity warning pattern consists of two beeps with two yellow LED flashes every 50 seconds, indicating that the unit requires cleaning or maintenance.

Smoke Low Sensitivity Warning	The low-sensitivity warning pattern consists of two beeps with one yellow LED flash every 50 seconds, indicating that the unit needs to be replaced.
Hush Feature	Temporarily silences the siren for up to one hour while the LED continues to flash according to the warning signal. Press the **Test/Silence** button to silence or restore the warning signal. **NOTE:** *The Low Battery Warning cannot be silenced.*
End of Product Life Warning	A single beep with four yellow LED flashes every 50 seconds indicates that the detector has reached the end of its 10-year lifespan and must be replaced.

NOTE: *The CR123A battery lasts up to 10 years. If replaced, test the alarm to confirm proper operation.*

LED Indications

After configuring SD760M10, the detector displays various LED indications based on specific events. The following table lists the LED indications and their corresponding event.

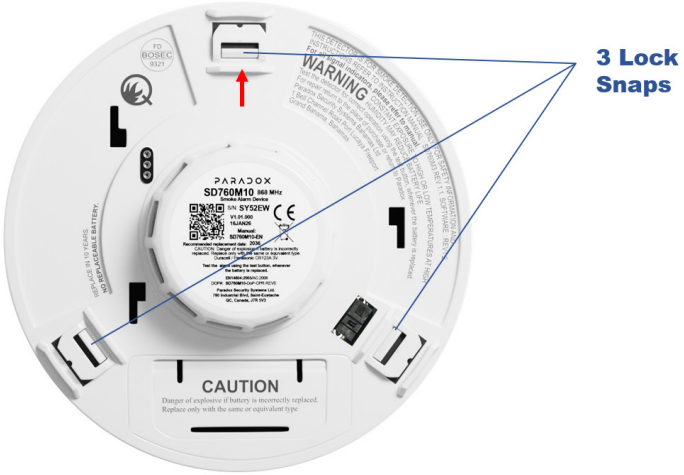
Table 5: LED Indications

LED Indication	Audio Tone	Event
3 Red blinks	3 beeps	Smoke Alarm
1 Yellow blink every 50 seconds	1 beep	Low Battery
1 Yellow blink every 50 seconds	3 beeps	Smoke Trouble
2 Yellow blinks every 50 seconds	2 beeps	Smoke Clean Me
1 Yellow blink every 50 seconds	2 beeps	Smoke Low Sensitivity
4 yellow blinks every 50 seconds	1 beep	End-of-Life

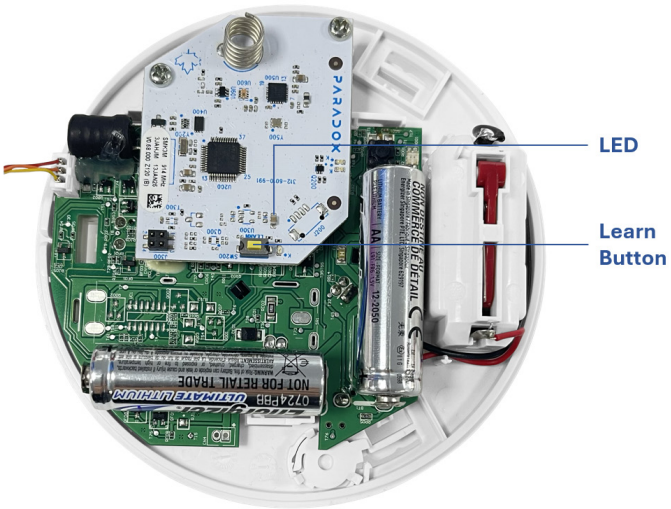
Resetting

To reset the device to its default settings, do the following:

1. Remove the detector from the mounting bracket.
2. Push any two lock snaps (in the direction indicated by the red arrow in the image) on the back cover simultaneously to partially detach it.



3. Push the third lock tab and then detach the back cover completely.
4. Press and hold the **Learn** button for 8 seconds.
   Reset is indicated by LED flashing red three times.
   NOTE: *If the device is already paired and online, delete the device first, then perform the reset on the device, and pair it again. Otherwise, the reset will have no effect.*



Upgrading Firmware

To upgrade the firmware:

1. When in the **Hardware** tab, tap on the device > **Check for Upgrade**.
2. If an upgrade is available, tap **Upgrade** when prompted.
   The process may take a few minutes. Keep track of the progress in the BlueEye application to ensure that the upgrade is completed successfully. Only Installers can perform the upgrade.

IMPORTANT: The firmware upgrade can be done only when the system is disarmed.

Signal Strength and Transmit Power Monitoring

The BlueEye application provides insights into each device's received signal strength and transmission power to optimize performance.

To view the RSSI and transmit power range:

1. When in the **Hardware** tab, tap the ⓘ icon next to the **Wireless** tab.
   A pop-up window with the RSSI and transmit power range is displayed.
2. Maximum power transmitted by SD760M10:
   - 868 MHz: +14 dBm
   - 914 MHz: +22 dBm

Tap on any listed device to view signal strength and additional device metrics. The following parameters are displayed for each device:

- **P** - Received signal strength at the panel
- **N** - Received signal strength at the device
- - Transmit power of the device
- - Current temperature reading of the device
- - Battery level of the device

A higher P and N value indicates stronger and clearer communication between the console and the device.

- If **P** is low, the console struggles to receive signals from the device.
- If **N** is low, the device struggles to receive signals from the console.

NOTE: *Values below -93 with maximum Tx power are not recommended values, and RPT5M can be used to extend the range.*

Power transmission impacts only **P**:

- When **power transmission** increases, the **P** value at the console generally improves, as a stronger signal is sent.
- If **P** value is good, the device can reduce its transmission power to save battery life.

IMPORTANT: All nodes adjust their transmission power to save battery life. The adjustment depends on the surrounding noise level and is updated at intervals set by the supervision timer or during a node status update.

If the Smoke Alarm Activates

If the smoke alarm activates, do the following:

1. Take Immediate Action
   - Never ignore the alarm—check for fire or smoke.
   - Alert others, especially those who need assistance.
2. Evacuate Quickly
   - Follow your pre-planned escape route.
   - Do not stop for belongings or to get dressed.
3. Check Doors Before Opening
   - Look for smoke around the edges.
   - Feel the door with the back of your hand—if it is hot, use another exit.
   - Open doors slowly and be ready to close them if smoke rushes in.
4. Stay Low in Smoke
   - Crawl under the smoke where the air is clearer.
5. Gather at Your Meeting Place
   - Once two people arrive, one calls 911 from a neighbor's home.
   - The other stays to conduct a headcount.
6. Wait for the Fire Department
   - Do not re-enter until the authorities declare it safe.

Maintaining the Detector

Perform the following to ensure your smoke detector functions properly:

- **Test Weekly**
  - Press the test button to check the siren, LED indicator, and battery.
- **Clean Monthly**
  - Remove the detector from its mounting bracket.
  - Use a soft brush attachment to vacuum the cover and vents.
  - Reinstall and test the detector after cleaning.
- **Avoid Damage**
  - Do not disassemble or clean inside—this voids the warranty.
  - Do not use detergents, solvents, or paint on the detector.
  - Ensure proper ventilation when using household chemicals.
- **Protect from Contaminants**
  - Avoid exposure to substances like alcohol-based products, paints, adhesives, hair spray, and perfumes, as they can damage sensors or cause false alarms.
- **Precautions During Home Projects**
  - Remove or cover the detector with a plastic bag when painting, staining, wallpapering, or using adhesives.
  - Reinstall it immediately after work is complete to maintain protection.

Smoke Alarm Limitations

A smoke alarm may not provide adequate warning in the following cases:

- **Close Proximity Fires** – When a fire starts directly on the victim, such as clothing catching fire while cooking.
- **Obstructed Smoke Flow** – When smoke cannot reach the alarm due to closed doors, ventilation, or other barriers.
- **Rapidly Growing Fires** – In cases of fast-spreading fires, where escape routes become blocked even with properly installed alarms.

Technical Specifications

The following table lists the technical specifications of SD760M10 along with their descriptions.
NOTE: *The specifications are subject to change without prior notice.*

Table 6

Specification	Description
Wireless Type	GFSK two-way with frequency and encryption hopping
RF Frequency	868 (865.05 - 867.95) MHz or 914 (902.25 - 927.55) MHz May vary by region.
RF Power	868 MHz up to +14 dBm radiated, 914 MHz up to +22 dBm in permitted countries.
Transmission Time	Less than 20 ms
Supervision Time	20 minutes, 10 minutes (Default), and 3 minutes
Status Indicators	Battery, temperature, TX/RX values
Battery	1 x CR123 lithium, 10 years of battery life with normal usage.
Installation Environment	Indoor
Firmware Upgrade	Remotely over the air, via BlueEye
Operating Temperature	4.4°C to +37.8°C (40°F to 100°F)
Auto Learn	Yes
Colors	White
Dimensions	12 Ø x 4.6 cm (4.8" Ø x 1.9")
Weight	0.21 kg

Certification	CE, EN 14604, FCC 15.247

FCC Statements

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

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

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

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:

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

WARNING – RF EXPOSURE COMPLIANCE: This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

FCC ID: KDYSD760M10
IC: 2438A-SD760M10

- This Class B digital apparatus complies with Canadian ICES-003.
- -Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

IC Statements

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

AVERTISSEMENT – CONFORMITÉ AUX NORMES D'EXPOSITION AUX RF: Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Warranty

For complete warranty information on this product, see the Limited Warranty Statement document, or contact your local Paradox distributor.

Patents

US, Canadian, and international patents may apply. Paradox is a trademark or registered trademark of Paradox Security Systems (Bahamas) Ltd.