PARADOX ⋀

K38M
32-Zone Wireless Fixed LCD Keypad

INSTALLATION MANUAL

Introduction

The K38M is a wireless 32-zone fixed LCD Keypad, a reliable, easy-to-install security control device that integrates with Paradox M systems. It communicates using 2-way wireless communication, featuring the latest Gaussian Frequency Shift Keying (GFSK) technology with frequency and encryption hopping. This ensures superior wireless range, enhanced encryption, supervision, and reliability. It supports 2 partitions and up to 32 zones.

Equipped with a fixed LCD display, the K38M provides real-time system updates, including zone, status and alerts. Users can arm or disarm the system, view zone status and control 4 PGM's, making it a practical choice for both residential and small commercial security needs. The K38M keypad is designed for ease of use, with an intuitive interface that allows users to interact with and control their security system efficiently, adding both flexibility and enhanced safety to the security setup.
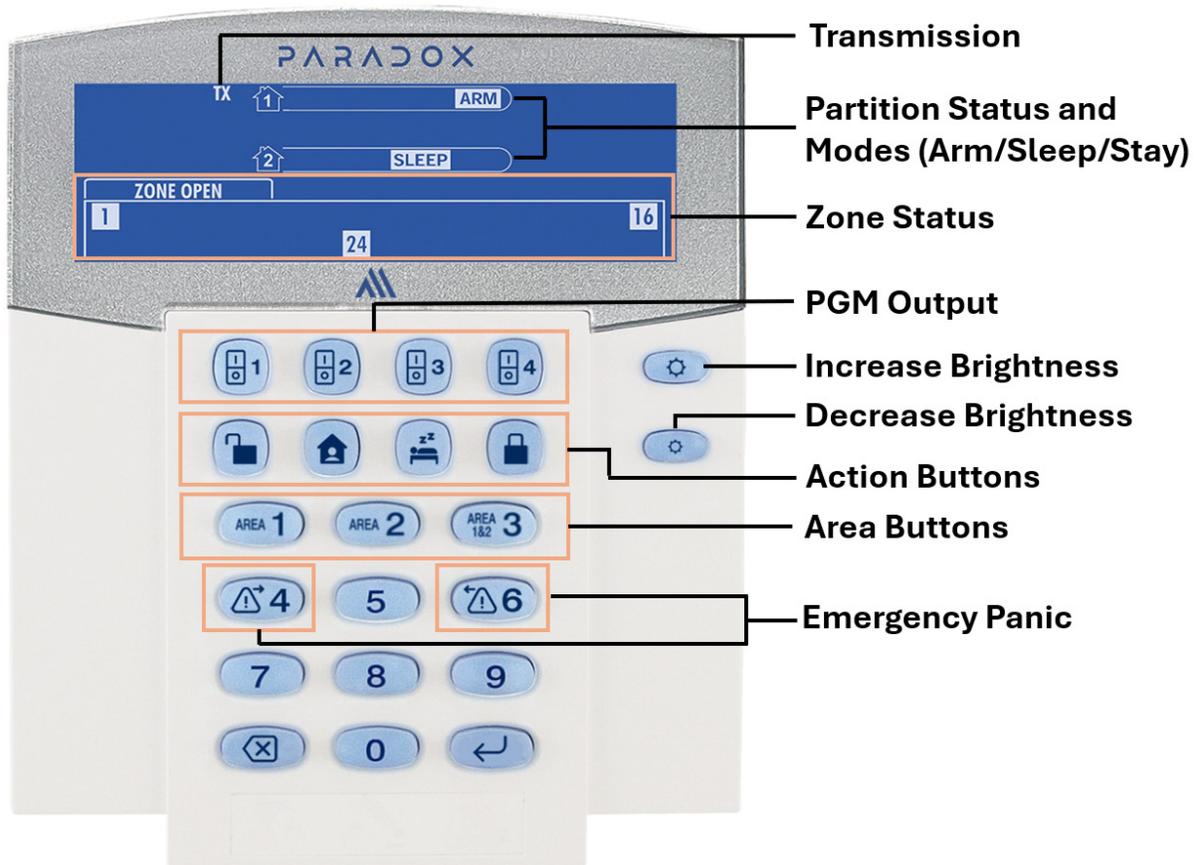
Quick Installation - Experienced Installers

To install K38M:
1. Push down the backplate of K38M and fix the backplate on the wall.
2. Insert batteries, and connect power when used.
3. Slide the keypad back onto the backplate.
4. Pair K38M with the console (Using the BlueEye application):
   - Go to: **Hardware** > Tap **Add Devices** > **Wireless Devices Auto learn**
     NOTE: *You can instantly pair K38M by pressing any button on the keypad.*
5. Configure K38M (Using the BlueEye application):
   - Go to: **Hardware** > Tap **K38M** from the device list > Enter the necessary details > **Save**.

Components of K38M

The following figure displays the components of K38M.

- Transmission
- Partition Status and Modes (Arm/Sleep/Stay)
- Zone Status
- PGM Output
- Increase Brightness
- Decrease Brightness
- Action Buttons
- Area Buttons
- Emergency Panic

Backplate

- External Power Input Connector
- Battery Tab
- 2 x AA Lithium Batteries

Physical Mounting

To mount K38M:

1. Push the backplate downward using a flathead screwdriver to detach it from the keypad.
2. Mount it on the wall by using the mount holes.
3. Install the batteries and ensure proper polarity of the batteries.
    - If the keypad includes batteries, unscrew the battery holder and remove the battery tab.
    - If the keypad does not include batteries, unscrew the battery holder and insert the batteries.
4. Tighten the screw on the battery holder.
5. Slide the keypad back onto the backplate until it clicks into place.

Connecting DC Source (Optional)

The K38 can be powered by an external power supply and batteries should also be inserted in case of power failure. Connect 6 to 14VDC,100 mA (minimum) power supply to the power terminals.

NOTE: *Use only an external power supply that is safety-approved in accordance with IEC/EN 60950-1 or 62368-1, with a rated output voltage of 6-14VDC and a maximum power of 15W.*

Pairing K38M with the Wireless M Console

The pairing and configuration settings of K38M are managed through the BlueEye application.

Prerequisites

Ensure that:
1. The K38M 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 K38M

To pair the K38M with the wireless console by an installer:

1. In BlueEye, when in the **Hardware** tab, tap **Add Devices**, and then tap **Wireless Devices Auto learn**. The wireless console searches for new devices and a rotating radar icon is displayed. This may take up to 6 minutes. To pair instantly, press momentarily on any button on the keypad. The device pairs with the console and it appears at the top of the device list with a *new* tag and voice announcements.
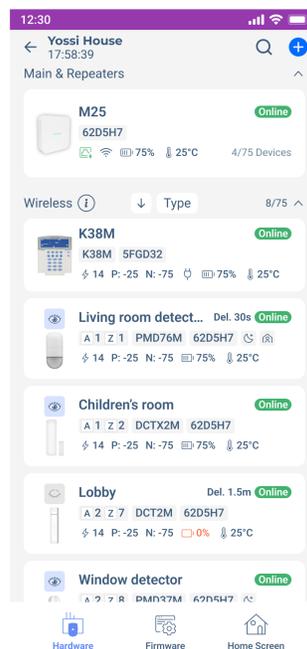
Configuring K38M

You can configure the K38M settings in the BlueEye application.
To configure the K38M settings:
1. When in the **Hardware** tab, tap the **K38M** device.
2. On the screen that opens, enter the necessary details.
3. Tap **Save**.
   For details about each parameter displayed on the page, see Table 1.

The following table lists the parameters displayed for configuring the K38M, along with their descriptions.

Table 1

Parameter	Description
Device Details and **Device Name**	Enter the device details.
Arm without Code	Enable this option to Arm the system without a code. When enabled, you can long-press the Arm button on the keypad to arm the system. For more information, see the **Operations** section in this manual.
Mute Keypad	Enable this option to silence the keypad tones.
PGM1 to **PGM4**	Assign PGMs to the keypad.
Area 1 to **Area 2**	Assign specific areas to the keypad for control.
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.*
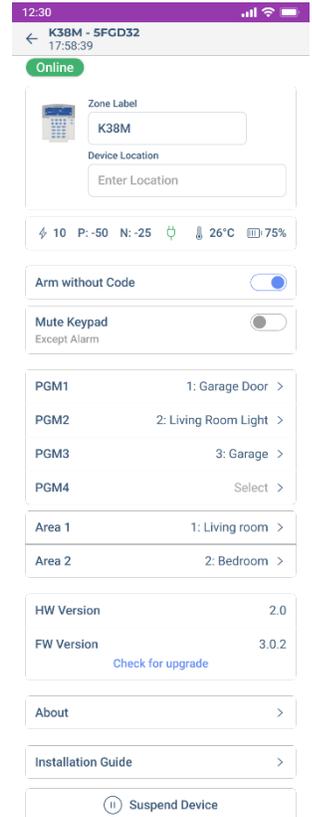
Setting Up an Access Code

After pairing and configuring the keypad using the BlueEye application, the **Owner** or **User** can create a valid six-digit access code in the application. This code can be used to manage the system via the keypad.

Ensure the following while creating a valid access code:
- Avoid repeating the same digit more than three times consecutively. For example, 444422.
- Avoid repeating a group of numbers within the code. For example, 234234.
- Avoid using sequential numbers in ascending or descending order. For example, 123456.
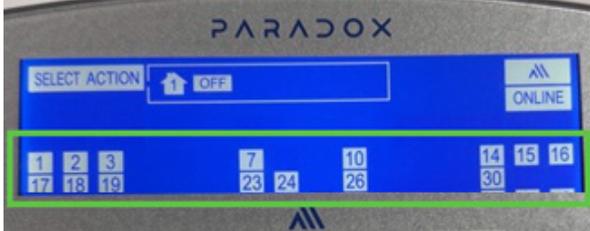
To set up a code for the keypad:
1. When in the M site, tap the ☰ icon at the top right of the **Home** screen.
2. Tap **Profile.**
3. Tap **Edit** next to **System Codes**.
4. Enter a six-digit number on the displayed screen.
5. Tap **Save**.

You can update the access code as required.

Operations

The operations that you can perform to control the security system using the K38M keypad are listed in the following table.

Table 2

Action	Procedure

Arming and Disarming (Arm/Stay/Sleep/Disarm)	1. Press the desired button on the keypad.
	
	2. Enter the access code.
	3. Press the area button.
	   • Key 1/Key 2 to Arm/Disarm an area individually.
	   • Key 3 to Arm/Disarm both areas simultaneously.
	NOTE: *If an area is not selected, it will Arm/Disarm Area 1 automatically.*
	4. Press the button to activate the mode immediately.

Activating a PGM Output	1. Press the PGM output button on the keypad. 2. Enter the access code.
Adjusting Display Brightness	Use the two buttons on the right to adjust brightness (8 levels available).
Canceling an Action	Use the button to cancel any ongoing action or erase input access code errors.
Triggering Emergency Panic Alarm	Simultaneously press and hold **Key 4** and **Key 6** on the keypad.
Cancelling a panic alarm	If a panic alarm is active on the system, press the **Disarm** button and then enter the access code to cancel the panic alarm. The following screen is displayed when a panic alarm is active. **NOTE:** *On 32-zone keypads, the text **PNC** is displayed partially, while on 48-zone keypads, the full text is displayed.*

Alarm Memory	Alarm in memory can be cleared either from the Keypad, or from the BlueEye app by acknowledging the messages in the message center. The following screen is displayed when there is an alarm in memory. **NOTE:** *On 32-zone keypads, the text **1-ALM** is displayed partially, while on 48-zone keypads, the full text is displayed.* To clear from the keypad: 1. Press 1, and then enter the access code. 2. Press either of the following buttons to acknowledge the alarm.
COM	The text **COM** appears on the LCD screen when there is a reporting issue with the VIPC20 or IPC10. To resolve the issue, check the panel's network connectivity or reconfigure its settings. **NOTE:** *On 32-zone keypads, the text **COM** is displayed partially, while on 48-zone keypads, the full text is displayed.*

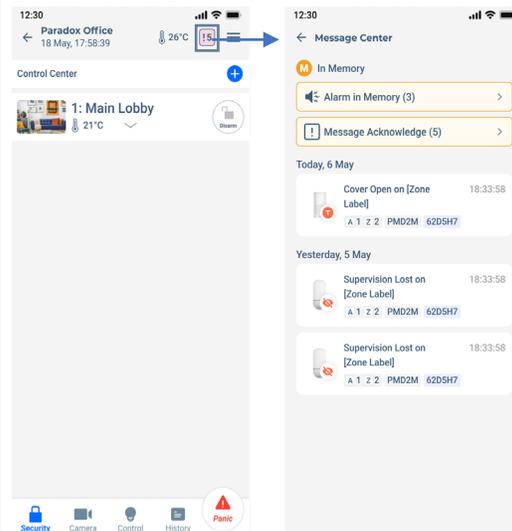| Trouble Display and Acknowledgment	When the M console detects trouble (for example, a tamper alert or battery drain), a **TL** (Trouble) message appears on the K38M screen. This message is displayed for up to 5 seconds.
	NOTE: *On 32-zone keypads, the text is displayed partially, while on 48-zone keypads, the full text is displayed.*
	To acknowledge the trouble message:
	1. Press **2**.
	2. Enter your access code.
	The screen then displays **CTL** (Clear Trouble), which will be displayed for up to 30 seconds.
	3. Within 30 seconds, press either of the following buttons to clear the message:
	NOTE:
	• *If the keypad is in power-saving mode (no power supply), press any button twice to wake up the screen and view the TL message.*
	• *If the keypad is powered by an external power supply, press the **Disarm** button, and then enter your access code to view the screen displaying the TL message.*
	After clearing the trouble message, you can arm the system using the keypad.
	The trouble condition does not specify the trouble type on the keypad. The details of any trouble conditions can be accessed in the **Message Center** of the BlueEye application.

Using Long Press for Mode Transitions	Ensure **Arm without Code** is enabled in the BlueEye application.
	To Arm a system or an area using a long press:
	  1. Long press the Stay/Sleep/Arm button.
	  2. When the display blinks, press the area button.
	     • Key 1/Key 2 for individual areas.
	     • Key 3 for both areas simultaneously.
	NOTE: *Long press can be used only for the following transitions:*
	     • *Stay to Sleep*
	     • *Stay to Arm*
	     • *Sleep to Arm*
	     • *Disarm to Stay/Sleep/Arm*

You can control up to two areas using the keypad. If the keypad produces a long failure beep, it indicates that the action was not successfully executed due to issues (for example, wrong code, or failure to communicate with the panel).

If a zone is open, the opened zone will be displayed in the **Zone Status** section of the keypad's display.

Power-Saving Mode

- **With external power supply:**
  The keypad stays on continuously.
- **Without a power supply:**
  The backlight of K38M's display turns off after 10 seconds and enters power-saving mode to conserve battery life. Only alarms, exit, and entry delays will wake up the K38M within 2 seconds. To activate the K38M, press any button twice on the keypad.

Upgrading Firmware

To upgrade the firmware:

1. 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. Both the Installers and owners 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 K38M:
   - 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 the **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.

Technical Specifications

The following table lists the technical specifications of K38M along with their descriptions.
NOTE: *The specifications are subject to change without prior notice.*

Table 3

Specification	Description
Power Input	6 to 14 VDC, 100 mA (minimum)
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

	Might vary in different countries.
Number of Supported Zones	32
RF Power	868 MHz up to +14 dBm radiated, 914 MHz up to +22 dBm in permitted countries.
Status Indicators in Application	Power supply, battery level, temperature, TX/RX values
Battery	2 x AA lithium, 6+ years of battery life with normal usage.
Transmission Time	Less than 20 ms
Supervision Time	20 minutes, 10 minutes (Default), and 3 minutes
Installation Environment	Indoor
Firmware Upgrade	Remotely over the air, Via BlueEye, takes approximately 2 minutes to complete after the transfer begins. Battery-powered mode: a delay of up to 2 seconds before the panel starts transferring the firmware. Plugged-in mode: The firmware transfer starts immediately.
Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Auto Learn	Yes
Colors	White
Dimensions	12.3W x 14.4H x 3.2D cm (4.9" W x 5.7" H x 1.3" D)
Weight	0.26 kg
Certification	CE, FCC 15.247 Certification Body: Applica Test & Certification

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: KDYK38M
    IC: 2438A-K38M

- 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.