



# MXK250W

System\_사용자 매뉴얼





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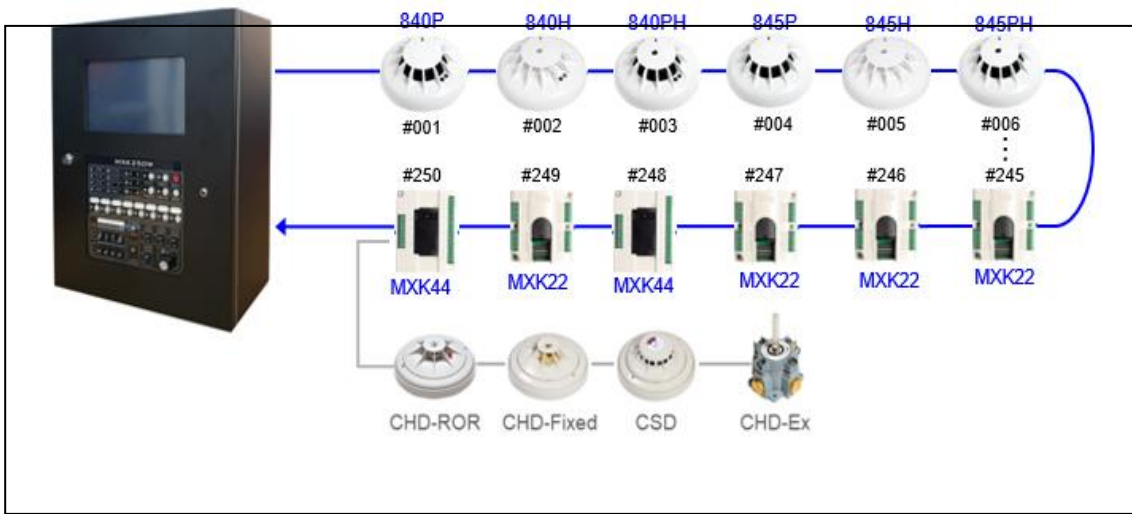
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## 1. General Specification

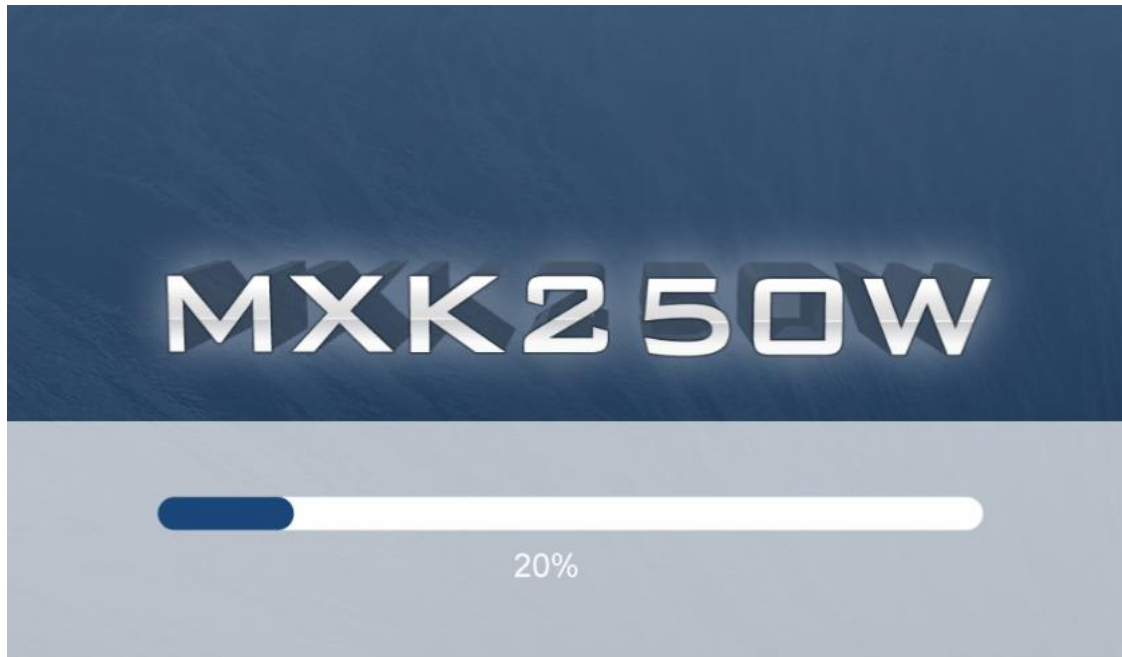
Item	Sub-item	Description
<b>Main Power</b>	A.C Input	AC 220V/50~60Hz
	D.C Output	27V/3.5A, 5V/2A
<b>Battery</b>	Capacity	24V / 4A
<b>Display</b>	Type	10.1inch TFT LCD
	Resolution	1024 x 600
<b>Touch Screen</b>	Type	10.1inch Resistive Touch
<b>Housing</b>	Size	400W*500H*160D
	Materials	SPCC(1.2t)
<b>Loop capacity</b>	Panel network	N/A Only 1 panel
	Transponder	N/A Only embedded Loop card
	Loop & Address	1 Loop, 250 Addresses
	Circuit(2/2 IO)	500 In / 500 Out
	Circuit(4/4 IO)	1000 In / 1000 Out
<b>KEY</b>	System Key	5 Keys
	Equipment Key	8 Keys
	Pump Control Key	4 Keys
<b>LED</b>	System LED	15 LEDs
	Equipment LED	8 LEDs
	Pump LED	4 LEDs
<b>Communication</b>	RS485	Emergency broadcasting
	USB	Map down/upload, Firmware Upgrade
<b>Phone/Call Point</b>	Connecting method	MTIB phone call point terminal
<b>Configuration Tool</b>	U-Consys	MXK250W Consys

## 2. System Diagram





### 3. Initiation Screen



This screen is displayed during the initiation process after the system is powered on. While the system boots, any upcoming updates are applied if software is installed in the predetermined directory (Root directory: \mxk250) via a USB connected to the MCM board.

Additionally, the system initializes hardware inspections, data updates, system operation files, configuration, and process preparation.

If an error occurs, the initiation process and the screen will stop. In such cases, you must manually reboot the system.

## 4. Normal Screen

### 4.1. Main Home screen

#### 4.1.1. Overview



After the initiation process, this screen is displayed.

At the top of the screen, the following information is shown: main voltage, battery voltage, number of current events, automatic restoration, holding, non-accumulation/accumulation, and time.

On the right side of the screen, click the appropriate menu to navigate.

At the bottom of the screen, the first and second occurrences of fire are displayed.

## 4.2. Status

### 4.2.1. Overview



On the right side of this screen, click the **status icon** to view the status screen on the next page. This menu allows users to acknowledge the status of IOs and detectors connected to the panel, displaying the current status of faults, fires, and other conditions, as well as providing access to the **test menu** for forced input/output operations.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

4.2.2. Group Status of Loops and Devices



The **Status menu** displays a screen showing groups of loops and devices connected to the panel. Each group displays the status of 15 devices, providing information about fires, equipment, faults, and isolated circuits.

To check a specific device, click the icon of the device group that contains the corresponding device.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

### 4.2.3. Status of Devices



On the previous screen, **Group Status of Loops and Devices**, click a group icon to view the type and status of devices.

The type of devices are categorized by color and their statuses can be one of the following: fire, equipment, fault, and normal.

Analog detectors display the current analog value on the corresponding devices.

To check the status of a specific device, click its corresponding icon.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.4. Status of MXK22 IO



On the previous screen, **Status of Devices**, click a specific device - an icon representing I/Os or analog detectors- to view the status of **MXK22 IO** shown on this screen.

At the top of the screen, the number of events -fire, equipment, fault, circuit isolation- are displayed. In the middle of the screen, the address number, communication status and power status of the chosen IO are shown.

The screen also displays the types of input and output devices connected to the IO, the status of the end-of-resistor of the input device, and the area where the input and output devices are connected.

To perform a circuit test (forced input) or circuit isolation, click the appropriate rectangular area icon to access the submenu.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.5. Submenu of MXK22 Input Circuit



On the **Status of MXK22 IO** screen, click the rectangular icon representing an Input area to access the submenu.

In the submenu, click **Start Test** to open the menu for initiating a circuit test.

Click **Isolate Circuit** in the submenu to isolate a circuit. Note that isolating a circuit does not collect any event information for the corresponding point.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

4.2.6. Submenu of MXK22 Output Circuit



To perform a forced output test, click the rectangular icon representing an Output area on the **Status of MXK22 IO** screen to open the submenu.

Click **Start Test** to initiate the output test.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.



#### 4.2.7. Status of MXK44 IO



On the previous screen, **Status of Devices**, click a specific device - an icon representing I/Os or analog detectors- to view the status of MXK44 IO.

At the top of the screen, the number of events -fire, equipment, fault, circuit isolation- are displayed. In the middle of the screen, the address number, communication status and power status of the chosen IO are shown.

The screen also displays the types of input and output devices connected to the IO, the status of the end-of-resistor of the input device, and the area where the input and output devices are connected.

To perform a circuit test (forced input) or circuit isolation, click the appropriate rectangular area icon to access the submenu.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.8. Submenu of MXK44 Input Circuit



On the **Status of MXK44 IO** screen, click the rectangular icon representing an Input area to access the submenu.

In the submenu, click **Start Test** to open the menu for initiating a circuit test.

Click **Isolate Circuit** in the submenu to isolate a circuit. Note that isolating a circuit does not collect any event information for the corresponding point.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.9. Submenu of MXK44 Output Circuit



To perform a forced output test, click the rectangular icon representing an Output area on the **Status of MXK44 IO** screen to open the submenu.

Click Start Test to initiate the output test.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.10. Checking the Level of Analog Detectors



The screen above shows information for an analog-type detector capable of displaying values up to 255. The left side of the screen shows the detector's type (P for Photoelectric or H, for Fixed temperature) and its current level. Next to this information, the values received from the panel are displayed as a bar graph that updates every 5 seconds.

**Max:** The highest value since the panel was last booted.

**Average:** The average value is calculated over a 90-minute period. After the initial 90-minute accumulation, the average is updated every 5 seconds.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.11. Checking the Temperature/Density of Analog detectors



The screen above appears after clicking **View Temperature/Density** on the Analog Detector screen. It displays the temperature or density values derived from the level data received from the panel.

The left side of the screen shows the detector's type (P for Photoelectric or H, for Fixed temperature), its current temperature and density. Next to this information, the values received from the panel are displayed as a bar graph that updates every 5 seconds.

**Max:** The highest value since the panel was last booted.

**Average:** The average value is calculated over a 90-minute period. After the initial 90-minute accumulation, the average is updated every 5 seconds.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.12. Checking the Level of a Combined Analog Detector



The screen above shows 2 types of information for a combined analog detector. The left side shows the detector's type (P for Photoelectric and H for Fixed temperature), and their current levels. The right side displays the values received from the panel as a bar graph that updates every 5 seconds.

**Max:** The highest value since the panel was last booted.

**Average:** The average value is calculated over a 90-minute period. After the initial 90-minute accumulation, the average is updated every 5 seconds.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.2.13. Checking the Temperature/Density of a Combined Analog Detector



The screen above appears after clicking **View Temperature/Density** on the Combined Analog Detector screen. It displays the temperature or density values derived from the level data received from the panel.

The left side of the screen shows the detector's type (P for Photoelectric and H for Fixed temperature), its current temperature and density. Next to this information, the values received from the panel are displayed as a bar graph that updates every 5 seconds.

**Max:** The highest value since the panel was last booted.

**Average:** The average value is calculated over a 90-minute period. After the initial 90-minute accumulation, the average is updated every 5 seconds.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 4.3. Records

### 4.3.1. Overview

The screenshot shows the MXK250W System interface. At the top, there's a status bar with '전압 26.83V' and '배터리 26.01V'. Below that, a row of colored buttons shows counts for '화재' (1), '설비' (0), '고장' (0), and '차단' (0). The main area has a search bar '검색한 기록 수 (0002)'. On the left, there are filters for '이벤트' (과거/현재, 과거기록, 현재기록) and '이벤트 타입' (All 전체, 화재, 설비, 고장, 출력, 기타). The right sidebar contains navigation icons, with the 'Record' icon (a globe) highlighted in a red box. The table below shows two records:

수신기	주경종 출력	[출력] 발생
No.3998 000-0		2021-01-01 10:12:38
4층 018	소화약제 감지기 A	[화재] 발생
No.3997 018-1		2021-01-01 10:12:38

The screen above appears after clicking the **Record** icon on the Main Home screen. It displays all the current records of the following information: fire, equipment, fault, and output.

The left side shows the search category, while the right side displays the results.

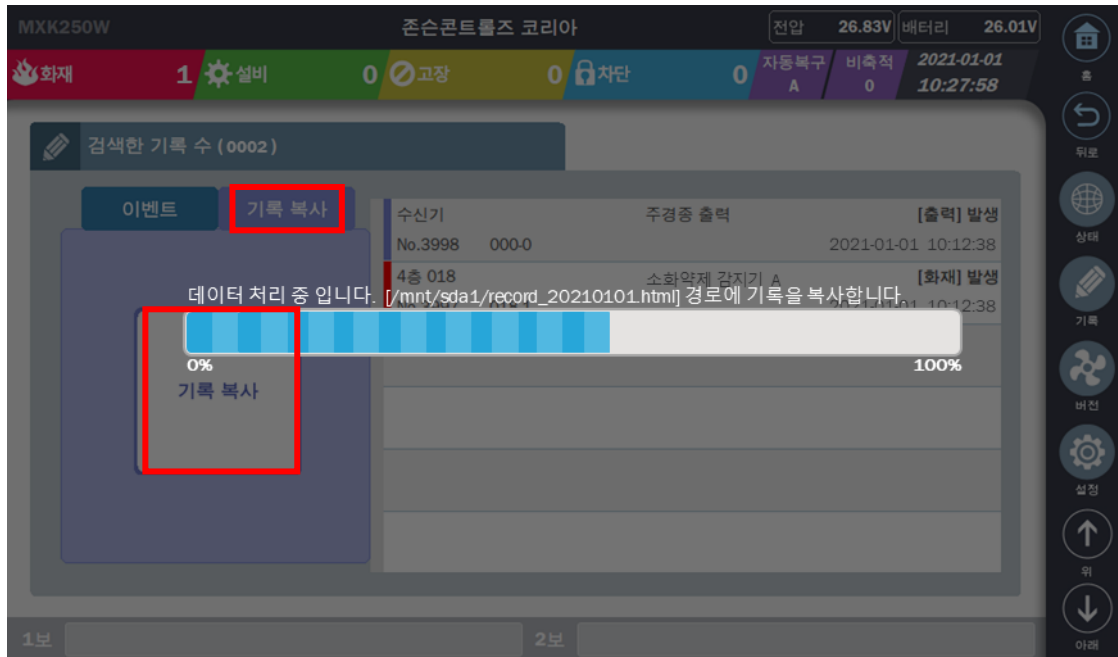
The search category includes **History** for archived data, **Present** for ongoing events. Only one of these can be selected at a time. The **Event Type** filter allows for multiple selections, including All, Fire, Equipment, Fault, Output, and Others. The screen above shows events related to Fire and Output.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.



### 4.3.2. Copy



To copy the searched records to a USB drive, click **Copy Record** on the screen. This will save the searched records as HTML file named “record\_yyyymmdd.html” in the root directory of the USB drive. For example, if the building date is 2021, January 1, the file will be named “record\_20210101.html”. Note that a USB drive is connected to the panel before proceeding.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 4.4. Version

### 4.4.1. Overview



The screen above appears after clicking the **Version** menu on the Main Home screen. It displays the download dates of the map data file and the date of system version and updates.

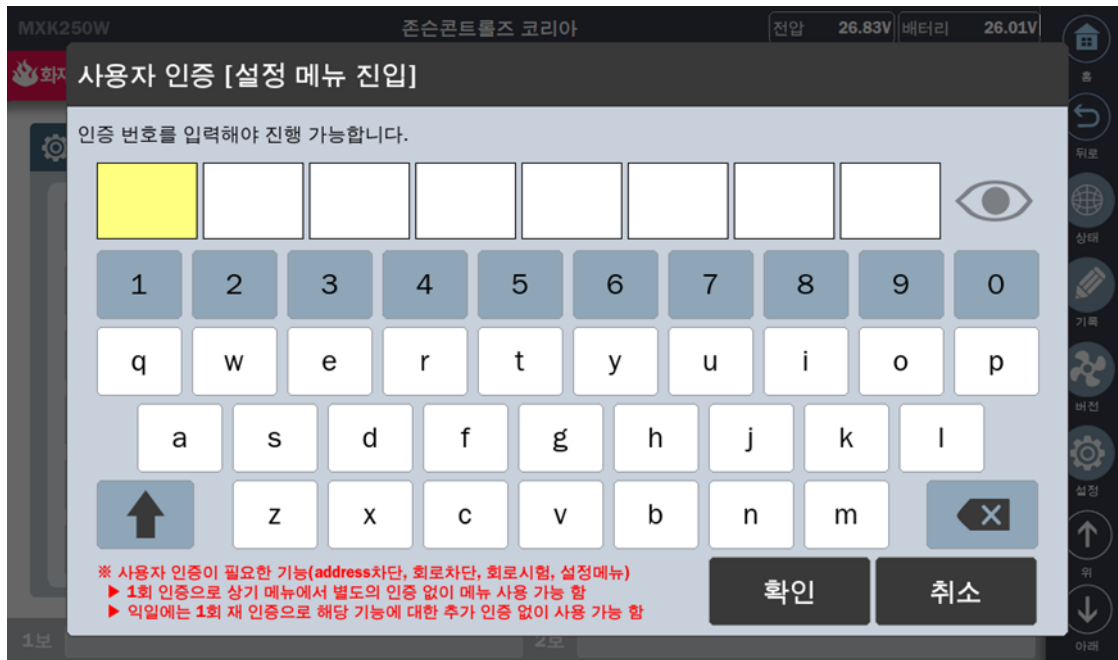
For the map data file, the download dates of In/Output data, Linked/Logic data, and other data are also shown. For the system, the version and update dates of UI program, File system, and Kernel are displayed.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 4.5. Setup

### 4.5.1. Overview



The screen above appears after clicking the **Setup** menu on the Main Home screen. You must input a certified password to view or change settings related to the panel.

Refer to the “Normal screen > User certification” page for user certification information.

4.5.2. Settings of Panel



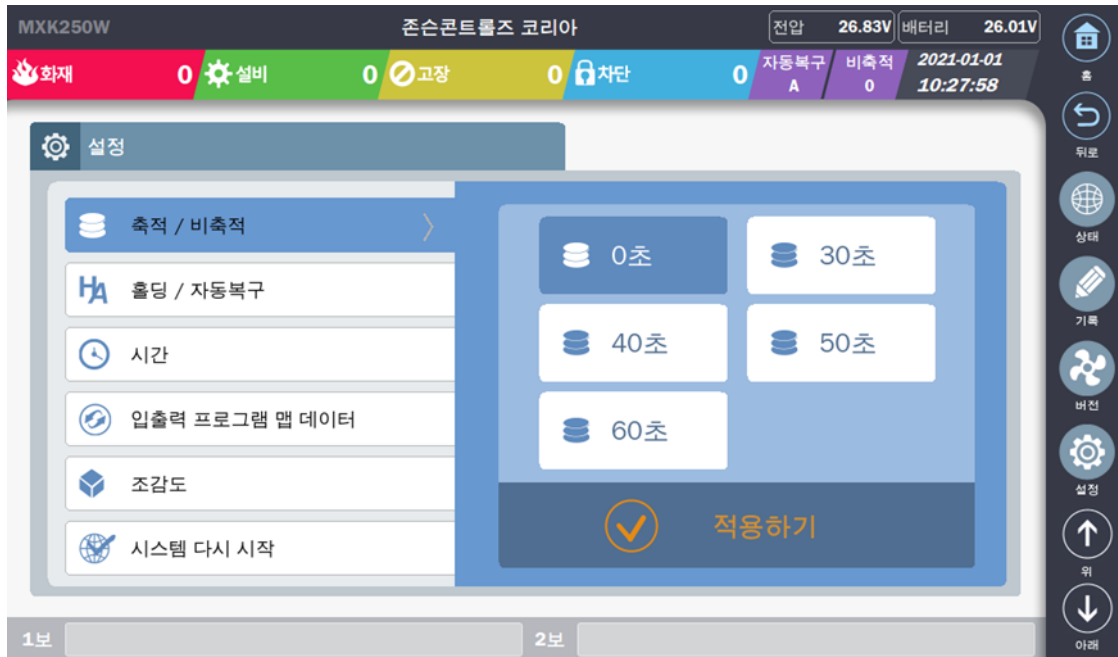
The screen above appears after clicking the **Setup** menu on the Main Home screen and completing user certification. It displays settings related to the panel that can be changed.

The left side shows the available settings, while the right side displays the corresponding details. The screen above shows the initial state where no specific setting is selected.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

### 4.5.3. Accumulation/Non-Accumulation



The screen above appears after clicking the **Accumulation/Non-Accumulation** button on the **Setup** screen. The right side allows users to set the accumulation time.

Available accumulation times are 30, 40, 50, to 60 seconds. Selecting 0 second disables accumulation.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.5.4. Holding/Automatic Restoration



The screen above appears after clicking **Holding/Automatic Restoration** button on the Setup screen. The right side allows users to set Holding and Automatic Restoration.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 4.5.5. Time

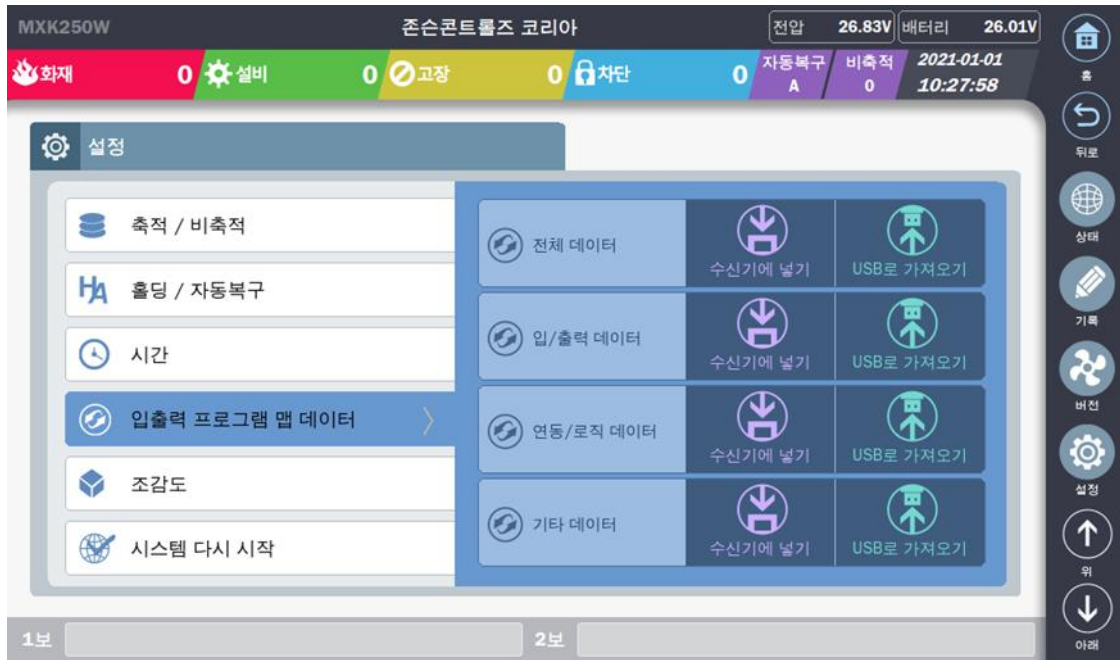


The screen above appears after clicking **Time** button on the Setup screen. The right side allows users to set time.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

4.5.6. Map Data for In/Output program



The screen above appears after clicking the **Map Data for In/Output program** button on the Setup screen.

The map data for In/Output program is a site map created using the Consys program. The panel uses this site map to collect site data and control links related to fire, equipment operation or output.

Note that a USB drive must be connected to the panel, and a predetermined directory (Root directory:\config) must exist.

To download the site map data from the USB drive to the panel, click the 'Download to Panel' button. To download the site map data from the panel to the USB drive, click the 'Download to USB' button.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.



#### 4.5.7. Bird View



The screen above appears after clicking the **Bird View** button on the Setup screen. The right side allows users to set the image for the Main Home screen.

The Bird View image can be downloaded to the panel to be used with the map data for In/Output program via a USB drive. To download the Bird View image from the panel to the USB drive, click the 'Download to USB' button.

Note that a USB drive must be connected to the panel, and a predetermined directory (Root directory:\config) must exist.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

#### 4.5.8. System Reset



System Reset is used to safely reboot or shut down the system. Avoid forced power shutdown as it may cause system instability.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 4.6. User Certification

### 4.6.1. Overview



Users must have a certified password to change the panel's status using the following menus: Address isolation, Circuit isolation, Circuit test, and Setup.

User certification is a one-time process that grants access to this menu. Users must obtain a new certified password daily.

## 5. Fire Occurrence Screen

### 5.1. Fire Occurrence

#### 5.1.1. Overview



When a fire occurs, the screen above appears, displaying information for both 1<sup>st</sup> fire and 2<sup>nd</sup> fires together. Click the Fire icon to access other menus on this screen.

The top left corner of the screen shows the number of fire incidents, which increases from 0.

## 6. Fire Caution Screen, Preliminary indication (Pre-alarm)

### 6.1. Analog Detector

#### 6.1.1. Overview



This screen appears when a fire caution event occurs, accompanied by a pop-up window displaying the affected area's name. Clicking the pop-up window closes it and returns to the Main Home screen.

To review details about the fire caution event, users can search records through the Records menu.

## 7. Event Screen

### 7.1. Fire History

#### 7.1.1. Present Records

The screenshot displays the MXK250W system interface. At the top, there is a status bar with the following information: MXK250W, 존슨콘트롤즈 코리아, 전압 26.83V, 배터리 26.01V. Below this, there are several colored indicators: 화재 (Fire) with a count of 2, 설비 (Equipment) with 0, 고장 (Fault) with 0, 차단 (Lock) with 0, 자동복구 (Automatic Recovery) with A, and 비축적 (Non-accumulation) with 0. The date and time are 2021-01-01 10:27:58.

The main content area shows a search result for '검색한 기록 수 (0002)'. On the left, there are filters for '이벤트' (Event) and '기록 복사' (Record Copy). Under '이벤트 타입' (Event Type), '화재' (Fire) is selected. The main table displays the following records:

이벤트 타입	소화약제 감지기	발생 시간
3층 018	소화약제 감지기 B	[화재] 발생
No.0139 018-2		2021-01-01 10:11:28
3층 018	소화약제 감지기 A	[화재] 발생
No.0137 018-1		2021-01-01 10:11:27

At the bottom, there are navigation buttons for '1보' (Previous) and '2보' (Next). On the right side, there is a vertical menu with icons for Home, Back, Status, Record, Version, Settings, Up, and Down.

The screen above displays information about fire area. Clicking Records menu on the right side of this screen and selecting Present Records and Event type on the left side allows users to view details about the fire area and operating detectors. The 1<sup>st</sup> and 2<sup>nd</sup> fire indications, along with the fire icon, remain visible on any menu until the system is restored.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 8. Event Screen

### 8.1. Fire Alarm History

#### 8.1.1. History

MXK250W      존슨콘트롤즈 코리아      전압 26.83V      배터리 26.01V

화재 2      설비 0      고장 0      차단 0      자동복구 A      비축적 0      2021-01-01 10:27:58

검색한 기록 수 (0019)

이벤트      기록 복사

과거/현재  
과거기록      현재기록

이벤트 타입  
All 전체      화재  
설비      고장  
출력      기타

3층 018	No.3997	018-2	소화약제 감지기 B	[화재] 발생	2021-01-01 10:21:55
3층 018	No.3994	018-1	소화약제 감지기 A	[화재] 발생	2021-01-01 10:21:17
3층 018	No.3988	018-2	소화약제 감지기 B	[화재] 해제	2021-01-01 10:13:58
3층 018	No.3987	018-1	소화약제 감지기 A	[화재] 해제	2021-01-01 10:13:26
3층 018	No.3984	018-2	소화약제 감지기 B	[화재] 발생	2021-01-01 10:11:28
3층 018	No.3983	018-1	소화약제 감지기 A	[화재] 발생	2021-01-01 10:11:27

1보      2보      위      아래

The screen above displays the history of fire alarms. Clicking **Records** menu on the right side of this screen and selecting **History** and **Event type** on the left side allows users to view details about past fire areas and operating detectors.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 9. Equipment Records

### 9.1. Equipment Records

#### 9.1.1. Present

The screenshot displays the MXK250W System interface for equipment records. At the top, the system name 'MXK250W' and company '존슨콘트롤즈 코리아' are shown, along with '전압 26.83V' and '배터리 26.01V'. A navigation bar indicates counts for various categories: 화재 (0), 설비 (3), 고장 (0), 차단 (0), 자동복구 (A), and 비축적 (0). The date and time are '2021-01-01 10:27:58'. The main content area shows a search for '검색한 기록 수 (0003)'. On the left, there are filters for '이벤트' and '기록 복사', with sub-filters for '과거/현재' (past/present) and '이벤트 타입' (event type). The '현재기록' (current records) and '설비' (equipment) filters are selected. The table below lists three records:

지하 0 - 007 - 2	배기댐퍼 기동확인	[설비] 발생
No.0357 007-2		2021-01-01 10:13:58
지하 0 - 007 - 1	급기댐퍼 기동확인	[설비] 발생
No.0339 007-1		2021-01-01 10:13:26
2층 0 - 015 - 2	물분무 기동확인	[설비] 발생
No.0314 015-2		2021-01-01 10:13:06

At the bottom, there are navigation buttons for '1보' and '2보'. A right-side menu contains icons for Home, Back, Status, Records, Version, Settings, Up, and Down.

The screen above displays the Present records of equipment events. Clicking **Records** menu on the right side of this screen and selecting **Present** and **Event type** on the left side allows users to view details about corresponding areas and operating detectors.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.



## 10. Fault Records Screen

### 10.1. Fault Records

#### 10.1.1. Overview



The screen above displays the history of fault events. Clicking **Records** menu on the right side of this screen and selecting **History** and **Event type** on the left side allows users to view details about past corresponding areas and fault devices.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 11. Fault Screen

### 11.1. Loop

#### 11.1.1. Status of Loops and Devices



The screen above displays information about faults related to loops and their connected devices.

This screen indicates a short circuit on a loop and a fault on IO module No. 1.

On the screen, click the **Home button** to return to the main Home screen.

The **Back button** allows you to navigate to the higher-level menu screen.

## 12. Product warranty


Warranty Period	24-month from the purchase date		
Purchase date	Year	Month	Day
Customer	Name		
	Address		
	Contact		
	T E L		
Seller	Name		
	Address		
	T E L		

- This warranty must be transferred and notified to end-users or fire supervisors upon completion of product installation.
- The constructor is responsible for any life loss or property damage resulting from user negligence during the warranty period.
- During the warranty period, defected products will be repaired at no cost to the user.
- After the warranty period, repairs will incur a fee.
- Please retain this warranty for future reference and repair requests.

## 13. Customer Service

- 1) Free of Charge– During the Warranty period, repairs will be provided at no cost (excluding consumable goods)
- 2) Cost incurrence – After warranty period, or in the following cases, repair costs will be incurred:
  - Damage caused by user negligence
  - Damage caused by unauthorized modifications or alterations to the product.
  - Damage caused by failure to follow the user manual
  - Damage caused by natural disasters such as fire, flood damage, or lightening
  - Lack of a valid warranty or incomplete warranty information

**14. Model**

Product	Basic Model	Model	Listing Number
MXK Panel	MXK250W		 R-REM-DBE-

**Seller/Manufacturer: Johnson Controls International Korea, Inc.**

**Seoul Headquarters: 12-14 floors, 4, Mareunnae-ro, Jung-gu,**  
 Seoul, Republic of Korea

**Factory: 149, Sagimakgol-ro, Jungwon-gu, Seongnam-si, Gyeonggi-do,**  
 Republic of Korea

**Customer Center TEL: 1588-9117**