MXK500W

벽부형_사용자 메뉴얼

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General Specification

Main power supply

A.C.	AC 220V/50~60Hz/3A
D.C.	27V/5A, 28V/3A, 5V/3A

Battery

Capacity	24V/7Ah (Lead Acid Battery

UIF Specification

Size	17 inch TFT LCD Panel
Resolution	1280×1024

Touch Panel

Size	17 inch

Housing type

Basic	Wall-mounted 590×910×195

회로수용 능력

Panel Node	32 nodes
Transponder	32 transponders per panel
Loopcard	2 Loops per Loop card
I/O	250 per Loop
Circuit	4 Points per I/O
Maximum number of circuits	32 panels x 32 transponders x 4 loops x 250 addresses x 4 circuits = 4,096,000 circuits
Minimum number of circuits	1 panel x 1 transponder x 2 loops x 250 addresses x 4 circuits = 2000 circuits

Key & LED (OCSM)

System Control Keys	5
Equipment Control Programmable Keys	16
System LEDs	15
Equipment Status Programmable LEDs	16

Printer

Basic	Compact serial printer Serial printer (RS-232C, Dot printer) 40colums(English), 20colums(Korean)

Configuration tool (Consys tool).

allows all the configuration of system

Emergency acknowledge by protocol.

RS-485 communication port makes a connection with external emergency broadcasting system

Workstation port (supporting Ethernet port).

32 Workstations connectable

Equipment Silence Key & LED.

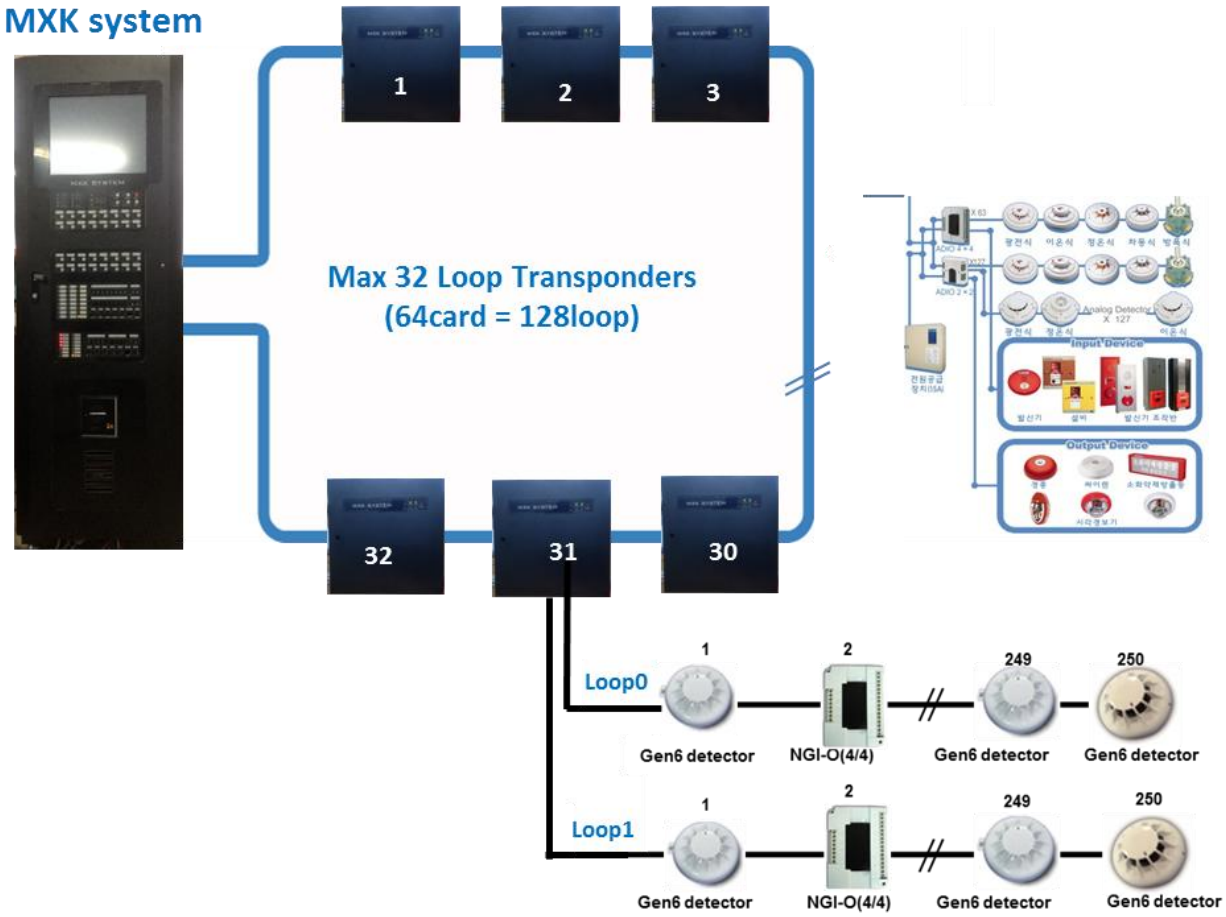
Indicates Stop and status of equipment

Communication port

No	Method	Purpose
1	Ethernet	LAN1(J2): SFC800, Hub Workstation
2	RS-232C	Port2 (CON4): Serial Printer
3	RS-485	Port1(CON12): Rack Communication, FCP Normal & Back, BMS, Emergency Broadcast , Network Normal & Back
4	RS-422	Port1 (CON13): Parallel
5	SATA	Port1(J4): Hard disk for records
6	USB	USBPort1~4(CON2A~D): Map Down/Upload, Firmware Upgrade

Call points & Telephone response.

System Diagram


MXK system
1
2
3
Max 32 Loop Transponders
(64card = 128loop)
32
31
30
Input Device
Output Device
Loop0
1
2
249
250
Gen6 detector
NGI-O(4/4)
Gen6 detector
Gen6 detector
Loop1
1
2
249
250
Gen6 detector
NGI-O(4/4)
Gen6 detector
Gen6 detector

Initiation screen

This screen is displayed during the initiation process after the system is powered on.

The system initializes hardware inspections, process updates, system operation files, configuration, and map data reading.

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

Normal Screen

✓ Home Screen

Overview

This is the initial screen that is displayed at the end of the initializing screen. Touching the number of events at the top shows up to 10 of the latest records. The right side of the event area displays 'Auto-Restoration' or 'Latched mode,' which can be toggled by touching the mode area.

You will see non-accumulation/accumulation on the right, and touching the area changes the setting.

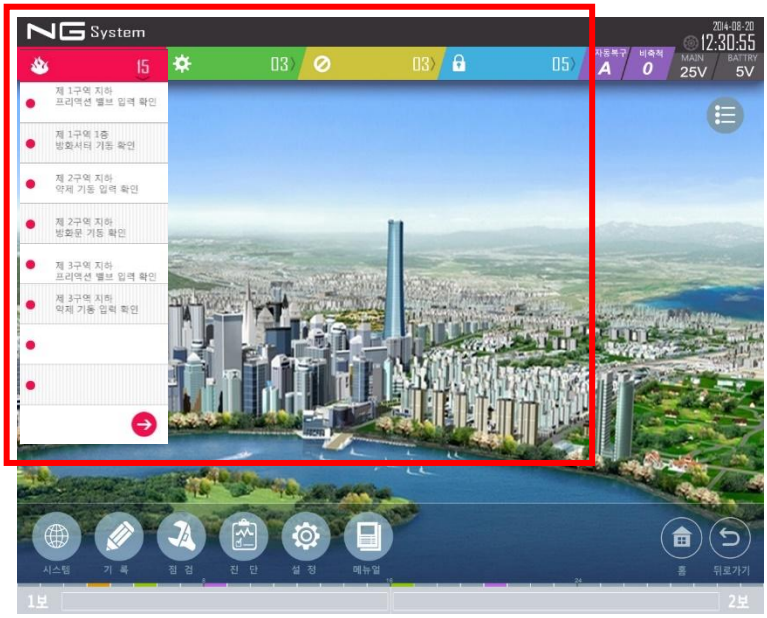
The main/battery voltage is displayed and time is presented at the upper right side of the screen. Touching the time area shows a new screen to set the time. Touching the menu located at the lower area of the screen navigates to a corresponding screen.

A **purple dotted line** or **green solid line** appears at the bottom of the screen. This indicates the synchronization status of the equipment key among panels on the network. Below the synchronization line, the statuses of "1st fire" and "2nd fire" are displayed.

Normal Screen

✓ Home Screen

Event Preview



Touching the event area at the top of the screen displays the event details screen. Touching it again hides the screen.

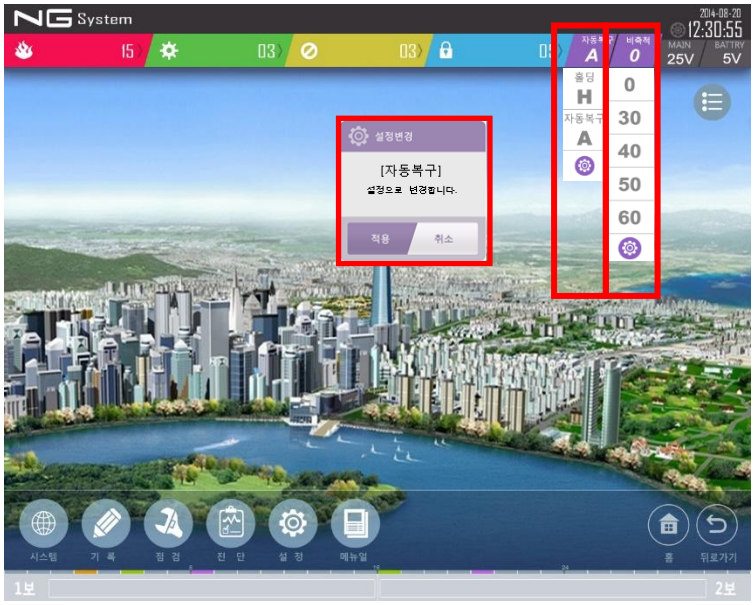
Selecting the → **arrow** at the bottom of the sub-area opens the **Record screen**, which provides detailed information about the event. This screen shows retrieved results based on the selected conditions for the location and event. Events related to equipment and trouble are displayed similarly.

Touching the **Home** button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ Home Screen

Quick Setup



Touching the **Auto-Restoration/Latched mode** area opens a sub-area on the left where you can configure the mode. Select either **Auto-Restoration** or **Latched mode**, then touch the lower setting button. A confirmation pop-up window will appear. Touch **Apply** to finalize the mode setting.

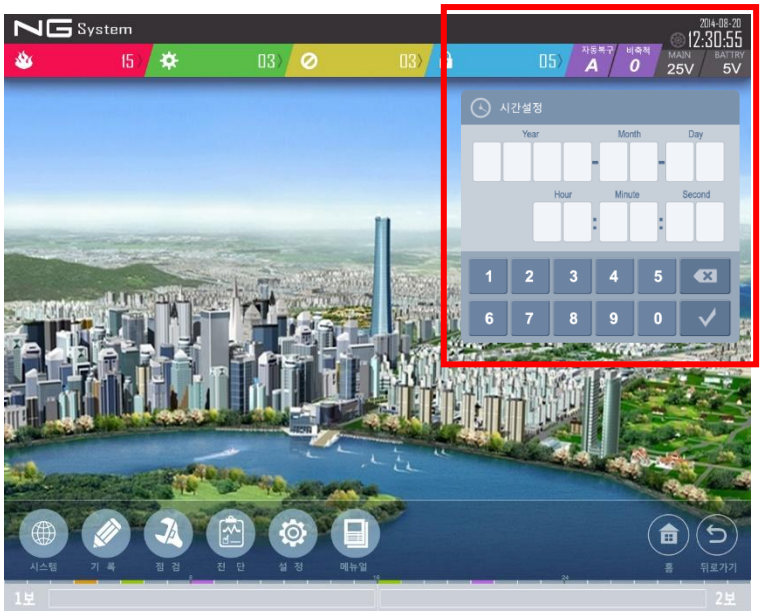
Touching the **Non-accumulation/Accumulation** area on the initial screen opens a sub-area on the right. This sub-area displays the accumulation time. If the time is set to 0, the system automatically switches to **Non-accumulation mode**. After making a selection, touch the lower setting button to display a confirmation pop-up window. Touch **Apply** to complete the change.

Touching the **Home** button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ Home Screen

Time Setup



Touching the time area at the right side of the initial screen presents a sub menu to set a time as above. If you set the time, all of the panels on a network have its time synchronized with your panel.

Time is one of important information for a use to record the occurrence time of all events in the panel. Please, be cautious about the time setting.

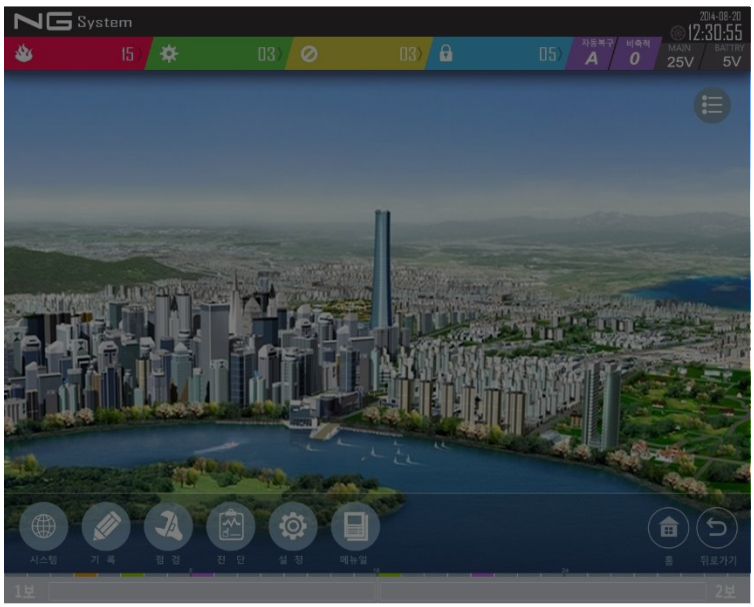
Touching the **Home** button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ Home Screen

Legend (Screen Explanation)

Touching the **red rectangular area** displays a legend explaining the screen contents. Clicking anywhere else hides the screen. The red rectangular area is located in the same position on all screens.



Normal Screen

✓ System

Overview

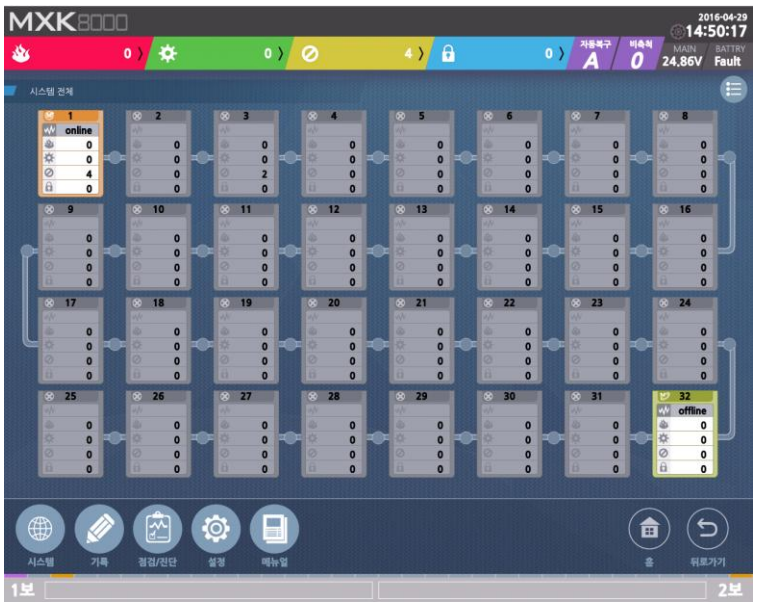
Selecting the **system menu** at the bottom of the screen opens the next page. This menu allows you to check the status of panels linked to the system, the transponders connected to these panels, and the I/O modules connected to the transponders, view the current states, such as faults and fires and access a menu to perform forced input/output tests.

Touching the **Home** button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ System

Network Status



This screen appears when you select the **system menu**. It shows the status of each panel connected to the network, along with the number of events for each panel.

Up to 32 panels can be networked, with each panel supporting up to 64 transponders. To view the status of connected transponders, touch the panel image and touch the Detailed View button to proceed. To view the event records for a panel, touch the panel image, and touch the Record view button..

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

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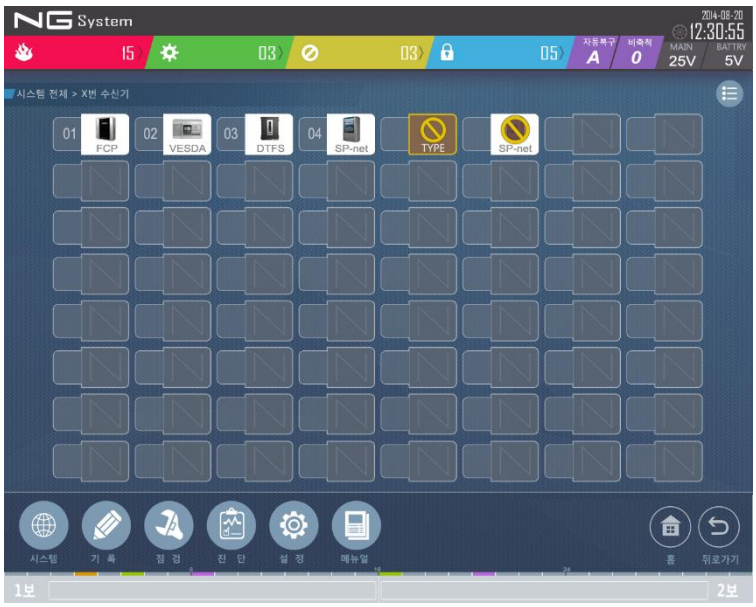
Normal Screen

✓ System

Panel State



This screen appears when you touch Detailed View in the sub menu of each panel image on the screen on the previous page. It displays the status of the transponder connected to the panel as shown above.

A transponder that is set up is represented by an image with its number. On the screen above, transponders 01, 02, 03, 04, 05 and 06 are set up. To view the state of a transponder, touch its image. To access information about the transponder, select LOOP0 or LOOP1, and the corresponding screen will appear.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ System

Transponder State

This screen appears when you select the image of a transponder in the Detailed View of the system. It displays the current status of the transponder, including communication, power, open status, shortage and redundancy.

To isolate a circuit connected to the desired transponder, click the Circuit Isolation button.

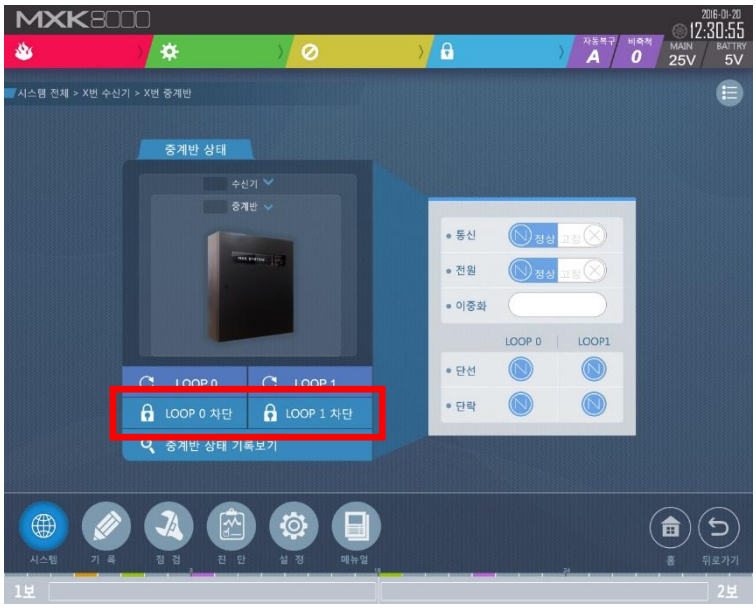
To view the event records for the transponder, click the Event View button.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

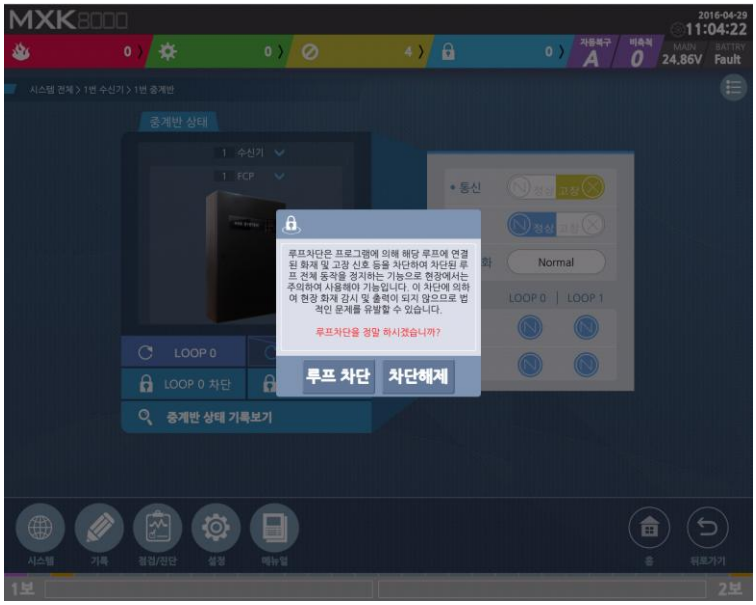
Normal Screen

✓ System

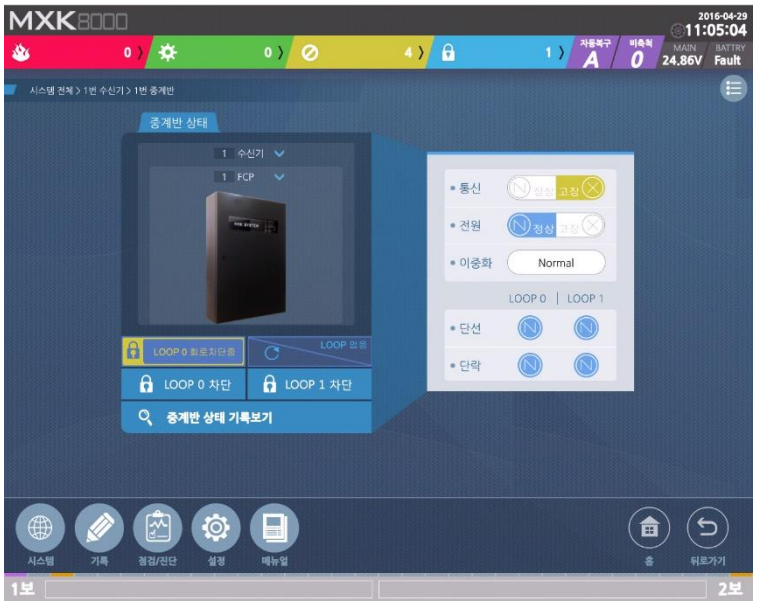
Warning and Confirmation for Circuit Isolation of Transponder



The buttons within the red square are used to isolate circuits by loop. Click Loop 0 Isolation, and a warning message will appear, as shown below.



Clicking [Isolate] will isolate the loop 0 and the square for the Loop 0 will display a yellow rim on the next screen.



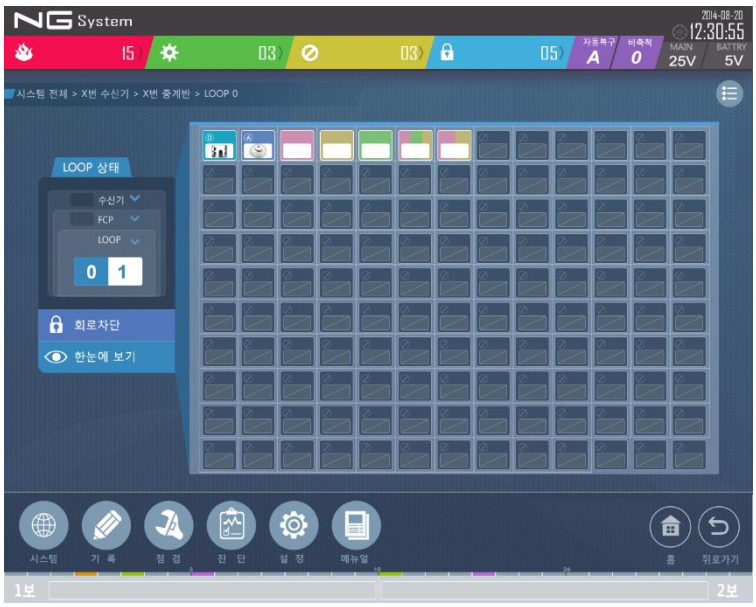
To clear the isolation, click the CLEAR button on the previous window from the process described above.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal Screen

✓ System

States of connected equipment



Touching the icons of LOOP 0 and LOOP 1 on the Transponder Statue view shows the screen above. The current screen shows the type and status of devices connected to LOOP1 of 01 transponder.

The types of devices connected to the LOOP are classified in color and there are 3 states of the device. (Legend shows communication failure, type trouble, and no connection).

An analog detector is connected and the icon of each device presents an address, and analog value.

To switch to another loop on the screen, simply touch the loop area on the left side. Also, touching the circuit isolation button isolates multiple I/O modules all together. Touching Quick View button shows the states of all transponders at one view.

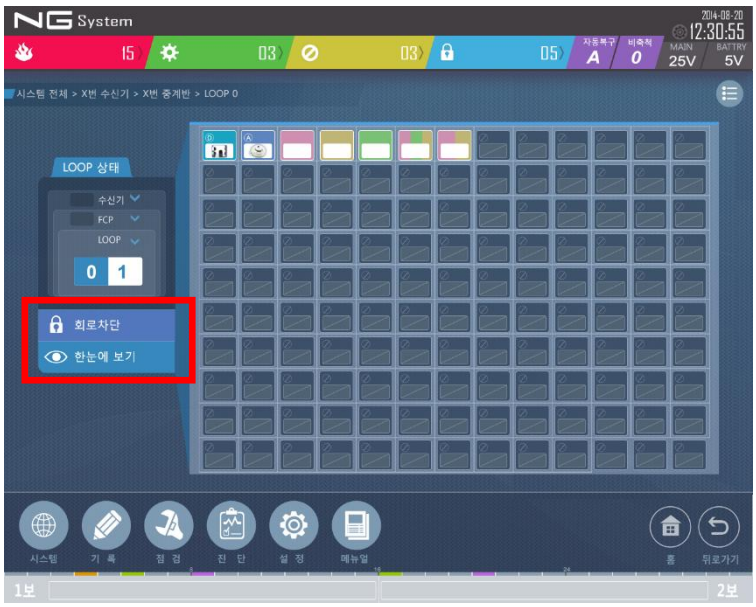
If you want to check the status of each device, touch the icon of the desired device.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

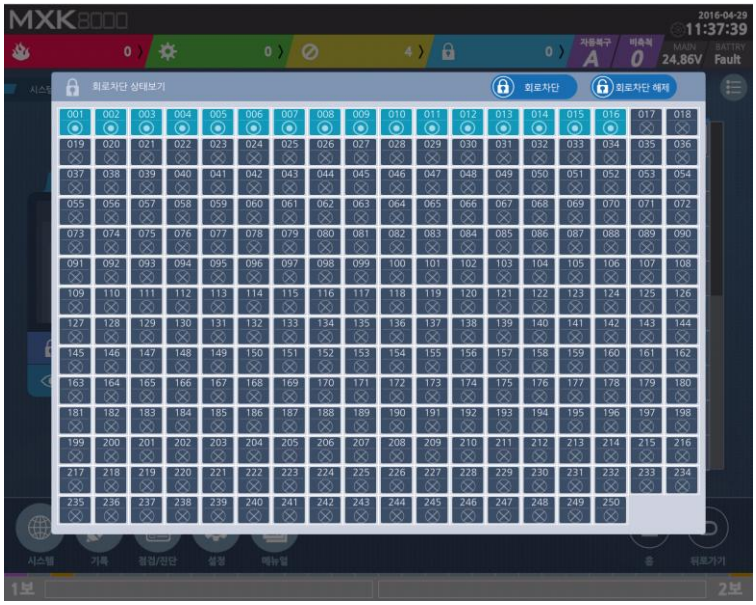
Normal Screen

✓ System

Circuit Isolation by I/O Module

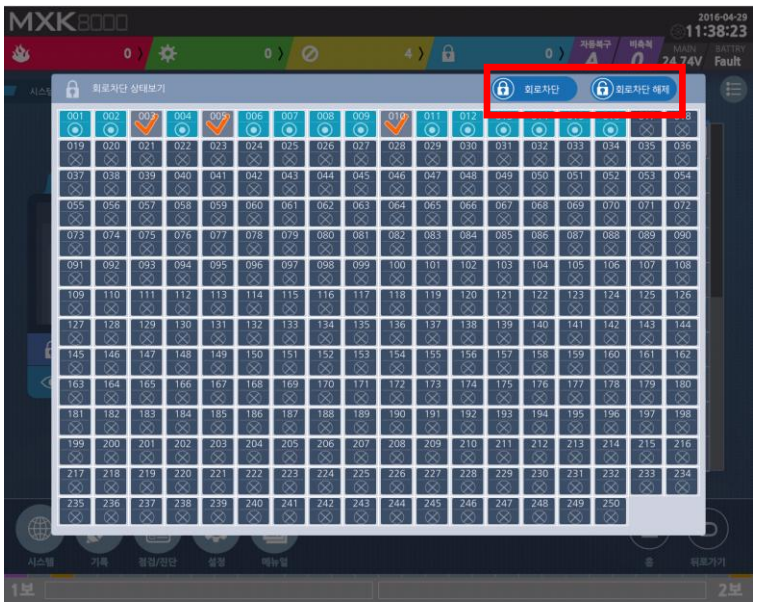


When you touch the Circuit Isolation button (located within the red square), a screen appears displaying the connected and disconnected devices in the loop.

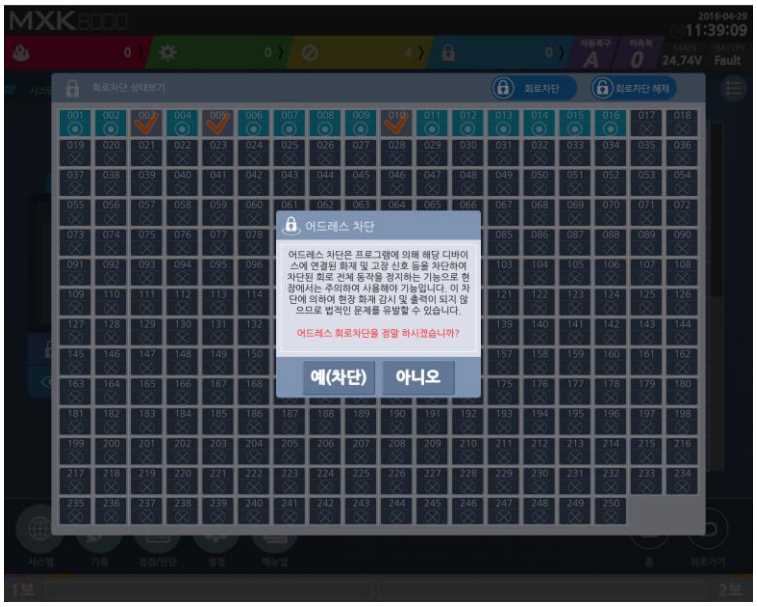


a screen appears displaying the connected and disconnected devices in the loop. **Connected devices** are highlighted in **blue** and **Disconnected devices** are displayed in **black** and are not

selectable. Tap the **device number(s)** you want to isolate. Selected devices will show a check mark(√) and disconnected devices cannot be selected.



Once the desired devices are selected, touch the **Circuit Isolation** button or the **Clearing Isolation** button (red square). If **Circuit Isolation** is selected, the confirmation screen will appear.

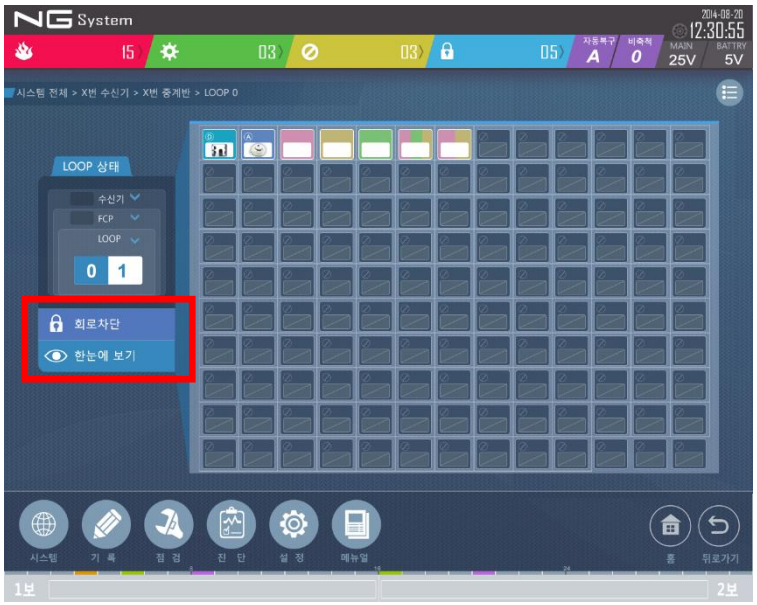


Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

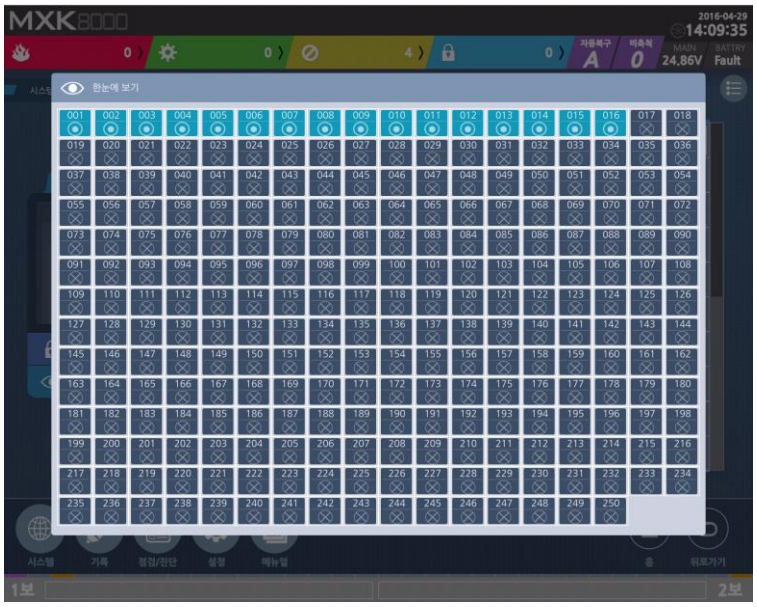
Normal Screen

✓ System

I/O modules - Quick View



The system provides a **Quick View** feature for I/O modules, allowing you to monitor their statuses effectively, even when there are too many modules to display at once.



The screen presents the status of all connected devices in the loop.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

MXK2x2 I/O Module Status

When you touch a device (I/O module icon) on the loop information screen, the MXK22 I/O module status screen appears.

This screen shows the types of input and output devices connected to the module. It also displays the end-of-resistor status for the input devices and the zone where the devices are connected.

The communication and power states of the module are shown using letters: N for normal, X for trouble

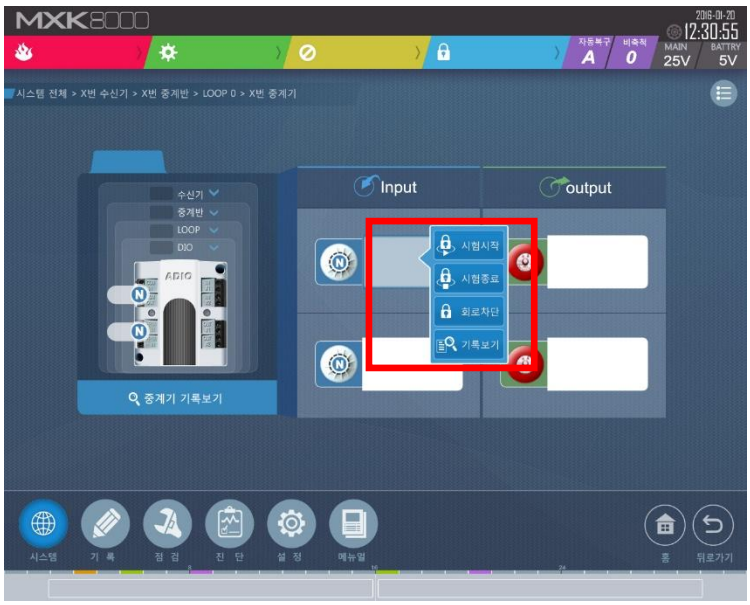
If you want to perform a circuit test (Forced Input), circuit isolation, or view records, touch the square box that shows the area. The box will change color, and a submenu will appear for further actions..

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

Submenu of 2x2 I/O module



An inverted image in the Input or Output area indicates that the circuit is selected.

Touch "Test Start" in the submenu to begin a circuit test.

Touch "Circuit Isolation" to isolate the circuit and prevent any events from being collected at that point.

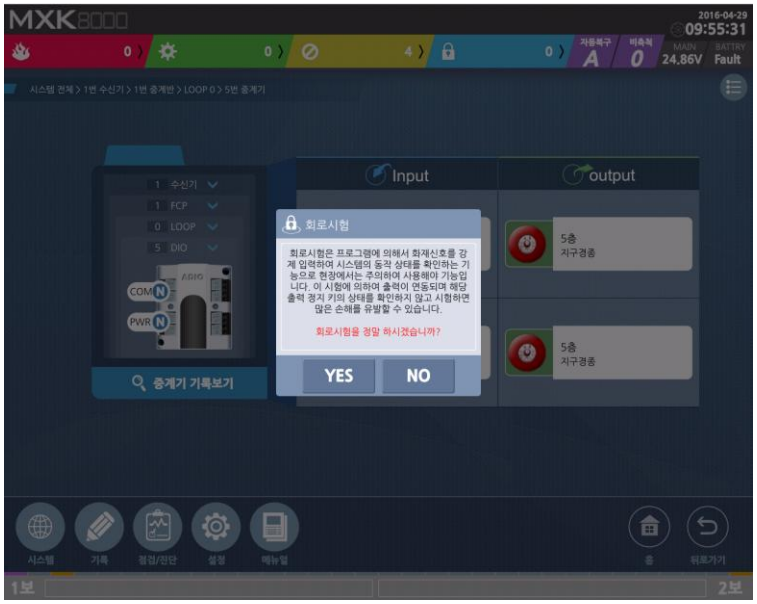
Touch "Record View" to view all records related to the corresponding point.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

MXK 2x2 Circuit Test Warning & Confirmation



This screen appears when you touch the **Circuit Test** button on the previous screen. It explains the potential hazards that may occur during the test. The user should carefully read this warning and be aware of the significant damage that could result from conducting the test.

If you wish to proceed with the test, touch **'YES'** at the bottom of the pop-up window. A new window will appear, as shown on the next page.

If you do not want to perform the test, touch **'NO'** to cancel.

Normal screen

✓ Panel State

2x2 Output Test

To perform a forced test on the output, touch the **green square boxes** on the screen that represent the output zone in the I/O module state screen. The touched icon will invert, as shown in the image above.

Once the icon is inverted, touch **Circuit Test** in the submenu, and you are ready to test the output.

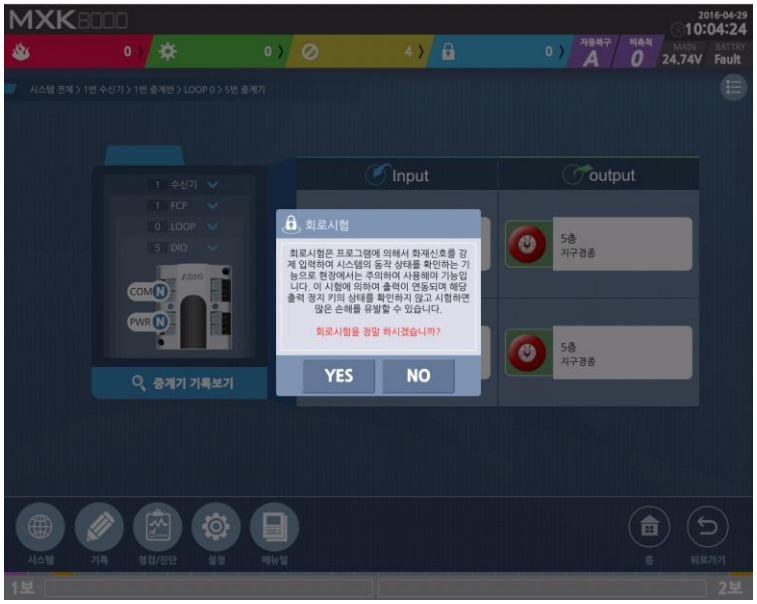
Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen

.

Normal screen

✓ Panel State

MXK 2x2 Output Test Warning & Confirmation



The screen above explains the hazards that may occur during the output test. The user must read this carefully before proceeding and pay special attention to the potential damage that could result from the test.

If you wish to conduct the test, touch **'YES'** at the bottom of the pop-up window. Another pop-up window will appear, as shown on the next page.

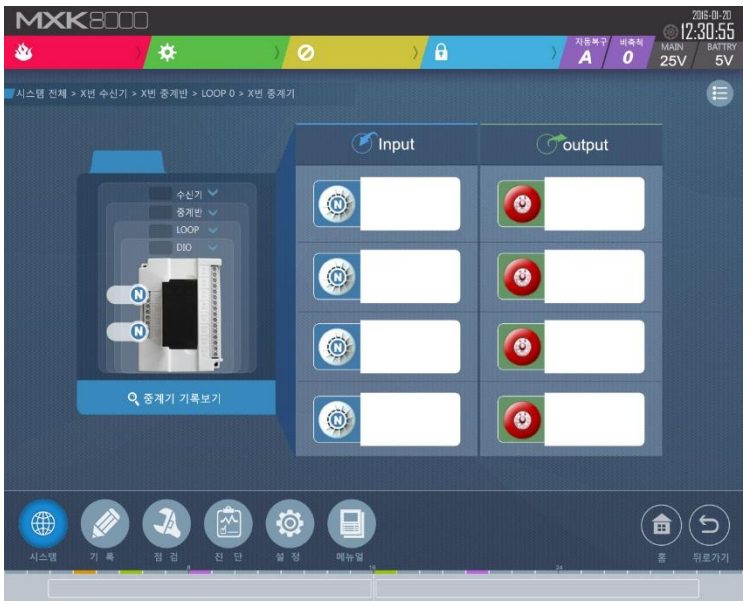
If you do not want to perform the test, touch **'NO'** to cancel.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen

Normal screen

✓ Panel State

State of 4x4 I/O module



This screen appears when you touch a device (I/O module's icon) on the **Loop Information Screen**. It shows the status of the **MXK44 I/O module**.

The screen displays the types of **input and output devices** connected to the I/O module, along with the **end-of-resistor status** for the input devices and the **zone** (area where devices are connected).

The **COM** and **PWR** states in the I/O module image are displayed as: **Normal (N), Trouble (X)**

If you want to perform a **circuit test** (forced input), **circuit isolation**, or **view records**, touch the square box displaying the area. The selected box will invert, as shown on the following page, and a submenu will appear.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

4x4 Circuit Submenu

An inverted image in the **Input** or **Output** area indicates that the circuit is selected.

Touch **Test Start** from the sub-menu to display the circuit test menu.

Touch **Circuit Isolation** to block the circuit, preventing any events from being collected at that point.

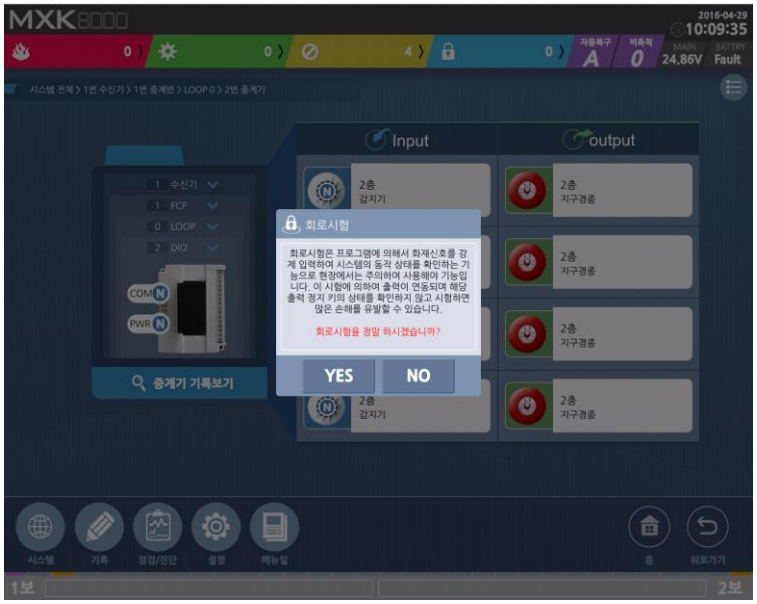
Touch **Record View** to search for and display the records for that point.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

4x4 Circuit Test Warning and Verification



The screen above explains the hazards that may occur during the circuit test. The user must read this carefully before proceeding and pay special attention to the potential damage that could result from the test.

If you wish to conduct the test, touch **'YES'** at the bottom of the pop-up window. Another pop-up window will appear, as shown on the next page.

If you do not want to perform the test, touch **'NO'** to cancel.

Normal screen

✓ Panel State

4x4 Output Test

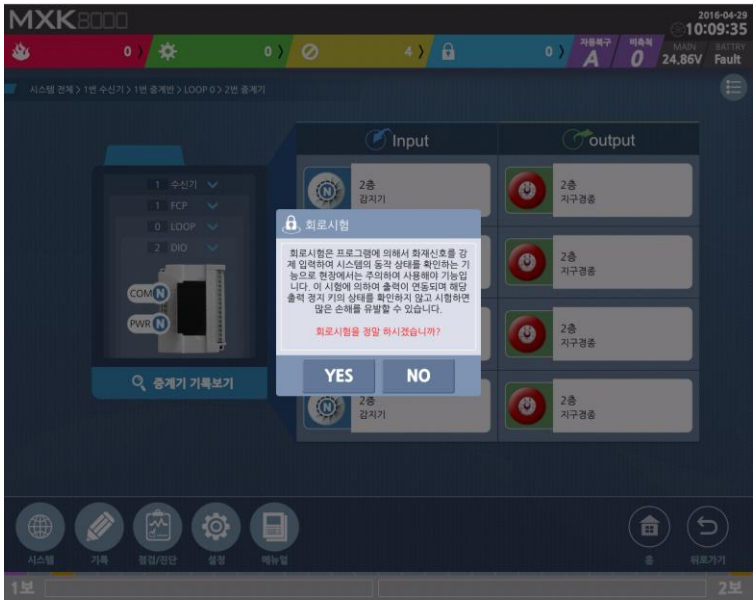
To perform a forced output test, touch the square icon representing the output zone (as shown in the screen above, labeled **"Experiment Building 1, 4th Floor, Local Alarm"**) in the **Relay Status Screen**. The touched icon will invert, as shown in the image above. Once this is done, touch **Circuit Test** in the submenu to complete the output test preparation.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Normal screen

✓ Panel State

4x4 Output Test Warning & Confirmation



The screen above explains the hazards that may occur during the output test. The user must read this carefully before proceeding and pay special attention to the potential damage that could result from the test.

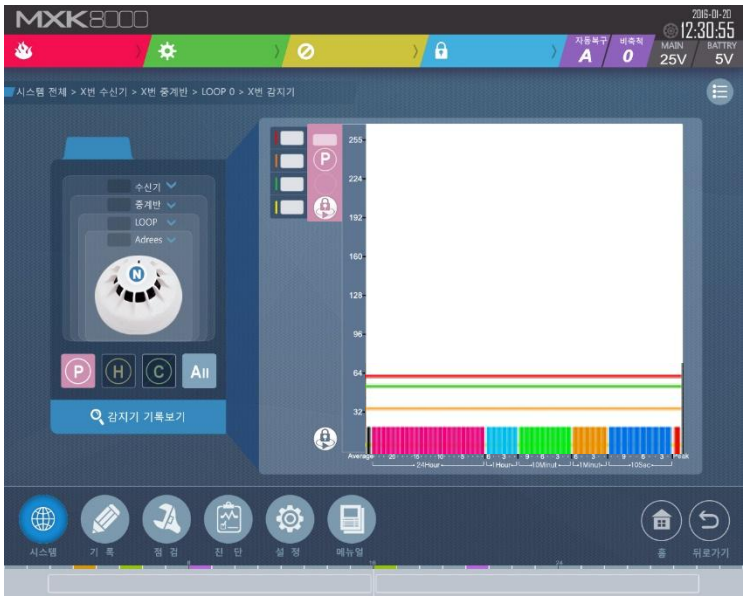
If you wish to conduct the test, touch **'YES'** at the bottom of the pop-up window. Another pop-up window will appear, as shown on the next page.

If you do not want to perform the test, touch **'NO'** to cancel.

Normal screen

✓ Panel State

Analog Detector



On the screen, you can view analog information (Max Value:127) for **P** (optical), **H** (quantitative), and **C** (carbon monoxide) types on the left side. Non-applicable types will be disabled and cannot be read. On the right side, a graph displays the reference level and the level values received from the detector.

Peak: Displays the highest value received from the detector.

10-sec Area: One bar represents the sample value for 1 second. (Total sampling time for this area is 10 seconds.)

1-min Area: One bar represents the average of sample values for 10 seconds. Data is transferred from the 1-min area, which has more than 6 sampling values for 10 seconds. (Total sampling time for this area is 1 minute.)

10-min Area: One bar represents the average of sample values for 1 minute. Data is transferred from the 1-min area, which has more than 10 sampling values for 1 minute. (Total sampling time for this area is 10 minutes.)

1-hour Zone: One bar represents the average of sample values for 10 minutes. Data is transferred from the 10-min area, which has more than 6 sampling values for 10 minutes. (Total sampling time for this area is 1 hour.)

24-hour Area: One bar represents the average of sample values for 1 hour. Data is transferred from the 1-hour area, which has more than 24 sampling values for 1 hour. (Total sampling time for this area is 24 hours.)

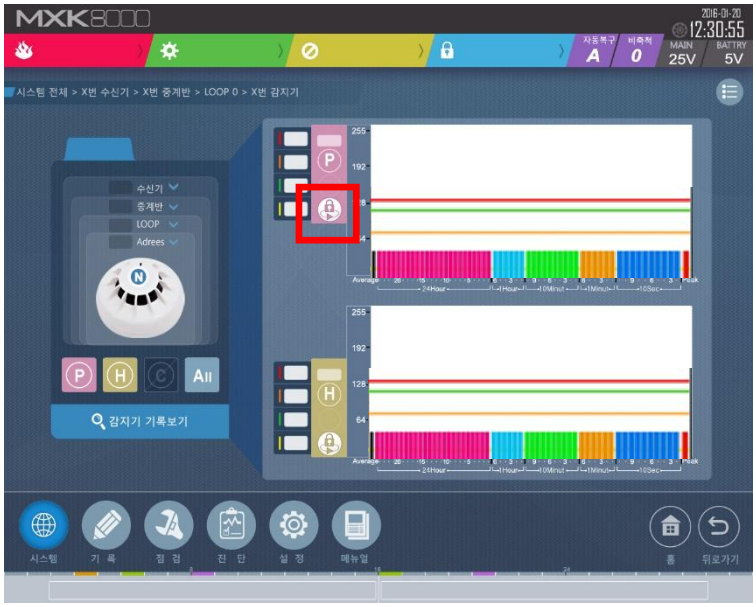
Average Area: Shows the average accumulated for more than 24 hours. After 24 hours, it displays the average of newly input values and the current value every hour.

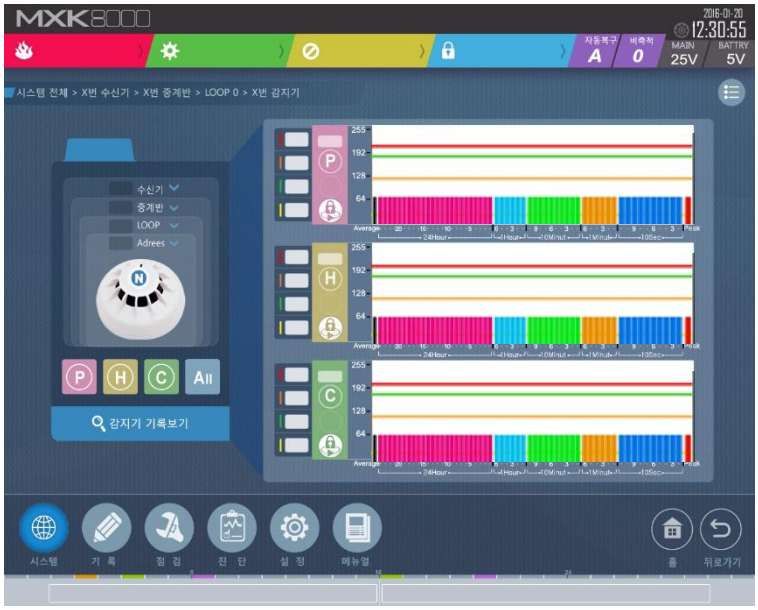
The analog detector has **3 types**: **P** (optical), **H** (quantitative), and **C** (carbon monoxide). The **analog value of the reference level** can be up to **127** or **254**, depending on the analog type..

Normal screen

✓ Panel State

Analog Detector



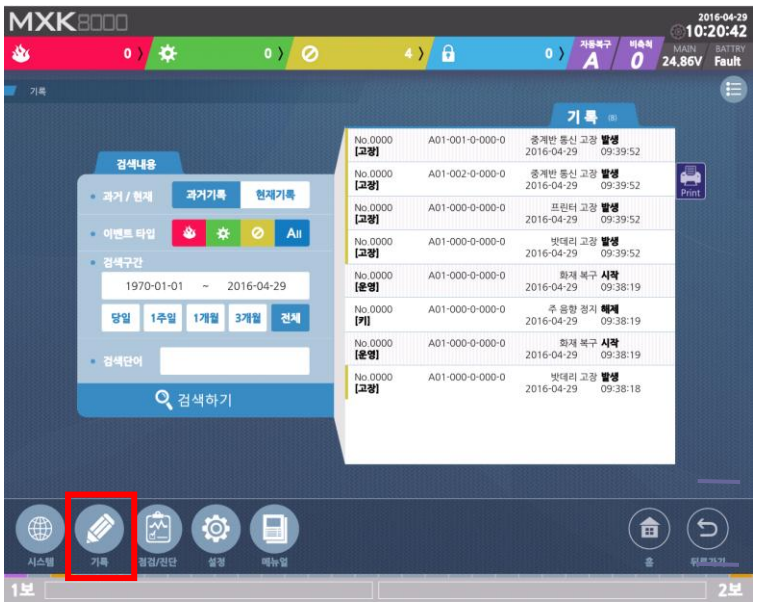


The screen above is about an analog type detector with two or three kinds of information. Touch the red box on the screen to see the warning statement and isolate the circuit.

Normal Screen

✓ Record

Overview



The 'Record' menu in the initial screen displays a screen showing all events that have occurred on the current panel, such as fire, trouble, and others.

The left side of the screen displays search conditions, and the right side displays search results.

Search conditions include accumulated past records and an active list of current events. Past records and the active list cannot be selected simultaneously.

Event types include fire, equipment, trouble, and 'all.' Multiple event types can be selected.

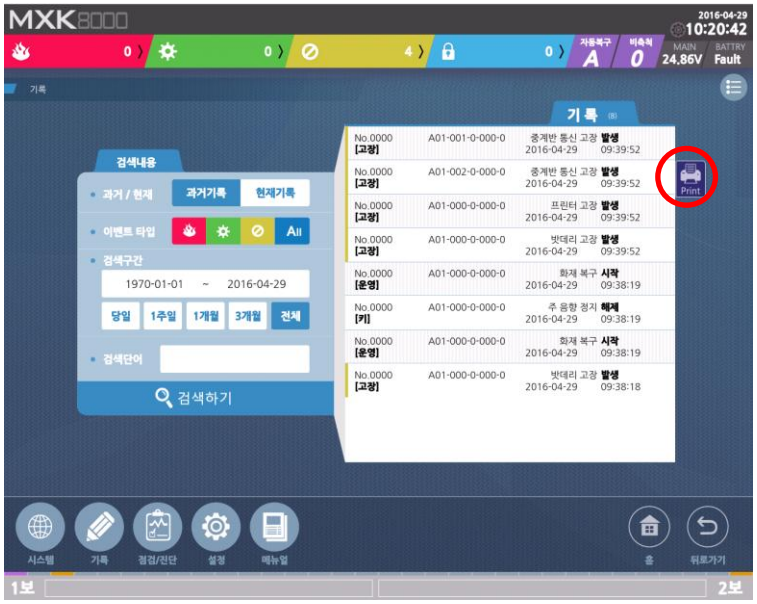
The 'Date Range' options include today, 1 week, 1 month, 3 months, and the entire period. Touching the period displays the specific date immediately above.

The screen above shows sample events when conducting a test.

Normal Screen

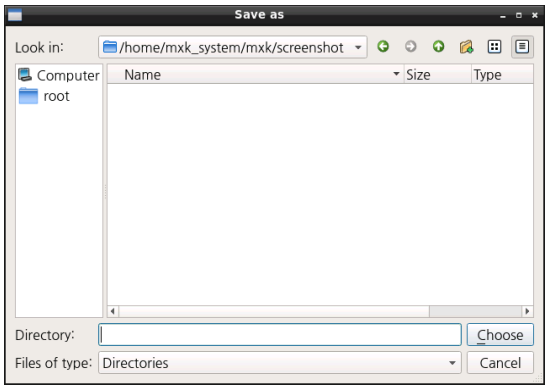
✓ Record

Print



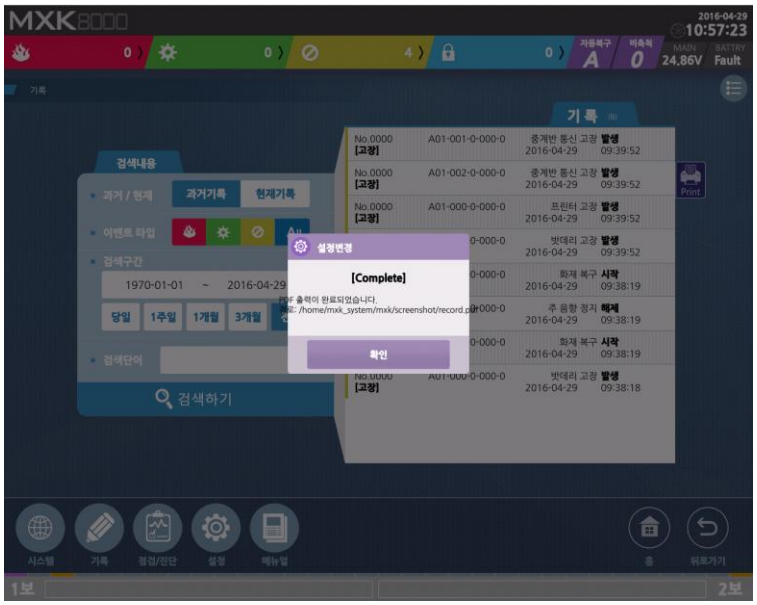
Touch the 'Print' button in the upper right corner of the screen.

This will display the following screen.



Select a location to save the record file on the screen above.

After selecting a location, click the 'Choose' button.

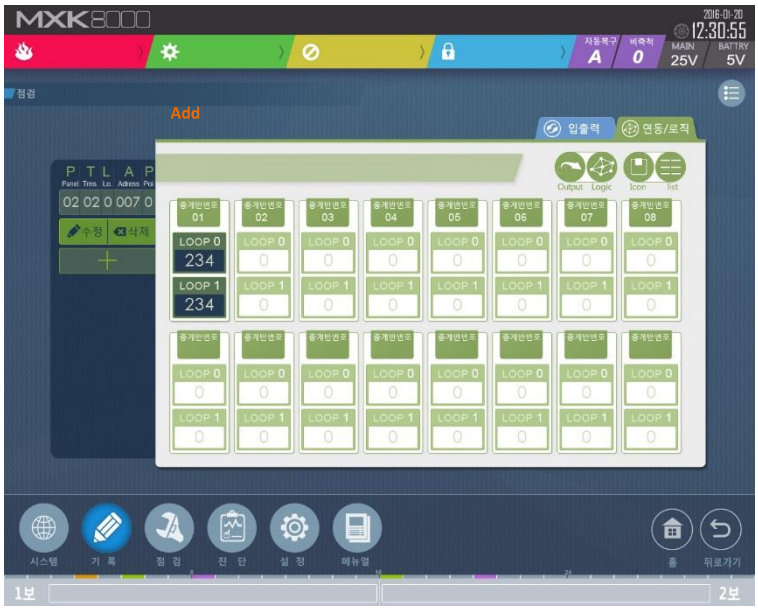


After saving, the screen displays the saved path and a 'Completed' message.

Normal Screen

✓ Inspection

Overview



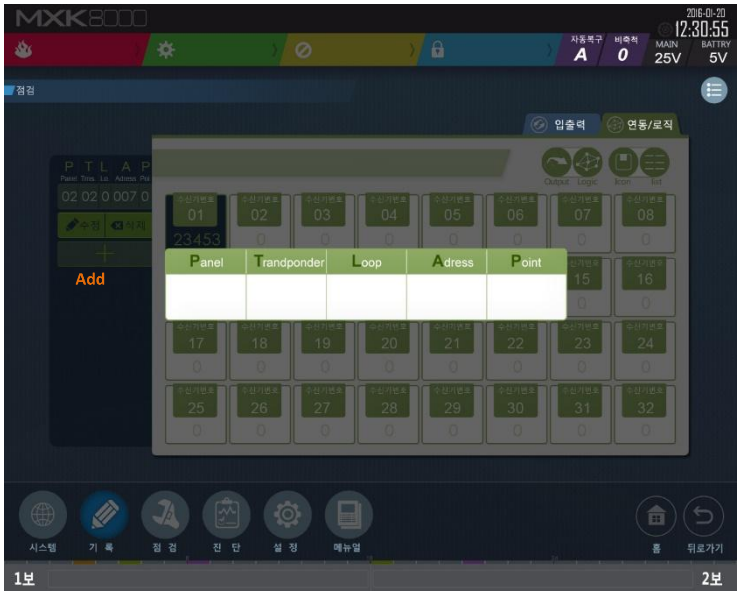
Touching the 'Inspection' button on the initial screen displays the screen above. Inspection is used to check the information about input/output circuits downloaded to the panel and identify any errors or problems. The screen above displays virtual inputs and outputs that do not operate in real-time.

The Inspection function provides the same functionality as Simulation.

Normal Screen

✓ Inspection

Input selection



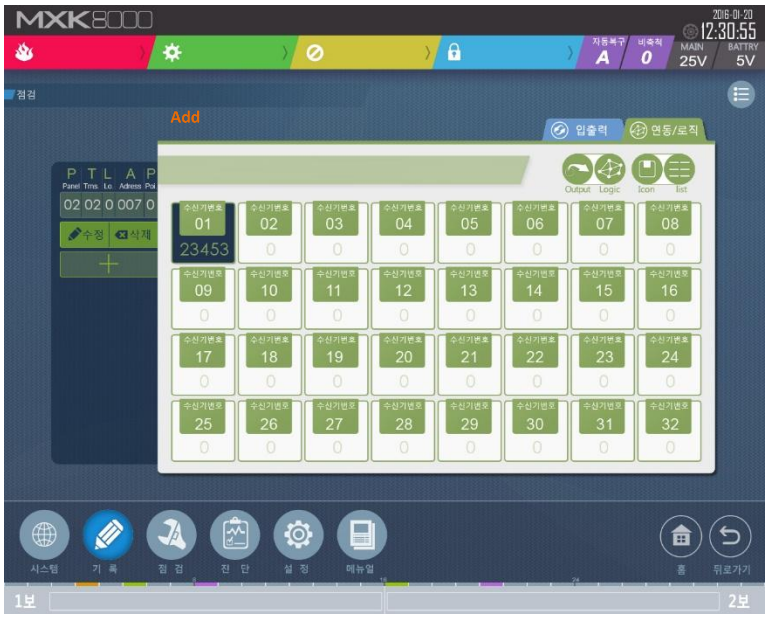
Touching the '+' button in the upper-left corner of the Inspection screen displays the screen above. This screen allows you to select a location for virtual input among a panel, a transponder, a loop, an address, and a point. Select the desired input, and the next screen will appear.

The Inspection function provides the same functionality as Simulation.

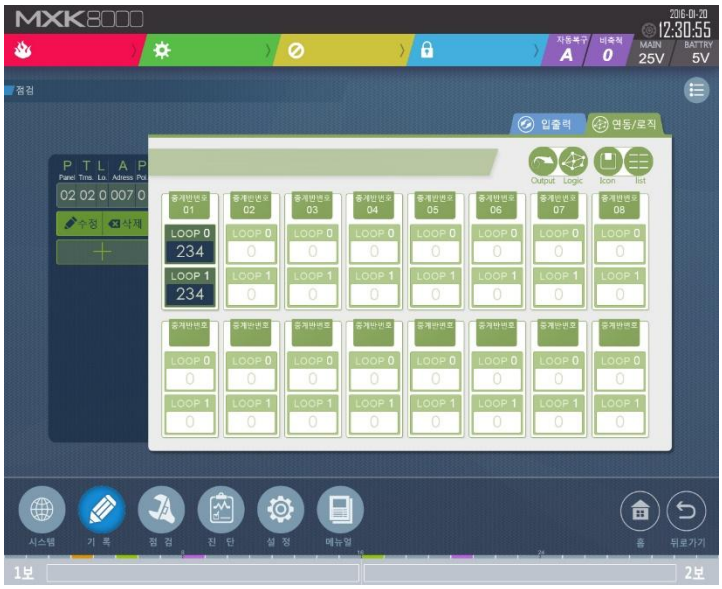
Normal Screen

✓ Inspection

Output link check (Logic & Matrix)



The selected input is displayed on the left side, and the corresponding output number is shown on the right side. Clicking the number displays the output information or the entire list, as shown below.

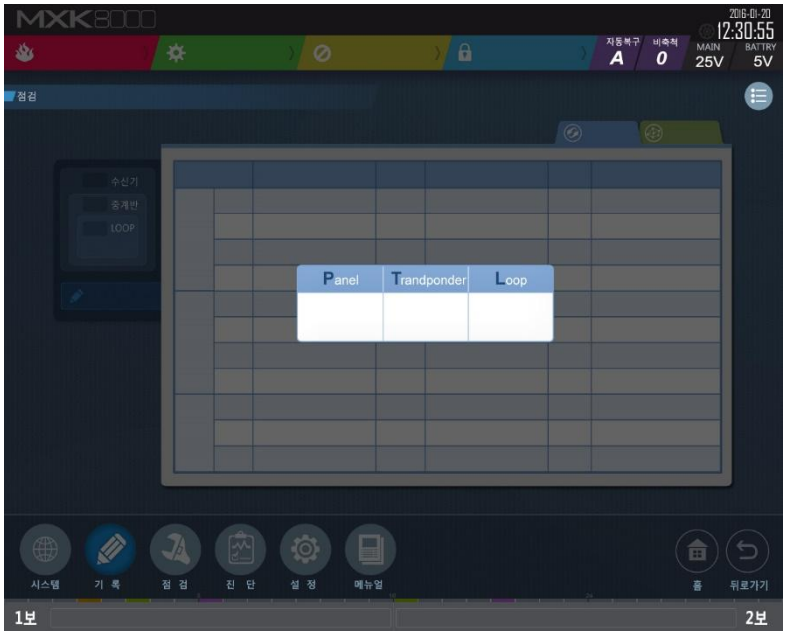


The Inspection function provides the same functionality as Simulation.

Normal Screen

✓ Inspection

Input/Output Table Check (ADIO)



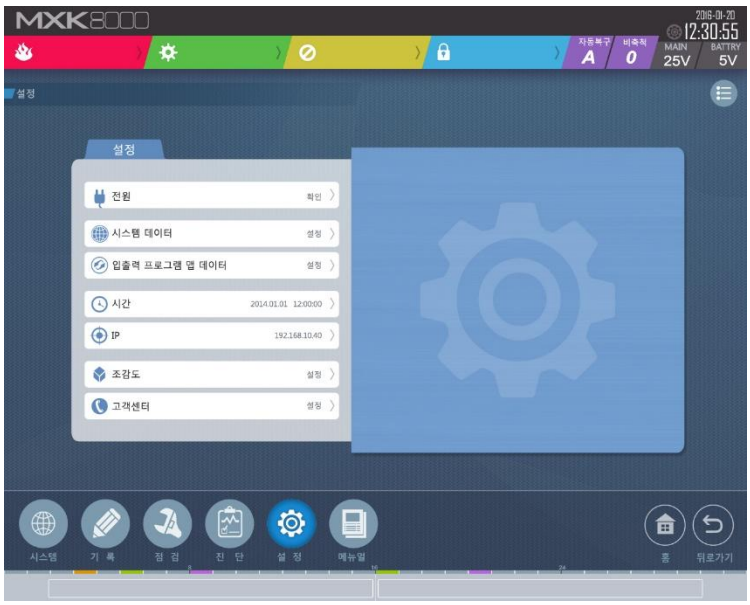
The screen above allows you to select a location for corresponding input/output among a panel, a transponder, and a loop.

Selecting a desired loop displays the input/output information

Normal Screen

✓ Setup

Overview



Touching the 'Setup' menu in the initial screen displays a screen that allows you to set or change panel data.

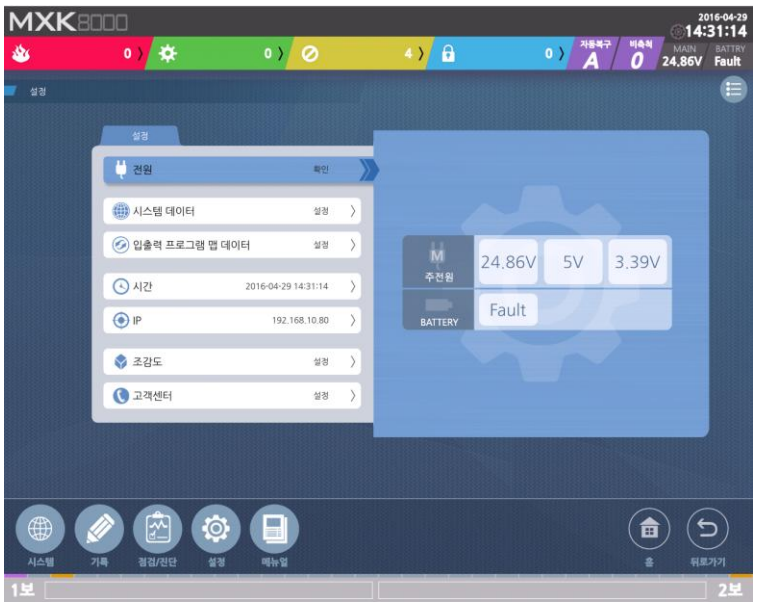
The left side of the screen displays the sub-menu options, and the result from the selected sub-menu is displayed on the right side.

The screen above shows no selection.

Normal Screen

✓ Setup

Power



Touching the 'Power' button on the Setup screen displays the screen above.

This screen displays the main power voltage and main battery voltage information on the left side and the secondary power voltage and secondary battery voltage information on the right side.

Normal Screen

✓ Setup

System Data

Touching the 'System Data' button on the setup screen displays the screen above.

System data represents the programs required for panel operation.

The system data shows their versions and the left side displays options to download or upload programs. Downloading or uploading allows you to modify or change the currently operating programs.

Touching the 'Download' or 'Upload' button displays the next screen.

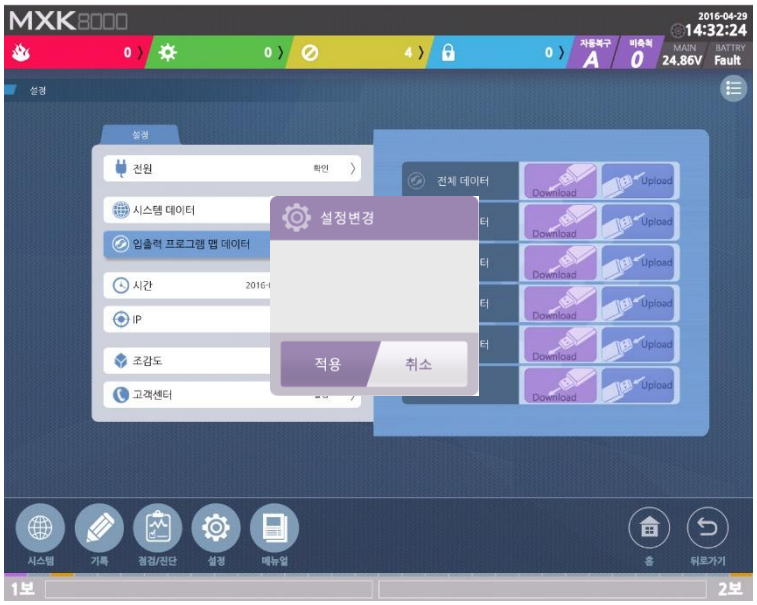
Normal Screen

✓ Setup

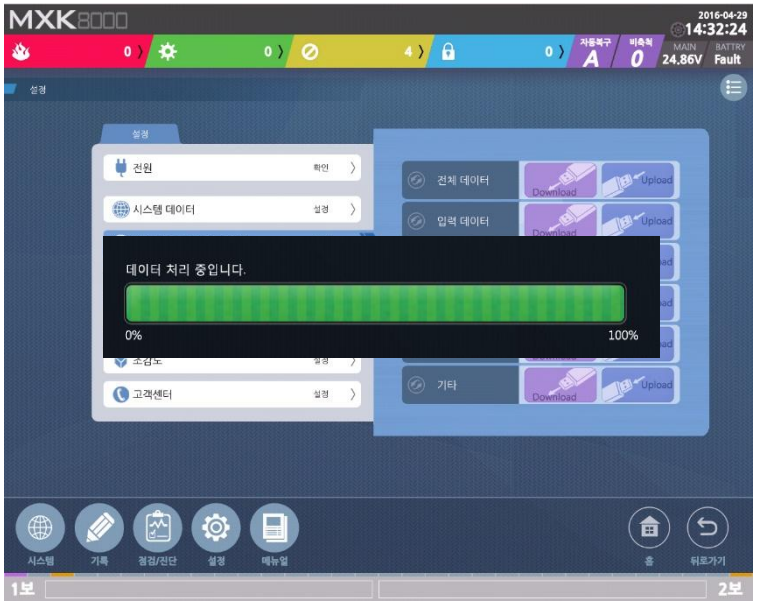
Input/Output Program Data

Touching the 'Configuration Data' button on the Setup screen displays the screen above. The 'In/Output Program and Data' button represents data used to control input/output links or activate fire/equipment. This data is collected from the site and transmitted to the panel using the input/output link table and site map within the Consys program.

It provides the same functionality of download and upload as System data.



This screen appears after selecting 'Download' or 'Upload' on the previous screen. A guide message will be displayed. Click 'Apply' to apply the data to the system, or click 'Cancel' to dismiss the message.

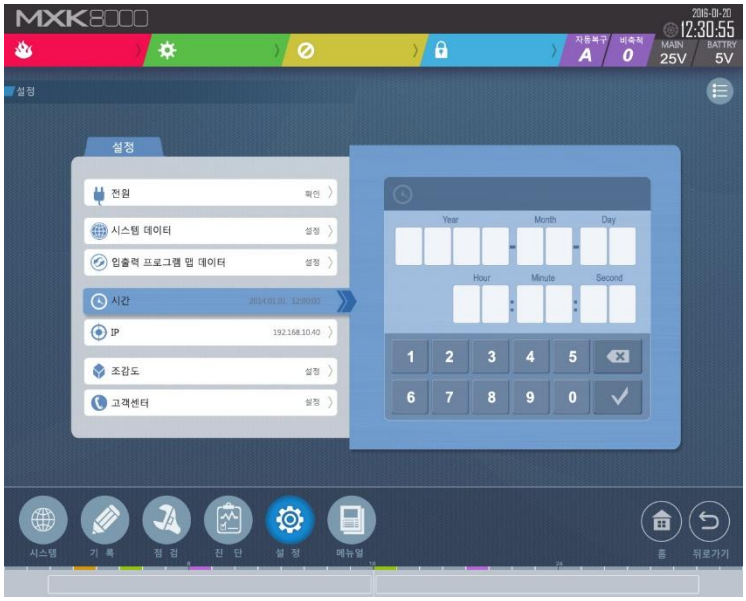


Clicking 'Apply' displays the progress window shown above. (Completion criteria: 100%)

Normal Screen

✓ Setup

Time

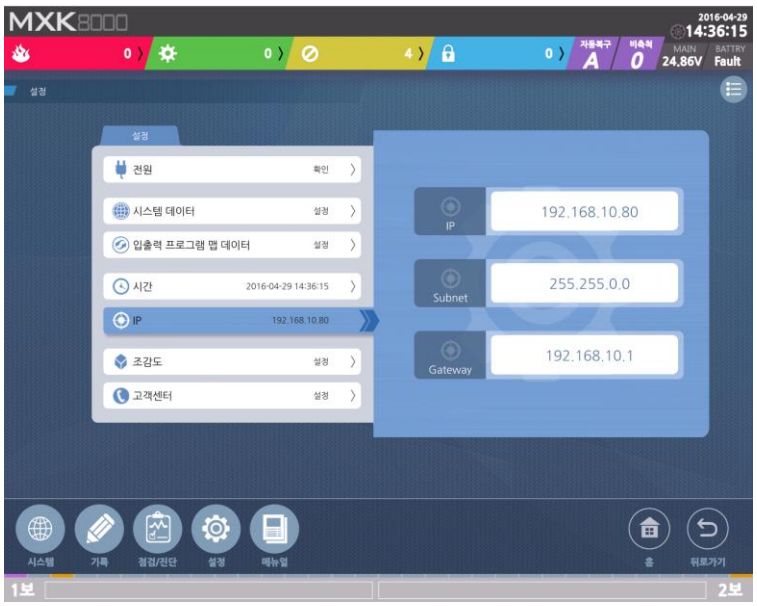


Touching the 'Time' button on the Setup screen displays the screen above. Time is crucial as it is displayed in the upper right corner of the screen and used to record events occurring within the device or system. The current time is displayed, and any changes made to the time are applied to the system immediately.

Normal Screen

✓ Setup

IP



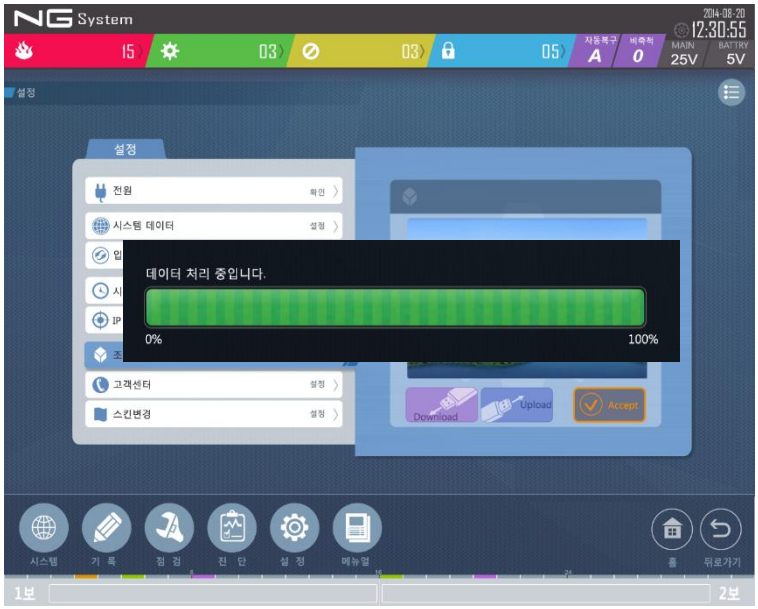
Touching the 'IP' button on the setup screen displays the screen above. This screen displays the IP information configured on the panel. This IP information is used for data exchange with workstations or other panels. Additionally, the subnet and gateway information are also displayed."

Normal Screen

✓ Setup

Aerial View

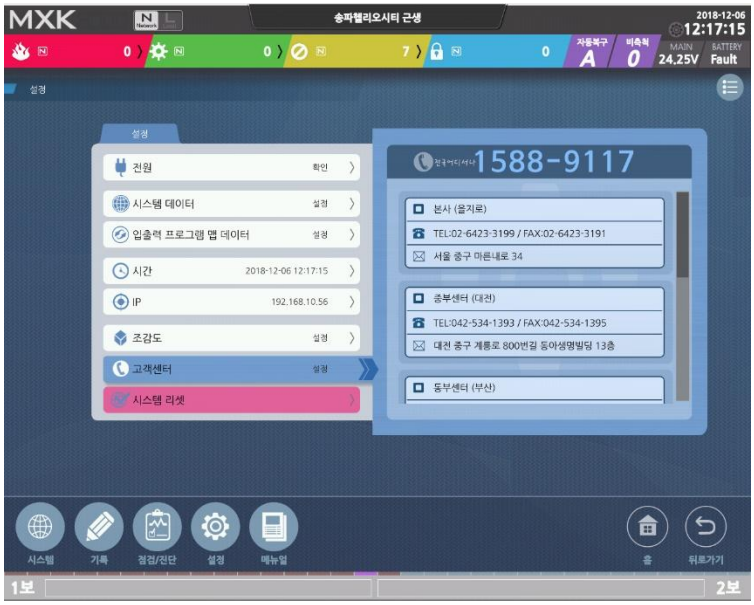
Touching the 'Aerial View' button on the setting screen displays the screen above. The aerial view refers to the image displayed on the initial screen of the panel. The screen allows you to download or upload screen images



Normal Screen

✓ Setup

Customer Center



Touching the 'Customer Center' button on the setup screen displays the screen above. The 'Customer Center' image is used in the main menu of the user manual.

Normal Screen

✓ Manual

Touching the 'Manual' button on the initial screen displays the user manual, as shown above.

Fire Occurrence

✓ Fire Occurrence

Overview

This screen appears when a fire occurs on the initial screen. The bottom of the screen displays information about the first and second fires.

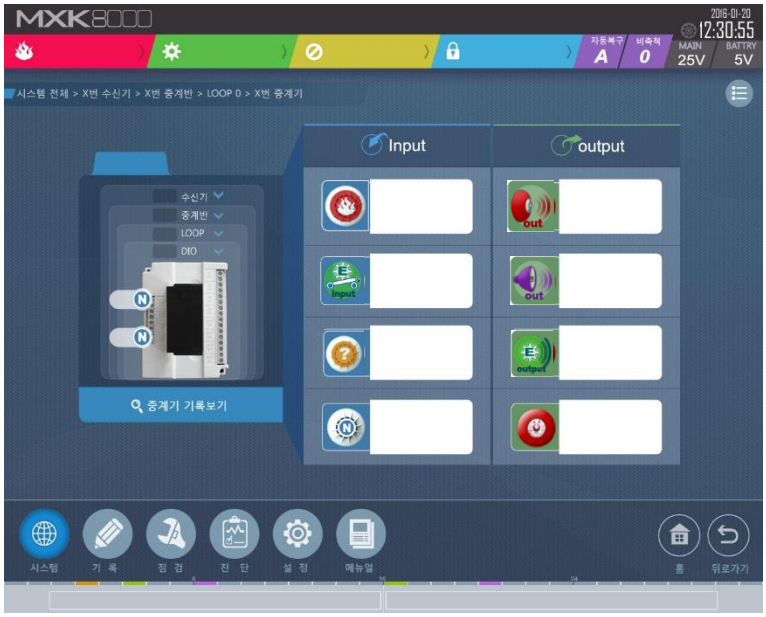
- Touching the fire occurrence box in the center of the screen will bring up the next screen.
- Touching the fire icon will navigate to another menu.

The number of fires in the upper left corner of the screen increases from zero to reflect the number of current fires

Event Screen (Including fire)

✓ I/O module

Overview



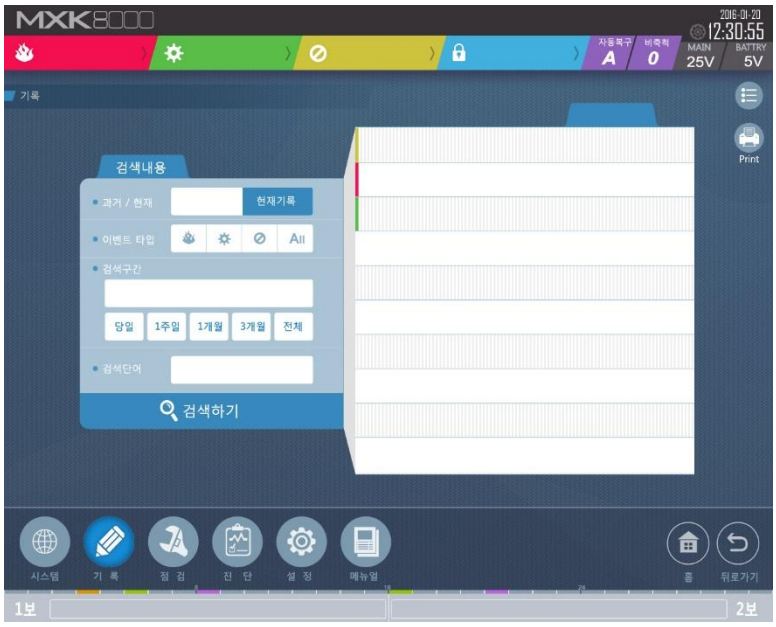
Navigating to 'Main Menu' > 'Panel State' > 'System' > 'I/O' displays this screen. If a detector connected to the I/O module is activated by fire, the fire icon is displayed. The screen also shows the operational status of the output equipment connected based on the I/O map.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Event Screen

✓ Fire Statement

Messages



Touching the Record icon in the Main menu displays the screen above, which show a currently active device list for an area experiencing a fire.

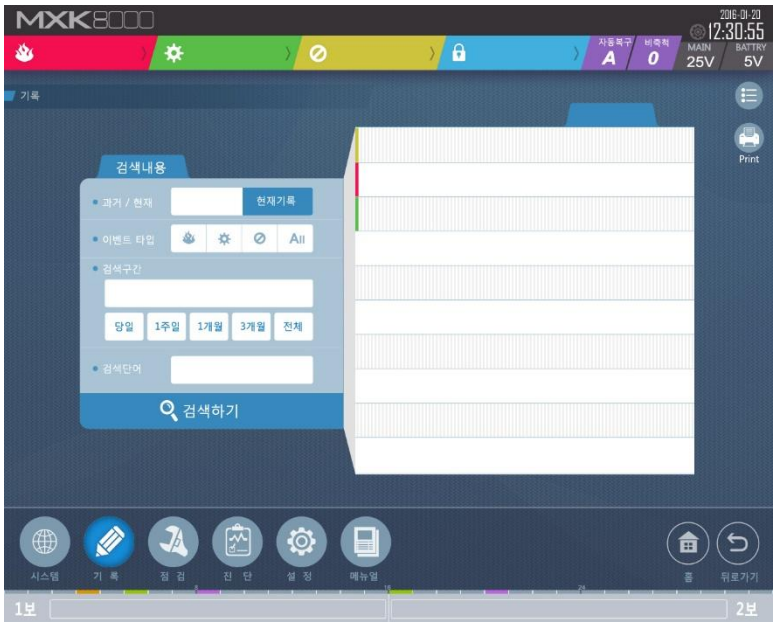
1st Fire" and "2nd Fire" indicators will persistently display on any screen within any menu until the fire condition is resolved and the fire indicator icon will remain visible throughout the system.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Event Screen

✓ Record of Fire Alarm

Record



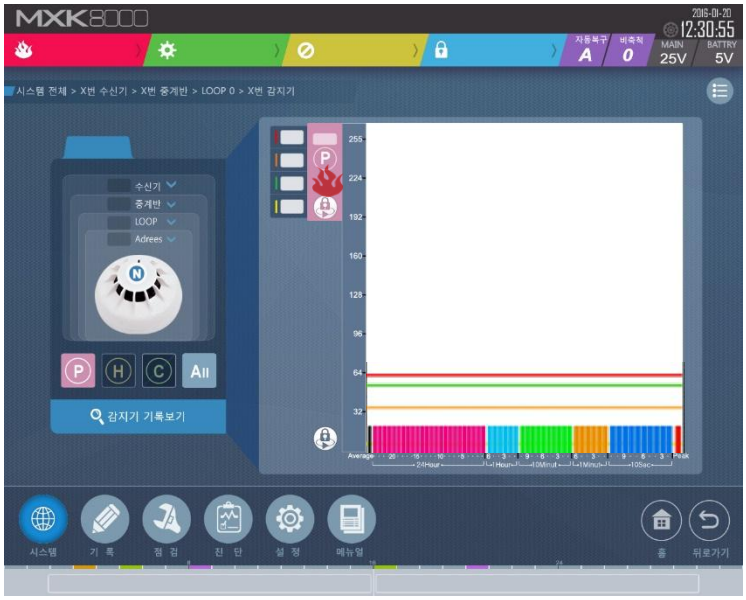
Touching the 'Record' icon in the Main Menu displays this screen, which shows a list of areas with active fire occurrences. The search records are information about these areas.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Fire Occurrence

✓ Analog Detector

Overview



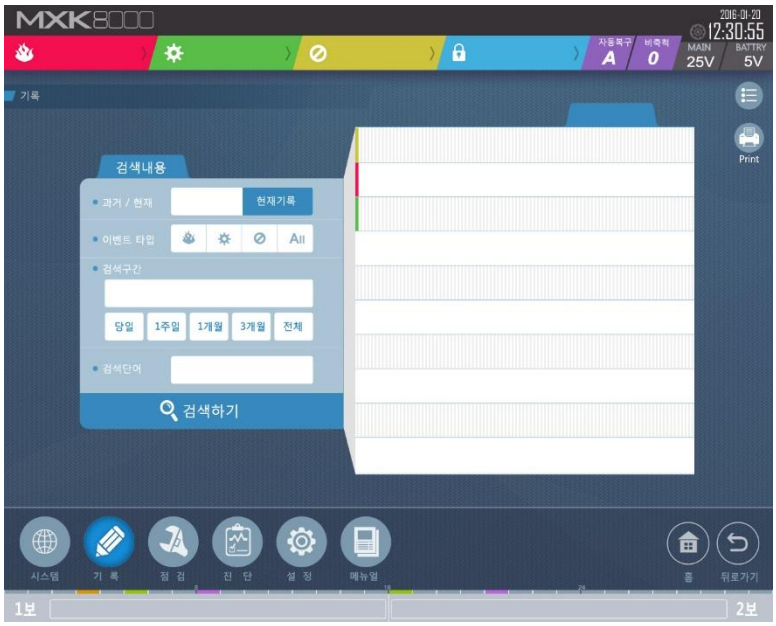
Navigating to 'Main Menu' > 'Panel State' > 'System' > 'Analog Detector' displays this screen. An activated analog detector indicates a fire occurrence by displaying a fire icon on the screen.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Equipment Record Screen

✓ Equipment Statement

Record



This screen displays a list of currently active equipment and their corresponding areas. The search record provides information about the area

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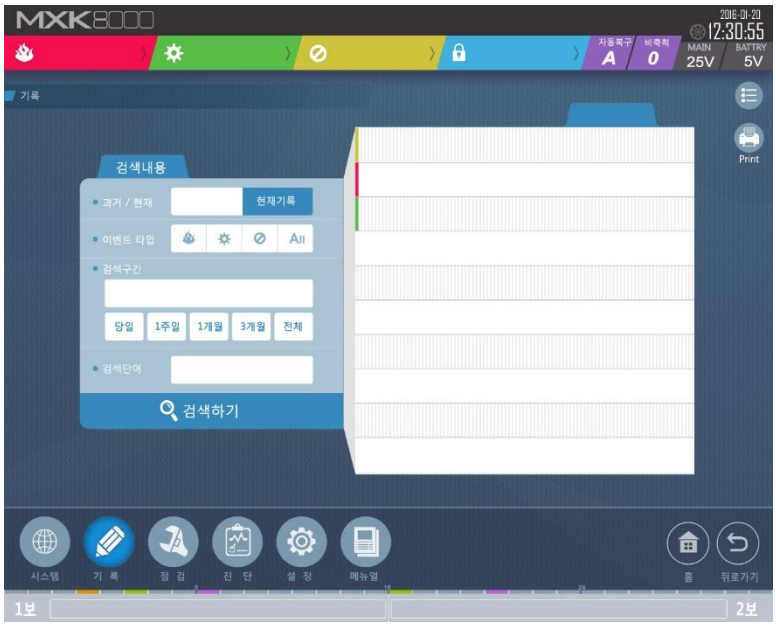
Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Fault Screen

✓ Fault Statement

Overview



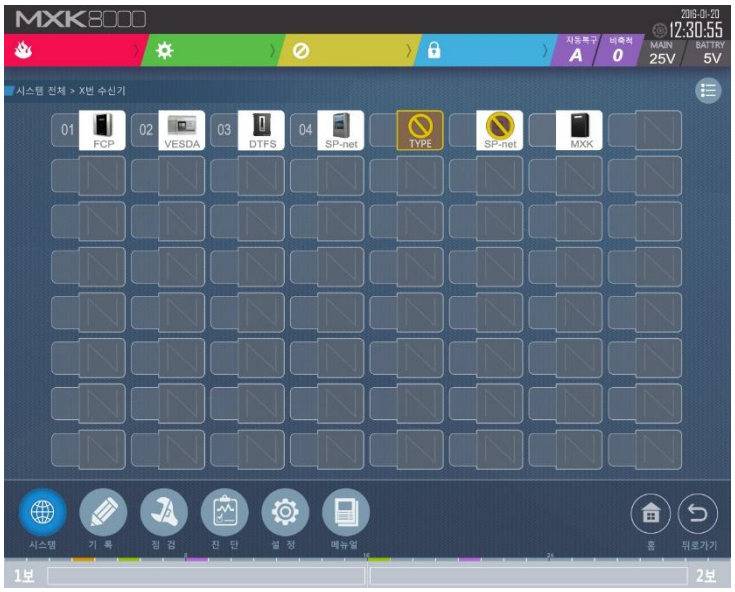
Touching the Record icon in the Main Menu displays this screen. It shows a message indicating areas with faults. The search records provide information about this area.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Fault Screen

✓ FCP

States of All Transponders



Touching the System icon in the Main Menu displays information about transponders. This screen provides a quick overview of their status.

Fault Screen

✓ FCP

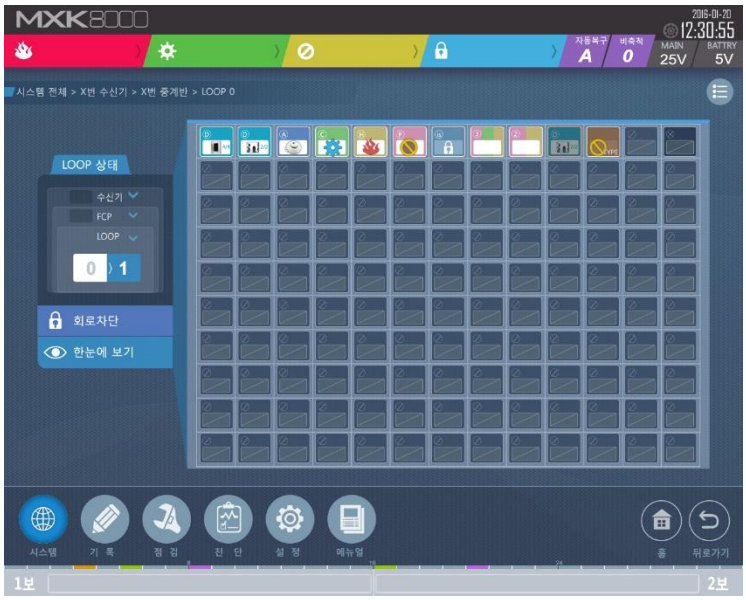
Transponder State

Touching a transponder to view its status displays the screen above. The right side of the screen shows information about communication troubles and power failures for the selected transponder. You can also view the fault states of Loop 0 and Loop 1, including open and short circuit statuses.

Fault Screen

✓ FCP

Device Status



The screen above indicates a fault on Loop 0 of Transponder No.1, specifically with I/O module No.6. This screen does not provide the specific type of fault with the I/O module. To identify the exact type of the fault, touch the fault icon.

Touching the Home button returns you to the initial screen, while the **Back** button navigates to the parent menu of the current screen.

Product warranty

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

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

Product Model

Product	Basic Model	Model	Listing Number
MXK Panel	MXK500W		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