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# 1. Specification

#### Main power supply

A.C.	AC 220V/50~60Hz
D.C.	28V/2.5A, 5V/3A(Default)

#### **Battery**

Capacity	12V/4Ah (2 Lead Acid Batteries)
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#### Housing type - Wall mounted

Size	400(W)×500(H)×147(D)
Material	Metal plate

#### Capacity

Loop	4 Loops per transponder
I/O modules	250 each per loop
Circuit	2, 4 Points per I/O module
Maximum	4 Loops × 250 Addresses × 4 Points = 4000
number of	circuits
circuits	

#### **Key & LED (programmable)**

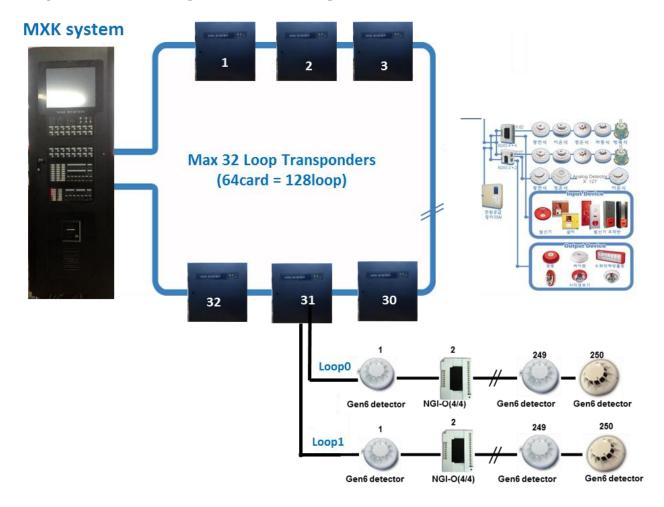
Battery Test Key	1 key
status LED	7 LEDs

#### **Communication port**

No	Method	Purpose
	RS-485	FCP Normal,
1		FCP Back

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# 2. System Configuration Diagram



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# 3. Transponder Image



### 4. Installation

Before MXK8000 Network System arrives at the site, all the basic tests finished. After setting addresses and wiring the external lines, users can use the system All settings can be set up in consultation with Johnson Controls International Korea's Engineering Team, considering the conditions of the site and the manager's opinion.

## > Arrangement

The product is protected by packing boxes and protective vinyl.

After moving the product to a place where you want to install the system (a fire control room, a security room, other control rooms, etc.), remove the packaging.

The environment where the transponder is installed shall be maintained at a temperature of 0  $^{\circ}$ C to 40  $^{\circ}$ C and humidity of 85  $^{\circ}$ 6 or less

If there is serious indoor contamination with dust, etc. due to a construction, keep the product without removing the packaging. Then, clean the contamination by air ventilation, and remove the packaging of the product before using it.

There are no restrictions on the location of the installation in the management room, so choose a location that is convenient for the administrator to manage the transponder. However, you should choose a suitable place where wiring is easy because the transponder must be connected to panels and I/O modules through external wires.

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### > Power Supply

#### - Caution before Power Supply

Do a visual inspection of the product before the power is supplied.

Long-term shipping and the consequent vibration may cause the assembly to become loose.

Applying power to an abnormal assembly causes physical damage to the product. Before turning on the product, do a visual inspection for connectors or connections to check that they are OK, and then apply AC power.

If visual inspection shows that the connectors are missing or abnormal, check the AC connection and please call the A/S center.

The MXK8000 transponder is for use with 220V. Do not use with 110V.

#### - Connecting Power line

When connecting the power line to the product, work with the power supply cut off. Working unblocked can lead to the risk of life loss. It can also cause product failure.

#### - State Check-up

If the AC power line is connected, turn on the main power switch on the panel and check the panel status.

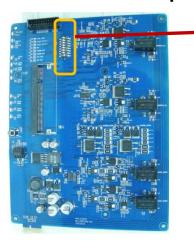
Make sure that Normal Circuit Voltage LED and AC Power LED on the front of the transponder are illuminated as normal.

Make sure that the CPU RUN LED is flickering normally.

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# 5. Setting and check-up

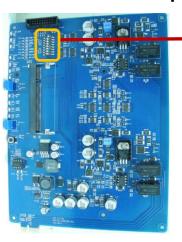
## > MXK-MX Loop Dip switch settings



Pin No.	Description	ON	OFF
1~6	Transponder Address Number	1~64	
7	850EMT Tool Remote Mode	Used	Unused
8	Mode Selection	Install	NORMAL

\*\* During system installation, Fast Mode is utilized for faster troubleshooting processes. Once installation is complete, switch the system to Normal Mode for regular operation.

## > MXK-NU Loop Dip switch settings



Pin No.	Description	ON	OFF
1~6	Transponder Address Number	1~64	
7	Protocol Setting	HI-MUX	N-MUX
8	Mode Selection	Normal	Install

During system installation, Fast Mode is utilized for faster troubleshooting processes. Once installation is complete, switch the system to Normal Mode for regular operation.

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# 6. External wiring connection - Panels, Loops

### > Loop Transponder TIB



TIB board plays a role as a terminal board connecting external and internal wires and runs simple functions. Check each number for its function.

- 1, 2. : Loop card connecting terminal

- 3. : Multi drop settup

- 4. : Front LED Connector (Connect housing display and control board)

- 5. : Loop communication Connector (Loop 0, 1 - Normal, Back)

- 6. : RS485 communication Terminal (Front-end, back-end)

- 7. : Power Connector

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## > External wiring connection method

1. Connecting to panel communication

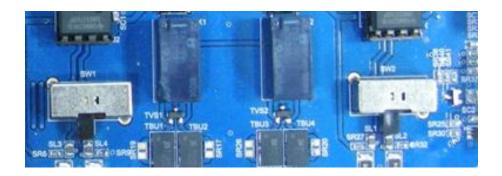


The above picture shows the terminal to be connected to the panel.

Unlike existing N-Mux U, RS485 communication is used as the default.

+ line goes to + and - goes to -.

#### 2. Selection switch for Multi drop mode (Normal or Multi drop)



# 7. Q&A

#### The product does not turn on.

- 1. Ensure that the AC power is normally applied to the product.
- 2. Ensure that the AC power is set to 220V (field-specific).
- 3. Ensure that the connector of each board is connected correctly.

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