# DNAKE



# User Manual

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**DNAKE RIM08**

# REMARK

Please follow the user manual for correct installation and testing. If there is any doubt please call our tech-supporting and customer center.

Our company applies ourselves to reformation and innovation of our products. No extra notice for any change. The illustration shown here is only for reference. If there is any difference, please take the actual product as the standard.

The product and batteries must be handled separately from household waste. When the product reaches the end of service life and needs to be discarded, please contact the local administrative department and put it in the designated collection points in order to avoid the damage to the environment and human health caused by any disposal. We encourage recycling and reusing the material resources.

# CATALOG

# PRODUCT FEATURE

1.  Control different devices, such as lights, heating, natural gas, curtains, water valves, etc.
2.  Support different control entrances including relay module, indoor monitor, and APP
3.  Powered by PoE or power adapter (DC12V/1A)
4.  Support remote control of device
5.  Rail mounting

# TECHNICAL PARAMETER
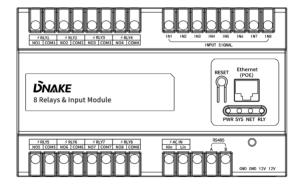
Power Supply: PoE (802.3af) or DC 12V/1A

Rated Power: 6 W

Working Temperature: -10℃ to +55℃

Storage Temperature: -40℃ to +70℃

Working Humidity: 10% to 90% (non-condensing)

Installation: Rail mounting

# OVERVIEW

# WEB SETTING

## 1. RIM08 web settings

Connect RIM08 and PC to a network switch in the same LAN. You can enter the IP address of RIM08 in the web browser search bar and log in with the default account (admin) and password (123456). This is where you can configure the device.

For getting the IP address, you can search by DNAKE Remote Upgrade Tool which is installed in the same LAN with the devices. And it's recognized as a Villa station on tool.



## 1.1 Information

When you first log in to the web interface, you can find basic information displayed in this dashboard.



| Model: | Model of the device; |
|---|---|
| Firmware Version: | Firmware version of the device; |
| MAC Address: | MAC address of the device; |
| Framework: | Framework of the device; |
| DHCP: | Status of DHCP; |
| IP Address: | Current IP address of the device; |
| Mask: | Subnet mask of the device; |
| Gateway: | Gateway of the device; |
| DNS: | Domain Name Server of the device; |

## 1.2  Device

Numbers here are basic settings to relate RIM08 with Indoor Monitor. The Building, Unit, Apartment, and

Sync number should be the same as those in Indoor Monitor.

The device number here is to distinguish different RIM08.



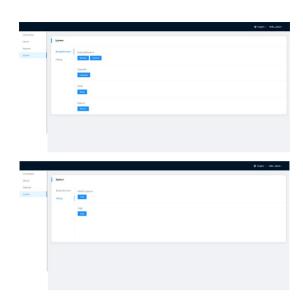| | |
|---:|:---|
| Building: | Number of the building (Range: 1-999); |
| Unit: | Number of the unit (Range: 0-99); |
| Device No: | Number of the device (Range: 1-9); |
| Sync: | A number used to synchronize to Indoor Monitors（Range: 1111-9999）; |

## 1.1  Network

The device network can be set to either DHCP or a static IP address.

| | DHCP: | Enable DHCP (Dynamic Host Configuration Protocol) to dynamically distribute network configuration parameters; |
| --- | --- | --- |
| | IP Address: | Configure Static IP address to manually distribute network configuration parameters; |
| | Mask: | Subnet mask; |
| | Gateway: | A component that is part of two networks, which use different protocols; |
| | DNS: | Domain Name Server of the device; |

## 1.3  System

The system column is designed for data backup and restore, firmware upgrade, factory default, device reboot, packet capture, logs capture, and obtaining UI screenshots.

| Backup&Restore: | Backup all setting and restore settings; |
|---|---|
| Upgrade: | Upgrade equipment; |
| Reset: | Reset to factory settings; |
| Reboot: | Reboot the device; |
| Packet Capture: | Capturing packets can help developers reproduce positioning problems; |
| Logs: | Device logs; |

## 2. Indoor Monitor web setting

Connect Indoor Monitor and PC to a network switch in the same LAN. You can enter the IP address of Indoor Monitor in the web browser search bar and log in with the default account (admin) and password (123456). This is where you can configure the device.



## 1.1. Advanced > Relay

The Relay settings of RIM08 can be found in the Indoor Monitor's web page.

| | |
|---|---|
| Name: | Customize name for switch button; |
| Zone: | The zone of Indoor Monitor; |
| Delay: | The length of trigger delay time (0-9s); |
| Trigger: | The length of the trigger time; |
| Enabled | Enable or disable switch on RIM08; |

# DEVICE SETTING

### 1. Search RIM08

Connect RIM08 and Indoor Monitor in the same LAN. After setting Building, Unit, Apartment and Sync number with Indoor Monitor on the web, you can find RIM08 on the Indoor Monitor here.

Note: The Building, Unit, Apartment and Sync number of RIM08 and Indoor Monitor should be the same.
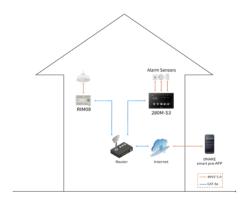


### 2. Home Control

After saving the RIM08 on Indoor Monitor, you will find home control button and its interface here. The relay will be triggered when you press the corresponding switch.
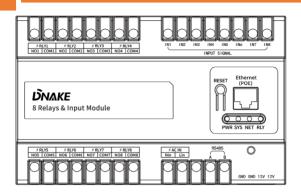
If you set the zone in the Advanced > Relay on indoor monitor's web page, when the zone is triggered, the relay which is connected to the RIM08 will also be triggered automatically. They are linked.
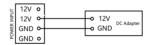
# SYSTEM DIAGRAM



Alarm Sensors

RIM08

280M-S3

Router

Internet

DNAKE
smart pro APP

RVV2*1.0

CAT-5e

# DEVICE WIRING



| No. | Interface Name | Interface Function | Note |
|-----|----------------|--------------------|------|
| 1 | RLY_ NO_ COM_ | Relay interface | Support 8 relays on one RIM08 |
| 2 | INPUT SIGNAL IN | Input | Dry contact input |
| 3 | AC IN Nin Lin | Zero Crossing Detection (ZCD) interface | ZCD function when module connect with AC Load |
| 4 | RS485 A B | RS485 | RS485 input |
| 5 | GND GND 12V 12V | Power interface | DC 12V1A input |

| 6 | Ethernet (PoE) | Network interface | PoE (802.3af) 10/100 Mbps adaptive |
|---|---|---|---|
| 7 | Indicator light--PWR | Power indicator light--RED | On: Normal power supply Off: No powered or the power is faulty |
| 8 | Indicator light--SYS | System indicator light--RED | On: System running properly Off: System is starting or the system is faulty |
| 9 | Indicator light--NET | Network indicator light--GREEN | On: Network connected Off: Network disconnected |
| 10 | Indicator light--RLY | Relay indicator light--GREEN | Flash once: Relay is triggered once |
| 11 | Button--RESET | Reset | Keep press more than 5s to reset device |

## 1. Power Interface

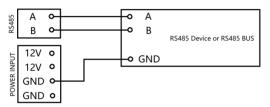The power interface of Indoor Monitor connects to 12V1A DC power



## 2. Network (PoE)

Standard RJ45 interface is for the connection with PoE switch or other network switch.
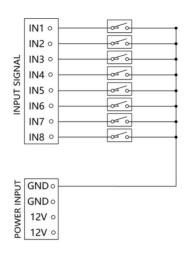
## 3. RS485 Interface

RS485 interface can connect to the equipment with RS485 interface;
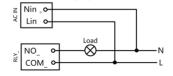


## 4. Input Interface

Each input interface can be separately connected to the warping switch, self-reset switch, normally open or normally closed sensor switch;

Each trigger control corresponds to relay action. For example, RLY1 will work after IN1 is triggered.

## 5. AC IN Interface

If you connect an AC device to RIM08, you need connect a 220V AC 50Hz input to AC IN interface first.

Q & A:

**1. Q: What is the function of the AC IN interface?**

A: This interface is used for Zero Crossing Detection (ZCD) function. RIM08 with 2 types operation modes, one for Alternating Current devices, the other for Direct Current devices. If you didn't connect to ZCD interface system will use Direct Current mode automatically. At that time if you are using Alternating Current devices, it may reduce reliability on RIM08. But if you are using Direct Current device then no need to connect ZCD interface.

**2. Q: Can I connect with AC device but don't connect to AC IN?**

A: The RIM08 can work normally, but the life of relay interface will be reduced and device security level will be degraded. We suggest you connect to AC IN when you connect with AC device.

**3. Q: Whether the AC IN interface is required for connecting with DC device?**

A: No. RIM08 are working as Direct Current mode as default.

**4. Q: Does all AC devices need to connect to AC IN interface first?**
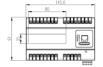A: No need, just one channel for each RIM08 device.

**5. Q: How to make AC IN function working?**
A: First power on AC IN with Alternating Current and then power on RIM08 with POE or 12V1A.

# INSTALLATION

Three views of the product:



Installation procedure:

1.    Clamp the upper end of the module to the guide rail.



2.    Lift the spring stop by a flat-head screwdriver, nd
      mount the module into the guide rail.

3. Installation complete

# SAFETY INSTRUCTION

**In order to protect you and others from harm or your device from damage, please read the following information before using the device.**

- Do not torque too much especially by electrical tools.
- Do not install the device in the following places:
- Do not install the device in high-temperature and moist environment or the area close to magnetic field, such as the electric generator, transformer or magnet.
- Do not place the device near the heating products such as electric heater or the fluid container.
- Do not place the device in the sun or near the heat source, which might cause discoloration or deformation of the device.
- Do not install the device in an unstable position to avoid the property losses or personal injury caused by the falling of device.

**Guard against High Voltage electric shock, fire and explosion. Connect AC device must be operated by Professionals:**
- Do not use damaged power cord, plug or loose outlet.
- Do not touch the power cord with wet hand or unplug the power cord by pulling.
- Do not bend or damage the power cord.

- Do not touch the device with wet hand.
- Do not make the power supply slip or cause the impact.
- Do not use the power supply without the manufacturer's approval.
- Do not have the liquids such as water go into the device.

**Other Tips**
- In order to prevent damage to the paint layer or the case, please do not expose the device to chemical products, such as the diluent, gasoline, alcohol, insect-resist agents, opacifying agent and insecticide.
- Do not knock on the device with hard objects.
- Overexertion might cause flopover or damage to the device.
- Please be careful when standing up from the area under the device.
- Do not disassemble, repair or modify the device at your own discretion.
- The arbitrary modification is not covered under warranty. When any repair required, please contact the customer service center.
- If there is abnormal sound, smell or fume in the device, please unplug the power cord and the devices connected to the module immediately and contact the customer service center.
- When the device isn't used for a long time, you can remove the power on device, and make sure

all the devices (Including the AC IN interface) connected to the module are power off.

- When the device isn't used for a long time, the adaptor can be removed and placed in dry environment.
- When moving, please hand over the manual to new tenant for proper usage of the device.

**EASY & SMART
INTERCOM SOLUTIONS**

**DNAKE**