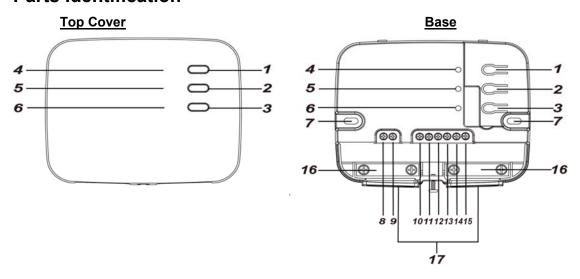
# PRLM-CH3-AC(DC) Relay Switch

## Introduction

PRLM-CH3-AC(DC) is a 3-channel Relay Switch that enables wireless operations of 3 separate connected devices, allowing users to remotely manage facilities inside and outside the home.

The Relay Switch is also equipped with the strain relief clamps for electrical and mechanical integrity and overall performance and safety.

## **Parts Identification**



#### 1. Switch Button 1/Test Button

- Press and hold the button for 3 seconds to send a learn code.
- Press and hold the button while powering on the device, then release the button when LEDs light up to factory reset.
- Press the button to switch ON/OFF the Relay Channel 1.

#### 2. Switch Button 2

- Press the button to switch ON/OFF the Relay Channel 2.

#### 3. Switch Button 3

- Press the button to switch ON/OFF the Relay Channel 3.

#### 4. LED indicator 1

#### 5. LED indicator 2

#### 6. LED indicator 3

The LED indicator 1/2/3 are used to indicate Relay Channel 1/2/3 status:

- LED 1 On/Off: Relay Channel 1 On/Off
- LED 2 On/Off: Relay Channel 2 On/Off
- LED 3 On/Off: Relay Channel 3 On/Off

When powered on, all LEDs will flash for two times.

When in learning mode, all LEDs will flash slowly.

When learning is successful, all LEDs will flash for 3 times.

## 7. Mounting Holes

#### **Connection Terminals**

Connect the wire into the terminal, tighten the screw to close the clipper and hold wire in place. Unscrew to open the clipper to remove the wire connected to the terminal.

### 8. Line (AC input) or 12V/24V DC Input (+)

#### 9. Neutral or Ground (-)

## 10. NO (Channel 1)

For Normal Open connection with the device

#### 11. Common (Channel 1)

### 12. NO (Channel 2)

For Normal Open connection with the device

#### 13. Common (Channel 2)

#### 14. NO (Channel 3)

For Normal Open connection with the device

#### 15. Common (Channel 3)

#### 16. Strain Relief Clamp

The clamps are used for securing the wires, and providing strain relief to protect the wires from the metal cutout.

#### 17. Wiring Holes

# **Specification**

Power Supply: 100 - 240V AC or DC12/24V

Supported Load Current (for each relay channel): 5A, 250VAC or 5A, 30VDC

Stranded Wire: 14–22 AWG

Operating Temperature: -10°C to 45°C (14°F to 113°F)

Humidity: Up to 85% non-condensing
Dimension: 110mm x 91mm x 28mm

# **Installation Environment**



- The Relay Switch should be installed indoors in a dry location.
- It is recommended to install the device in a fire resistant plastic gangbox.
- Do not install the device in a metal gangbox for optimization of RF range.

# Caution



- All works on the device, including installation and maintenance, must be performed by a qualified and licensed electrician.
- To prevent electrical shock and/or equipment damage, disconnect electrical power at the main fuse or circuit breaker before installation and maintenance.
- Do not connect the device to loads exceeding supported load current.

#### Installation

Wire the Relay according to the instructions below.

- 1. Please turn off the power supply before connection.
- 2. Remove the top cover and remove the strain relief clamps.
- Connect the power supply to the Line(or 12/24V) and Neutral(or Ground) terminals of PRLM respectively through the wiring hole.
- 4. Depending on the device you wish to control via Relay Channel 1, select NO terminal and wire Relay Channel 1 with the device through the wiring hole to establish Normal Open connection with device.
- 5. In the same way as step 4, connect Relay Channel 2/3 to other wired devices.
- 6. After completing the wiring, replace the strain relief clamps and the top cover. Turn on the power supply to power on the Relay Switch.

# **Getting Started**

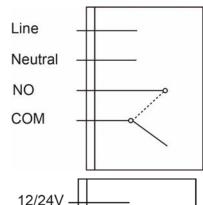
Step 1: Connect the power input to the Relay Switch according to Installation

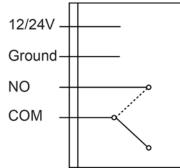
instructions above and power up the Relay Switch.

Step 2: Put the Control Panel into learning mode.

Step 3: Press and hold the Test button for 3 seconds to send a learn code.

Step 4: The three LEDs will start to flash slowly, indicating that the Relay Switch is in learning mode.





Step 5: Upon receiving acknowledgement from the Control Panel, the three LEDs will flash three times to indicate successful learning. The Relay Switch will then exit learning mode.

#### <NOTE>

After entering learning mode, the Relay Switch will not automatically leave learning mode unlesss it receives acknowledgement from the Control Panel, or unless the Test button is pressed.

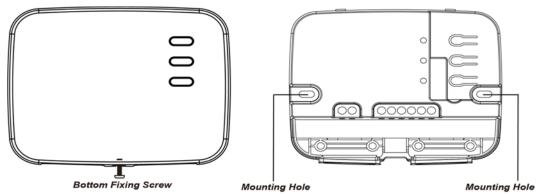
# **Walk Test**

To test whether the Relay Switch is able to communicate with the Control Panel:

- Put the Control Panel into Walk Test mode.
- Press the Test Button on the Relay Switch.
- The Control Panel should display if the Relay Switch is within the operation range (please refer to the operation manual of the Control Panel).

# Mounting

• After you have finished the Walk Test, and you are satisfied that the device is able to



communicate with the Control Panel in the chosen location, proceed to mounting.

- Disconnect the main power supply.
- Loosen the bottom fixing screw and remove the top cover of the Relay Switch.
- Use the holes on the base to mark mounting location on the wall.
- Drill holes into marked location and insert wall plugs if required, screw the base onto the mounting location
- Replace the top cover and tighten the bottom fixing screw.

# Operation

- After the Relay Switch is successfully learned in to the Control Panel, the Control Panel can remotely control the Relay Channel 1/2/3 to turn On/Off. Please refer to your Control Panel for details.
- The user can also manually press the Switch Button 1/2/3 to switch ON/OFF the Relay Channel 1/2/3.

# Supervision

- After the Relay Switch is successfully learned in to the Control Panel, the device will automatically transmit Supervisory signals periodically to the Control Panel at random intervals of 30 to 50 minutes.
- If the Control Panel has not received the signal from the Relay Switch for the preset period of time, the Control Panel will indicate on its display that the particular Relay Switch is experiencing an out-of-signal problem.

# **Factory Reset**

- Factory resetting the Relay Switch will restore it to factory default settings.
- Press and hold the test button while powering on the Relay Switch, then release the button when LEDs light up to factory reset.

#### Federal Communication Commission Interference Statement

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 of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution**: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

## FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.