Relay Controller PRL-8-AC(DC)

Introduction

PRL-8 is a Relay Controller that can be connected to wired device and set to either Normal Open (N.O.) or Normal Close (N.C.) status. After learned into the Control Panel, the Relay Controller can be controlled via the Panel webpage to remotely open and close the connected device.

Parts Identification

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 Relay Controller, then release the button when the LED lights up to factory reset.
- Press the button to switch ON/OFF the Relay.

2. LED indicator (Red)

The LED indicator is used to indicate Relay status:

- On: The Relay Controller is turned on.
- Off: The Relay Controller is turned off.
- Flashes twice: When powered on.
- Flashes slowly: Under learning mode.
- Flashes three times: When learning is successful.
- Flashes briefly: RF signal transmitting

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.

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

4. Neutral or Ground (-)

5. NO

For Normal Open connection with the device.

6. Common

7. NC

For Normal Close connection with the device.

8. Strain Relief Clamp

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

9. Wiring Buckle

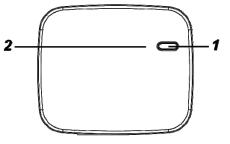
The Wiring Buckle is used for managing wires.

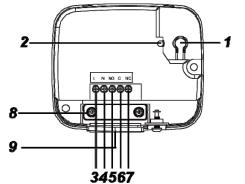
Specification

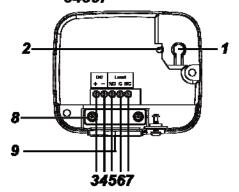
- Power Source (External Power): 100-240VAC or 12/24VDC
- Relay Output: Potential-free SPDT relay, Maximum Operation Load: 10A (Resistive) at 24VDC or 240VAC
- Stranded Wire: 14 ~ 22 AWG
- Operating Temperature: -10°C to 45°C (14°F to 113°F)
- Humidity: Up to 85% non-condensing
- Dimension: 86mm x 72mm x 29mm

Installation Environment

• The Relay Controller 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.

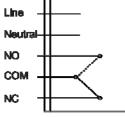


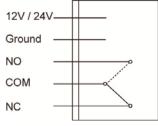
- All works on the device, including installation and maintenance, must be performed by a qualified and licensed electrician.
- To prevent electrical shock and/or equipment damage, disconnect electrical power at the main fuse or circuit breaker before installation and maintenance.
- Do not connect the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

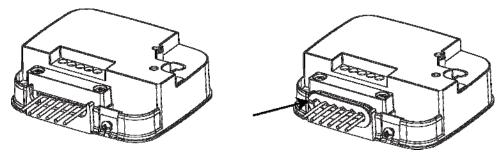
Installation

Please turn off the power supply before connection. Wire the Relay according to the instructions below or refer to the diagram for more information.

- 1. Remove the top cover and remove the strain relief clamp.
- Connect the L and N terminals of the power supply to the Line and Neutral terminals of PRL respectively through the wiring hole.
- Depending on the device you wish to control via the Relay, select NO or NC terminal and wire the Relay with the device to establish Normal Open or Normal Close connection with device.
- 4. After completing device wiring, replace the strain relief clamp, use the wiring buckle to manage the wires, and place the wiring buckle on the base with its gap (opening) positioned on the left (as in the diagram below).







5. Replace the top cover. Turn on the power supply to power on the Relay Controller.

Getting Started

- Step 1: Connect power supply to the Relay Controller according to the installation instructions in previous section and power up the Relay Controller.
- Step 2: Put the Control Panel into learning mode.
- Step 3: Press and hold the Test button on the Relay Controller for 3 seconds to send a learn code.
- Step 4: The LED will start to flash slowly, indicating that the Relay Controller is in learning mode.
- **Step 5:** If the Control Panel receives the signal from the Relay Controller, it will display the information accordingly. Refer to the Control Panel manual to complete the learn-in process.
- **Step 6:** When the Relay Controller receives acknowledgement from the Control Panel, the LED of the Relay Controller will flash 3 times and then turn off to indicate that learning process is completed.

<NOTE>

- After entering learning mode, the Relay Controller will not automatically leave learning mode unlesss it receives acknowledgement from the Control Panel, or unless the Test button is pressed.
- If the Relay Controller already exists in a Control Panel system, you will need to first remove the Relay Controller from the Control Panel before you can learn it into a different Control Panel.

Walk Test

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

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

Supervision

- After the Relay Controller is successfully learned in to the Control Panel, the device will automatically transmit supervisory signal along with ON/Off status to the Control Panel at random intervals of 30 to 50 minutes.
- If the Control Panel has not received the signal from the Relay Controller for the preset period
 of time, the Control Panel will indicate on its display that the particular Relay Controller is
 experiencing an out-of-signal problem.

Operation

- Relay Control
 - After learned into the Control Panel, the Relay Controller can be controlled via the Panel webpage to remotely open and close the connected device or toggle between on and off conditions.
 - You can also press the test button on the Relay Controller to switch ON/OFF the Relay.

Factory Reset

Factory resetting the Relay Controller will clear its memory and restore it to factory default settings.

- 1 Remove the Relay Controller from the Control Panel. Refer to the operation manual of your Control Panel for details.
- 2 Remove power supply from the Relay Controller.
- 3 Press and hold the test button while supplying power to the Relay Controller.
- 4 Keep holding the button, then release it when LED lights up. Factory reset is complete.

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.