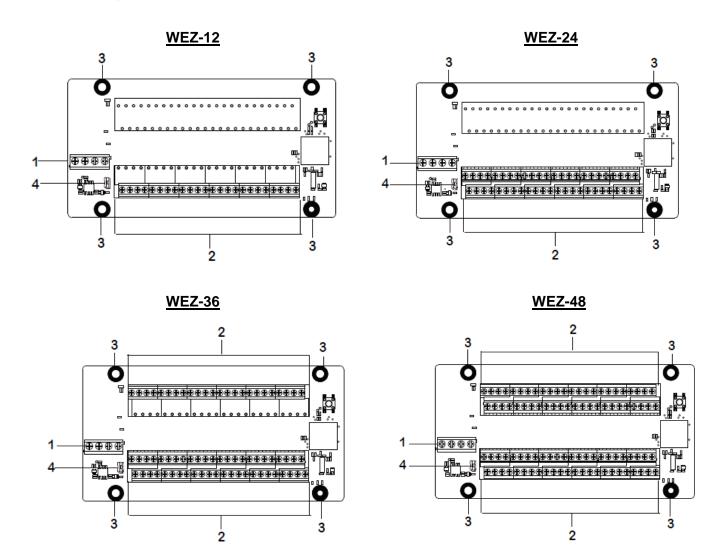
# **WEZ-12/24/36/48-RS485 Expansion Module**

#### Introduction

This installation guide shall be used in conjunction with the Hybrid Panel's user's manual, to which the WEZ model is connected to.

The WEZ-12/24/36/48-RS485 Expansion Module is designed to support expansion for the Hybrid Panel. It can provide the expansion of additional 12, 24, 36, and 48 wired zones on the compatible panels.

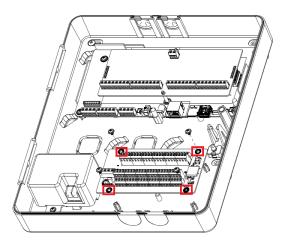
# **Identifying the Parts**



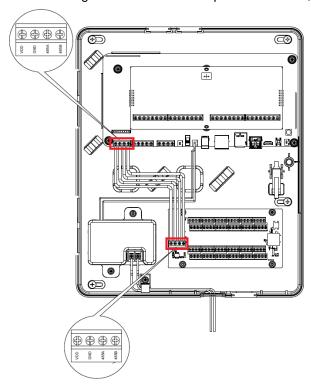
- 1. Panel Connection Terminal
- 2. Zone Terminal & 12V Auxiliary Voltage Output Terminal & GND Terminal
- 3. Screw Holes
- 4. Jumper Switch (JA22)
  - If the jumper is OFF (if the jumper link is removed or "parked" on one pin), the expansion module's communication ability is in normal level.
    - If the jumper is ON, the expansion module's communication ability will be enhanced.

#### **Installation and Connection**

 Before installation and connection, make sure the power supply has been disconnected, and the battery switch has been slid to OFF position..



Thread the four screws through the holes on the Expansion Module, and fasten the screws to secure.



- Connect the cables to the four terminals labeled as VDD, GND, 485A, 485B on the Hybrid Panel.
- Connect the four cables from the Hybrid Panel to the four corresponding terminals labeled as VDD, GND, 485A, 485B on the expansion module.
- To ensure optimal communication between the Panel and expansion module, turn the jumper switch to ON position.
- Incorrect connections will result in failure or improper operation. Inspect wiring and ensure proper connections before applying power.

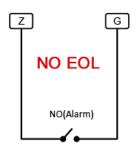
# Zone Wiring

- The zones can be wired by supervising NC (normally close) or NO (normally open) devices, e.g. PIR sensor, door contact, smoke detector, water sensor, fire sensor, CO sensor, gas detector, heat detector, and glass break detector, etc.
- Wire gauge: Minimum 20 AWG, maximum 18 AWG. Do not use shielded wire.
- The hardwired zones support Single-End-of-Line (SEOL) or Double-End-of-Line (DEOL) loop configuration, with a value from 1K, 2.2K, 3.74K, 4.7K, 5.6K, 6.8K, 8.2K, 10K ohms. Please install the resistor(s) at the end of each zone loop far away from the Control Panel. The Panel will detect if the circuit is secure, open, or short.

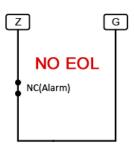
- For an NC loop, please have an EOL resistor in series with the loop.
- For an NO loop, please have an EOL resister in parallel (across) the loop. Please refer to the following diagrams for wiring examples.
- There is no EOL resistor in loop 1 and loop 2.

## **NO/NC Wiring**

1.

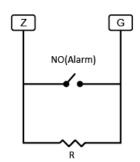


2.

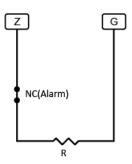


#### **Single-End-of-Line Resistor Wiring**

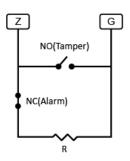
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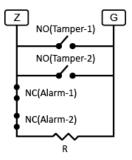
4.



5.

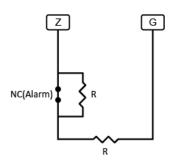


6.

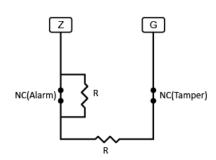


### **Double-End-of-Line Resistor Wiring**

7.



8.



## **Getting Started**

After connecting the expansion board to the Hybrid Panel, and completing device wiring, please proceed to learning and zone programming.

#### Learning

- Step 1. Connect the Expansion Module to the Control Panel. Then, power on the Control Panel.
- Step 2. Click on "Learning" to enter learn page.
- Step 3. Click on "Start" to enter learning mode.
- Step 4. Click "Add" to include the Expansion Module into panel.
- **Step 5.** If the Expansion Module is successfully learnt into the system, the added device will be displayed in the "Learned Device" section. The Device Type will be shown as "Expander".

## Wired Zone Programming

After the expansion module is added, proceed to wired zone programming.

- Step 1. Click Wired Sensor to enter this webpage. You will see the Expanders at the bottom of the page.
- Step 2. Click "Edit" at end of expander entry.
- **Step 3.** Edit the type of the wired sensor, zone wiring, and the EOL resistance for each zone.
- Type: Select the type of the wired sensor for each zone from the drop down menu.
- **Loop**: Select the number to correspond to the zone wiring for each zone from the drop down menu. On this web page, there are wiring diagrams below for your reference.
- **Resistor**: Select the resistance for the zone wiring.
- Status: The status of each zone—Restore, Tamper, or Trigger—will be shown in this
- **Step 4.** Click "**OK**" to save changes when finished. Alternatively, click "**Reset**" to re-enter all the information.
- **Step 5.** If the process is successful, the screen will display "**Updated Successfully.**" The sensor will be assigned to specific area and zone. To edit the device setting or information, click "**Edit**" at the end of device entry.
- Step 6. You will enter Device Edit webpage.
- Step 7. Edit your device setting and information. Click "OK" to save changes when finished.

# **Supervisory Signal**

• After being learnt in to the Control Panel, the Expansion module will automatically transmit Supervisory Signals every 20 to 30 seconds.