

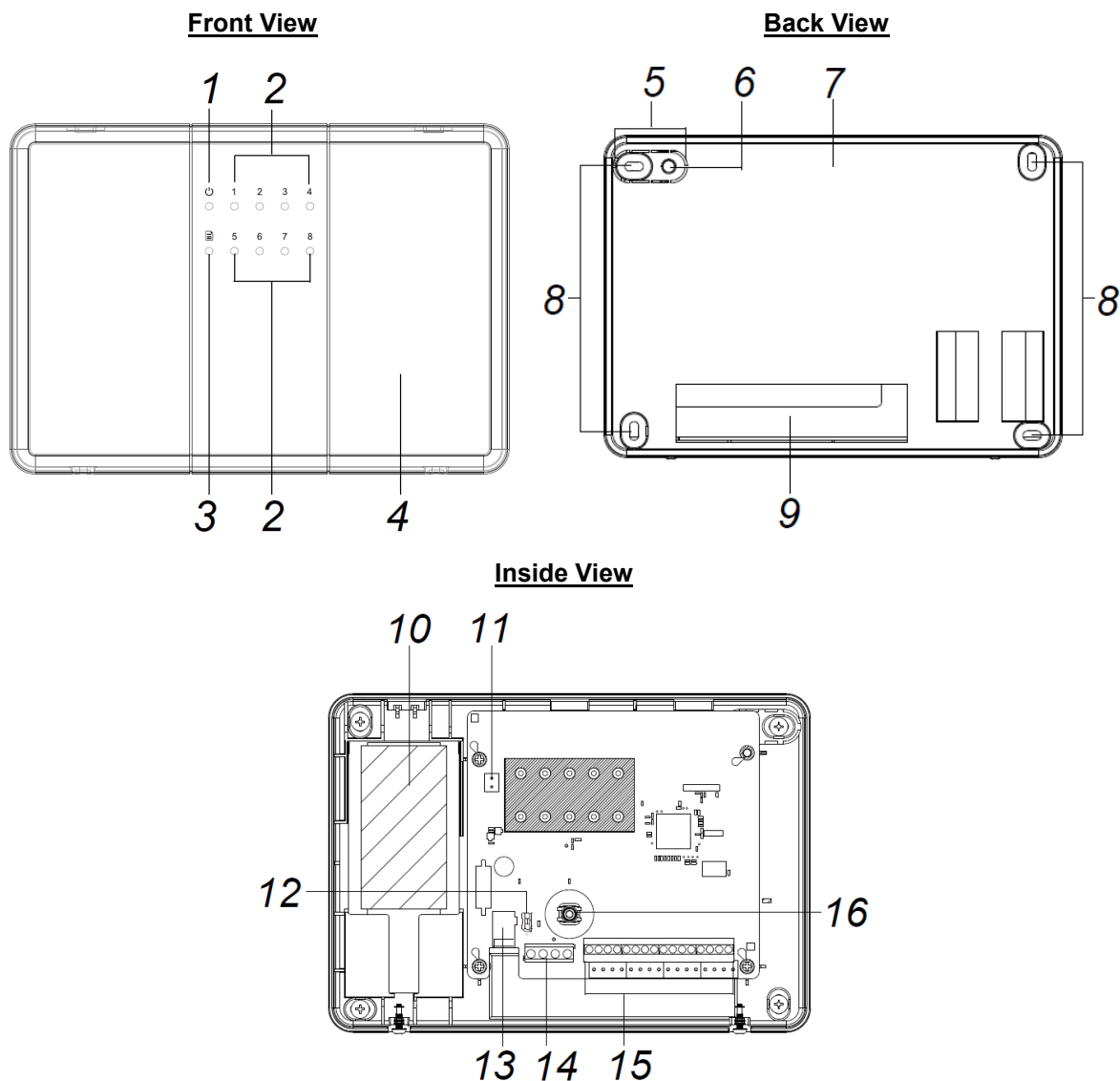
WEZC-8 Expansion Module

Introduction

This installation guide shall be used in conjunction with the Hybrid Panel's user's manual, to which the WEZC-8 model is connected to.

The WEZC-8 Expansion Module is designed to support expansion for the Hybrid Panel. It can provide the expansion of up to 8 zones on the compatible panels. The WEZC-8 is equipped with its own enclosure case, which has tamper protection and LED status indicators.

Identifying the Parts



- 1. Power LED (Red)**
On – Powered by a 12V 1A power adapter or Hybrid Panel.
Off – When the power is off, or when powered by rechargeable battery.
- 2. Zone 1~8 LED (Red)**
The corresponding Zone LED will light up when zone wiring is abnormal, or when tamper is

triggered. The LED is off when zone wiring status is normal, or when wiring is not connected.

3. Transmission LED (Red)

Lights up when connection or signal transmission is normal between WEZC-8 and Control Panel.

4. Front Cover

5. Breakaway Area

When the expansion module is forcibly removed from the mounting location, the area will detach and allow tamper switch to be activated.

6. Tamper Switch (For Wall Mounting)

The expansion module is protected by the tamper switch against any unauthorized removal from the mounting location.

7. Back Cover

8. Mounting Holes

9. Wiring Hole

10. Rechargeable Battery Pack

11. J2 2-Pin Terminal

For connecting the rechargeable battery pack.

12. Jumper Switch (J3)



- If the jumper is OFF (if the jumper link is removed or “parked” on one pin), WEZC-8’s communication ability is in normal level.



- If the jumper is ON, the WEZC-8’s communication ability will be enhanced.

13. DC Jack

DC 12V 1A switching power connection.

14. Panel Connection Terminal

15. Zone Terminal & 12V Auxiliary Voltage Output Terminal & GND Terminal

16. Tamper Switch (For Case Cover)

The expansion module is protected by the tamper switch against any unauthorized case opening. Whenever the case cover is opened, the tamper switch will be activated.

Power Supply

- Power on WEZC-8 by connecting a 12V 1A adaptor to the DC Jack. WEZC-8 can also be powered by connecting to the RS485 terminals of the Hybrid Panel, but it is recommended to use the adaptor when connected to loads that require heavier power draw.
- The power supply from the adaptor or Hybrid Panel will charge the rechargeable battery pack automatically when power is supplied and the rechargeable battery is connected. When power supply is interrupted, WEZC-8 will switch to using the rechargeable battery and continue operation.
- When power supply from Hybrid Panel is interrupted and restored, WEZC-8 will transmit AC failure and restore signal respectively.

Rechargeable Battery Pack

- A Rechargeable Battery Pack is installed inside WEZC-8 to serve as a backup in case of a power failure. The battery pack is not connected by factory. Please connect the battery pack if you want to use it as backup power. Make sure the power of DC Jack and/or panel connection terminal is switched off before connecting the battery pack.
- It takes several hours for the battery charging to complete. Make sure that the electricity of DC Jack and/or panel connection terminal is sufficient to charge the battery,
- When power supply from the adaptor or Hybrid Panel is interrupted, the expansion module will switch to using the rechargeable battery and continue operation.
- When the rechargeable battery is low on power, the expansion module will transmit low battery signal to the Control Panel. When the battery has been charged, it will also transmit

battery restore signal to the Control Panel.

Tamper Protection

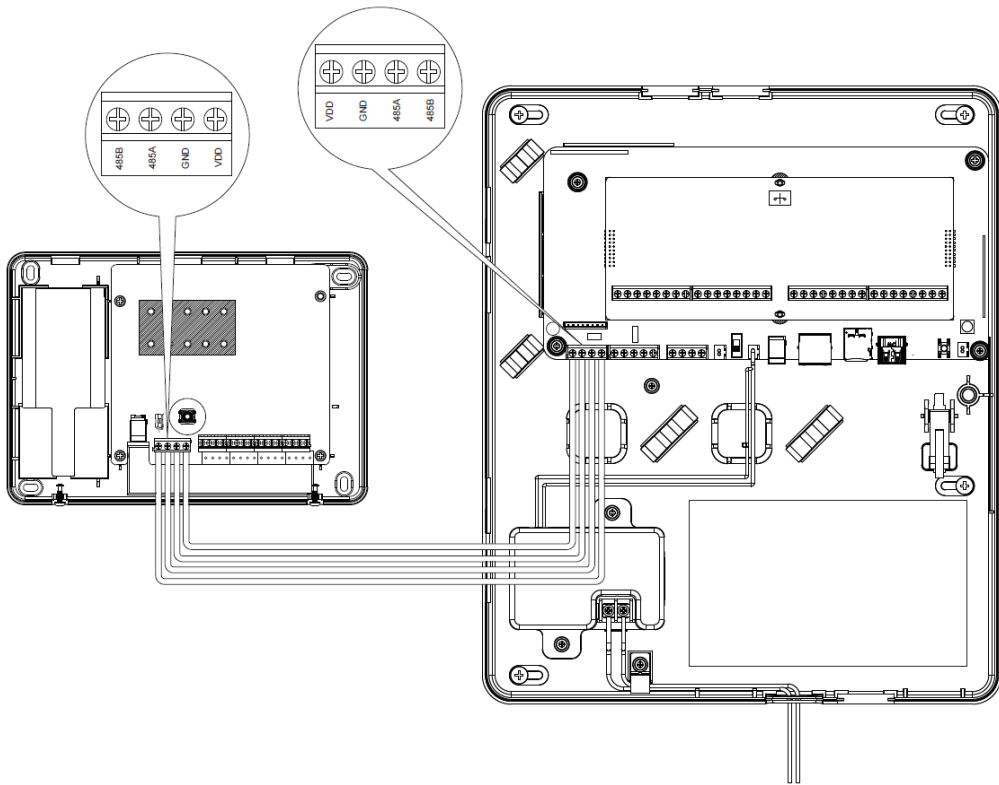
There are two Tamper Switches, each comes with a different function.

- The Tamper Switch for case cover is located at the front of the board. It is in normal position when the case is closed. Tamper violation happens when the case is opened where Tamper Switch is released (Tamper Opened).
- The Tamper Switch for wall mounting is located at the back of the board. It is in normal position when the module is well mounted on the wall. Tamper violation happens when the module is forcibly removed from the mounting location, the area will detach and allow tamper switch to be activated.
- The tamper is considered as triggered if any one of the tamper is opened. The Tamper is only considered restored when both tampers are in closed state.

Supervisory Signal

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

Connection to the Hybrid Panel



- Before connection, make sure the power supply has been disconnected, and the panel battery switch has been slid to OFF position.
- 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 WEZC-8, turn the jumper switch to **ON** position.

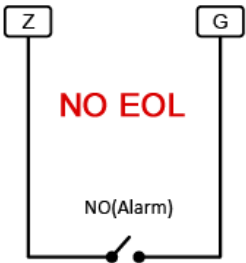
- Incorrect connections will result in failure or improper operation. Inspect wiring and ensure proper connections before applying power.

Zone Wiring

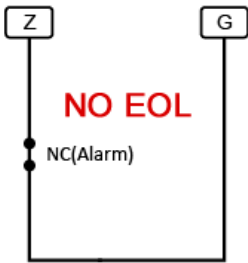
- The 8 zones can be wired by supervising NC (normally close) or NO (normally open) devices, e.g. PIR sensor, door contact, smoke detector, water sensor, fire sensor, CO sensor, gas detector, heat detector, and glass break detector, etc.
- The zones can be wired to supervise NC (normally close) or NO (normally open) devices. Connect hardwired devices into any Zone terminal.
- 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 resistor 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.

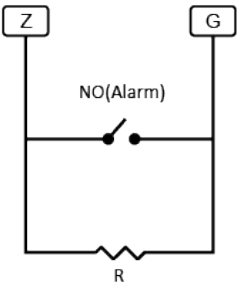


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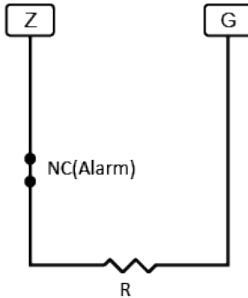


Single-End-of-Line Resistor Wiring

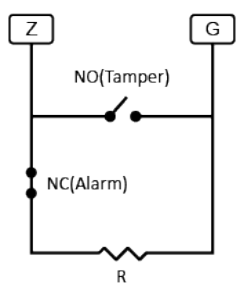
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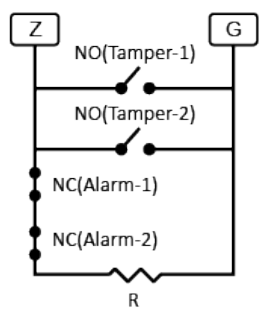
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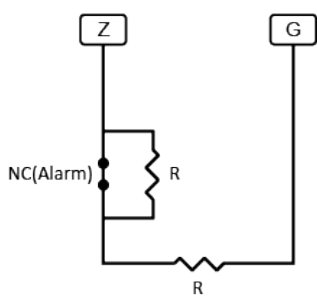


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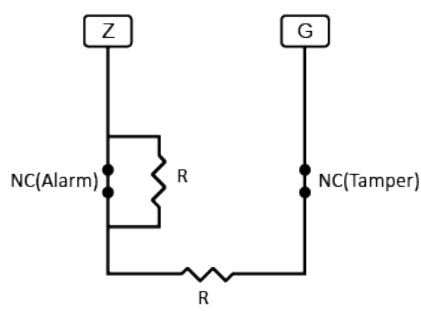


Double-End-of-Line Resistor Wiring

7.



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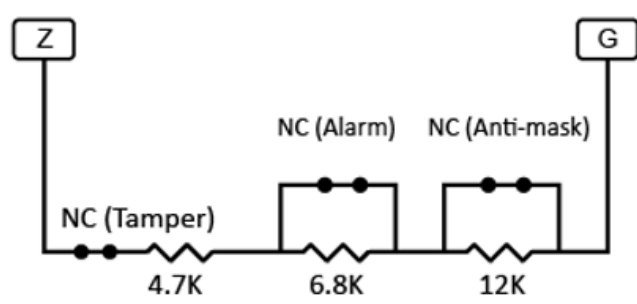


Triple-EOL Wiring

9.



10.



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.

How to Mount the Expansion Module

The Expansion Module can be mounted on the wall. Follow the steps below to mount it:

- Make sure that the Expansion Board is disconnected from power.
- Loosen the bottom fixing screw and remove the front cover,
- Using the holes of the Expansion Board as a template, mark the drilling holes on the wall.
- Drill holes on the marked location on the wall. Insert wall plugs if required.
- Screw the base onto the mounting location.
- Replace the front cover, and tighten the bottom fixing screws.

