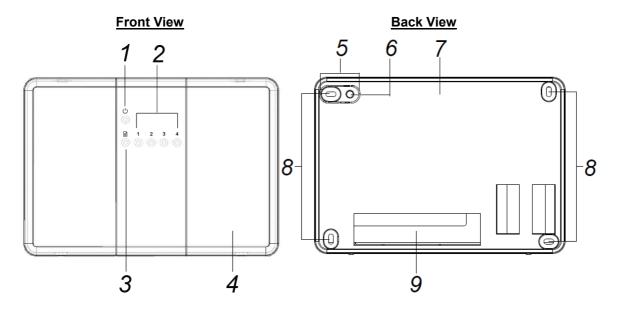
# **WEPC-1 Programmable Output Expansion Module**

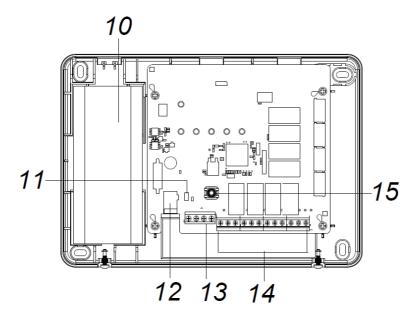
# Introduction

The WEPC-1 Programmable Output Expansion Module is designed to provide programmable output for the Hybrid Panel. It includes 4 programmable relay outputs, which can be used in conjunction with compatible panels. The WEPC-1 is equipped with its own enclosure case, which has tamper protection and LED status indicators.

## **Identifying the Parts**



**Inside View** 



#### 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 1~4 LED (Red)

The corresponding Zone LED will light up when the dry contact relay output switch is turned on, and the LED light will turn off when the switch is being turned off.

3. Transmission LED (Red)

Lights up when connection is normal between WEPC-1 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. Jumper Switch (J3)
  - If the jumper is OFF (if the jumper link is removed or "parked" on one pin), WEPC-1's communication ability is in normal level.
  - If the jumper is ON, the WEPC-1's communication ability will be enhanced.

#### 12. DC Jack

DC 12V 1A switching power connection.

- 13. Panel Connection Terminal
- 14. Dry Contact Relay PGM Output Terminal
- 15. 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 WEPC-1 by connecting a 12V 1A adaptor to the DC Jack. WEPC-1 can also connect to the RS485 terminals of the Hybrid Panel to supply power. However, it is recommended to use the adaptor when connected to loads that require heavier power draw.
- When AC power supply from Hybrid Panel is interrupted and restored, WEPC-1 will transmit AC failure and restore signal respectively.
- In addition to the power adaptor, 6 Ni-MH AA rechargeable batteries are pre-installed inside the Control Panel to serve as a backup in case of a power failure.
- WEPC-1 will charge the battery automatically when power is connected. When power supply from adaptor is interrupted, WEPC-1 will switch to using backup battery and continue operation.

# **Tamper Protection**

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

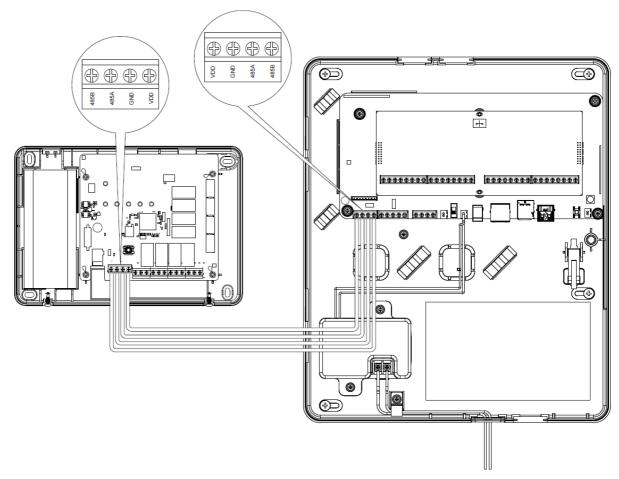
- The Tamper Switch for case cover is located at the front of the board. It is in normal position when the case is closed. Tamper violation happens when the case is opened where Tamper Switch is released (Tamper Opened).
- The Tamper Switch for wall mounting is located at the back of the board. It is 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.
- Ensure the furthest expansion module's Jumper Switch is set to ON to serve as a terminating resistor for optimal communication
- Incorrect connections will result in failure or improper operation. Inspect wiring and ensure proper connections before applying power.

# **Getting Started**

After connecting the expansion board to the Hybrid Panel, and completing device wiring, please proceed to learning and power switch sensor 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".

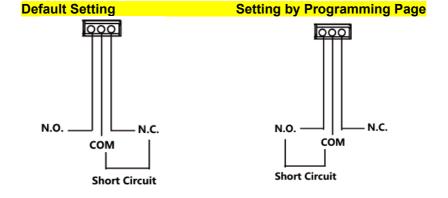
### Power Switch Sensor Programming

After the programmable output expansion module is added, proceed to Power Switch Sensor 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. Select and assign the output switch for each zone.
- **Type**: Select to activate the power switch for each zone from the Type drown down menu. The default setting is "Disabled" and you can choose to assign the dry contact relay output power switch to a zone by selecting "Power Switch".
- **Step 4.** Click "**OK**" to save changes when finished. Alternatively, click "**Rese**t" to re-enter all the information.
- **Step 5.** If the process is successful, the screen will display "**Updated Successfully**." The power switch will be assigned to specific area and zone.
- Step 6. Click on "PSS Control" under Device Management, and you will enter **Power Switch**Sensor webpage.
- Step 7. Under this page, you may switch on or off the power switch of each zone.
- **Step 8.** You may also edit your device setting and information. Click "**Edit**" at the end of device entry and click "OK" to save changes when finished.

## **PGM Wiring**

- The PGM port can serve as dry contact relay output.
- By default, the N.C and COM are set as the short circuit.
- You may set the N.O. and COM as the short circuit by turning on the power switch through the programming web page.



# How to Mount the **Programmable Output** Expansion Module

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

- Make sure that the Programmable Output Expansion Board is disconnected from power.
- Loosen the bottom fixing screw and remove the front cover,
- Using the holes of the Programmable Output 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.

