PMB-AUX(-RTO) Power Supplies Product Installation Document

PN LS10242-000GE-E:B 5/4/2022 ECN: 16475

1 General

The PMB-AUX and PMB-AUX-RTO are auxiliary power supplies for touchscreen fire alarm control panels. The units are identical in functionality, but differ in mounting availability. The PMB-AUX mounts in a CAB-5 Series enclosure while the PMB-AUX-RTO mounts in a CAB-4 Series enclosure. They both feature 3 amps of power in standby/8.5 amps of power in alarm, four (4) power-limited NAC outputs which can be configured for either Class A or Class B wiring, two (2) 24VDC auxiliary power outputs, and a remote sync input. One auxiliary power output, AUX1, can be configured for either class A or class B wiring. A maximum of two (2) PMB-AUX(-RTO) power supplies can be installed in an enclosure in addition to the FACP (fire alarm control panel). If more than five (5) loop cards are installed in the system, a PMB-AUX(-RTO) power supply is required, and if ten (10) loop cards are installed in the system, two (2) PMB-AUX(-RTO) power supplies are required, for battery charging and alarm load.

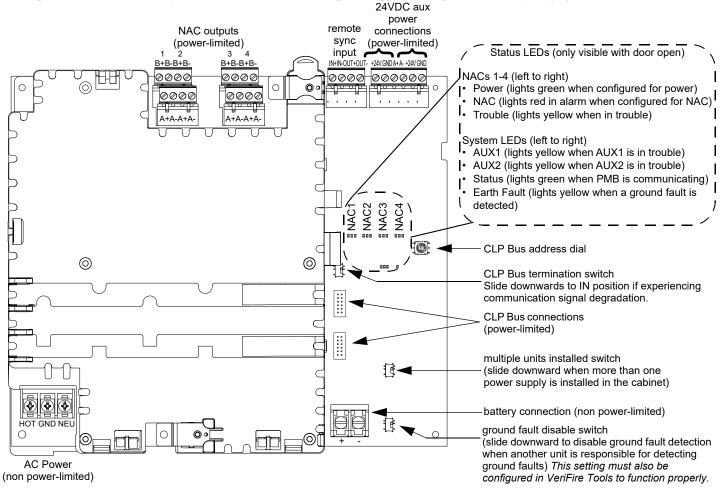


Figure 1 PMB-AUX(-RTO) Board Layout/Wiring Connections

1.1 Hardware Kit

The PMB ships with all hardware necessary for installation.

- two (2) #8 keps nuts
- one (1) 22" wired cable for CLP bus connection
- six (6) terminal block plugs

2 Specifications

AC power: 2.5A 120VAC 50/60 HZ, 1.25A 240VAC 50/60 Hz

24VDC aux outputs: Power-limited (Class 2) 24V @ 1.5A each, Special Applications Aux Power, Aux 1 Class A/B, Aux 2 Class B only

NAC outputs (power-limited): Special Applications Class A/B NAC Power, Class D Door Holder Power, 1.5A Special Applications, 150mA Regulated, Class A/B Aux Power, UZC

CLP Bus connections: carry CLP data and internal 24V power to the SLM-318 loop cards and the core board on the FACP CPU assembly. PMBs use only the CLP data.

Secondary power (battery) charging circuit:

- Sealed lead-acid battery charger which will charge 7-100 AH batteries
- Charging current: 1A, 2A, and 4.25A
- Charging voltage: 27.6 VDC nominal

PMB battery charging configurations available (configured in VeriFire Tools):

- · No charger
- Low (7-26AH)
- Medium (33-55AH)
- High (100AH)

3 Installation

The main FACP assembly should be mounted in the top row of the cabinet. Due to cable length restrictions, the PMB-AUX(-RTO) must be mounted in the second position of the backbox. If installing two PMB-AUX(-RTO) power supplies, the second unit must be mounted in the third position. A maximum of two PMB-AUX(-RTO) units is allowed

Wiring methods used shall be in accordance with Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681.



WARNING: HIGH VOLTAGE PRESENT

REMOVE ALL SOURCES OF POWER BEFORE SERVICING, REMOVING, OR INSTALLING ANY UNITS. ENSURE TO INSTALL THE SNAP-ON COVER OVER TB1 AFTER WIRING.



CAUTION: STATIC SENSITIVE EQUIPMENT

THE CIRCUIT BOARD CONTAINS STATIC-SENSITIVE COMPONENTS. ALWAYS USE PROPER GROUNDING DEVICES SUCH AS A WRIST STRAP BEFORE HANDLING ANY BOARDS SO THAT STATIC CHARGES ARE REMOVED FROM THE BODY. USE STATIC SUPPRESSIVE PACKAGING TO PROTECT ELECTRONIC ASSEMBLIES.

3.1 Requirements

- Installations are to be indoors only, in dry locations, protected from rain, water, and rapid changes in temperature that could cause condensation.
- Equipment must be securely mounted on rigid, permanent walls.
- Operating temperature shall not exceed the range of 32° to 120° F (0 to 49° C).
- Operating humidity not to exceed 93% +/- 2% non-condensing at 100° F (38° C).
- Adequate space must be available around the installation to allow easy access for operation and servicing.
- All sub-assemblies and components are to be located in compliance with local and national codes.
- All installation field wiring shall be in compliance with local and national codes.

3.2 PMB-AUX

The PMB-AUX Power supply comes pre-installed on a chassis for easy installation in a CAB-5 series cabinet.

- 1. Mount the chassis to the backbox by aligning the two mounting tabs with the slots in the backbox, then position the two mounting hole tabs over the studs with nuts located in the upper portion of the backbox.
- 2. Slide the tabs located on the bottom of the chassis into the mounting slots in the backbox by pressing the chassis down.
- 3. Secure the chassis to the backbox. Fasten the two supplied #8 keps nuts over the mounting holes at the top.

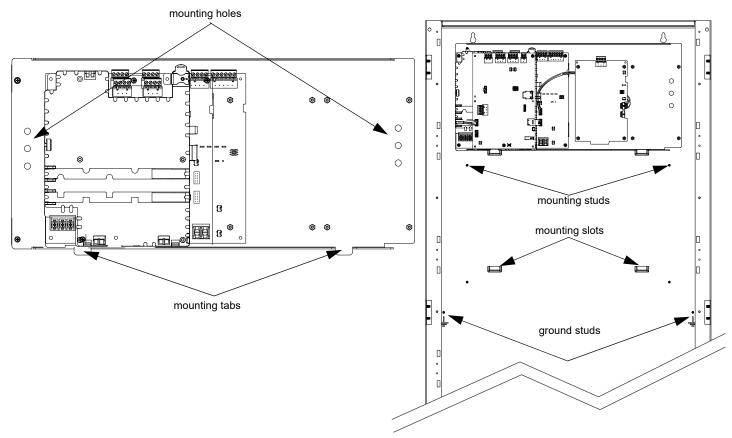
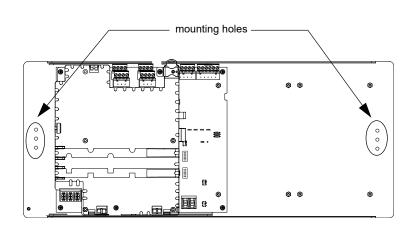


Figure 2 PMB-AUX Installation

3.3 PMB-AUX-RTO

Mount the chassis into the second row of the backbox. Align the center hole on the edge of the chassis with the studs on the backbox and secure with two supplied #8 keps nuts. (The FACP should be mounted in the top row.) If installing a second PMB-AUX-RTO, install the chassis in the third row of the cabinet using the top mounting holes on the edge of the chassis. Refer to Figure 3 below for details.



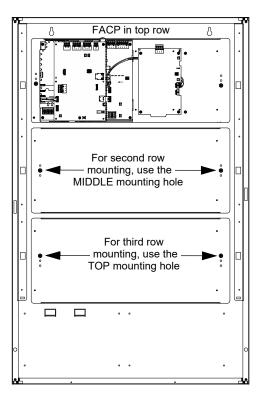


Figure 3 PMB-AUX-RTO Installation