

4 APPLY AC VOLTAGE TO PS101 AND TEST DEVICES.
OPERATION SUMMARY

100-2 OPERATION SUMMARY				
MODE	INPUT		OUTPUT	
	I1	I2	O1	O2
SEQUENTIAL	OV	OV	OV	OV
	24V	=I1	24V	24V
	=I2	24V	24V	24V
INDIVIDUAL	OV	OV	OV	OV
	OV	24V	OV	24V
	24V	OV	24V	OV
	24V	24V	24V	24V

All DC voltages referenced to 100-2 ground terminal.

TROUBLE SHOOTING

SYMPTOM	CAUSE	SOLUTION
COVER GREEN LED OFF	No AC input voltage	See "PS101 / PS102 POWER SUPPLY"
NO PS101 OUTPUT, GREEN LED OFF	No AC input voltage	See "PS101 / PS102 POWER SUPPLY"
	Output current exceeds max rating ⚠ See "CAUTION" below ⚠ Voir "ATTENTION" ci-dessous	1. Reduce output current. 2. Replace fuse F2. Use 4 A slow blow, 250V. ⚠ See "CAUTION" below. ⚠ Voir "ATTENTION" ci-dessous
	100-FA not properly connected	See "100-FA FIRE ALARM BOARD"
12V ON OUTPUT INSTEAD OF 24V OR VICE VERSA	Improper DC output selection	See "PS101 / PS102 POWER SUPPLY"
ELR DEVICE TRIES, BUT FAILS, TO PULL LATCHBOLT	Wire size too small from power supply to ELR device, or wire run too long	See "100-2 INSTALLATION"
	Device adjusted improperly	Consult factory

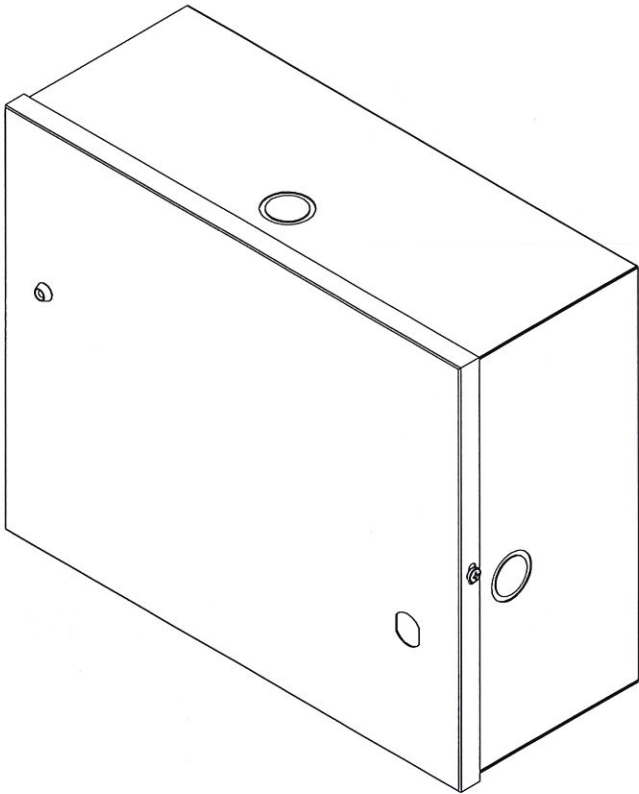
⚠ CAUTION!

FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE, FOR REPLACEMENT OF FUSE, PLEASE RETURN TO MANUFACTURER / AUTHORIZED DEALERS FOR SERVICING.

⚠ ATTENTION!

AFIN DE MAINTENIR UNE PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, VEUILLEZ VOUS ADRESSER AU FABRICANT OU À SES REVENDEURS AUTORISÉS POUR PROCÉDER AU REMPLACEMENT DES FUSIBLES ET À L'ENTRETIEN.

**PS101 / PS102 CLASS 2
POWER SUPPLY
INSTALLATION INSTRUCTIONS**

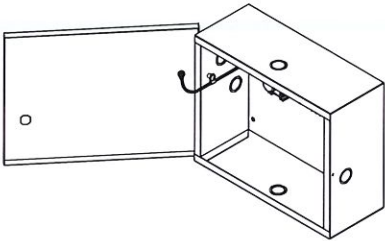


PS101 / PS102 Class 2 Power Supply

SPECIFICATIONS:

INPUT : PS101 - 120VAC, 1.0 Amperes 50 / 60 Hz
PS102 - 240VAC, 0.5 Amperes 50 / 60 Hz

OUTPUT : 24VDC, 2 Amperes
12VDC, 4 Amperes



ELR Compatible - 24VDC, 16 Amp-inrush (0.3 sec.).
When using ELR device: 100-2 option board required - see page 7~8.
Output protected with 4 A slow blow, 250V, fuse (F2)

CAUTION!

FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE, FOR REPLACEMENT OF FUSE, PLEASE RETURN TO MANUFACTURER / AUTHORIZED DEALERS FOR SERVICING.

ATTENTION!

AFIN DE MAINTENIR UNE PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, VEUILLEZ VOUS ADRESSER AU FABRICANT OU À SES REVENDEURS AUTORISÉS POUR PROCÉDER AU REMPLACEMENT DES FUSIBLES ET À L'ENTRETIEN.

NOTE: During battery backup (100-BB required),
Output range becomes 10.92-12VDC, 4 A or 22.2-23.9VDC, 2 A.

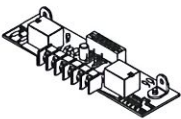
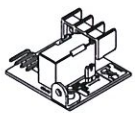

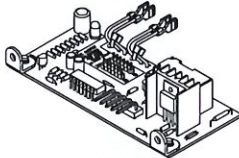
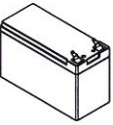


ENCLOSURE: 10" H x 12.5" W x 5.0" D Hinged cover box
20 GA steel, five(5) 1/2" x 3/4" knockouts total

TEMPERATURE: 32-120 degrees F (0-49 degrees C)

RELATIVE HUMIDITY: 93%RH

- NOTE: 1. If installing a PS101 with an ELR device, see Page 7~8 of these instructions and exit device instructions under "optional equipment - ELR".
2. If installing PS101 with a DE device, see DE instructions.
3. UL Listed (voltage range compatible) devices may be used.
4. For Canadian applications, the device must be installed in accordance with Canadian Electrical Code, Comply with CAN/CSA-C22.2 No. 107.1.
5. Product wiring methods shall be in accordance with NFPA70.
6. For indoor use only.
7. For Attack Class I installation only.

100-2, 100-FA, 100-BB, 100-K Options

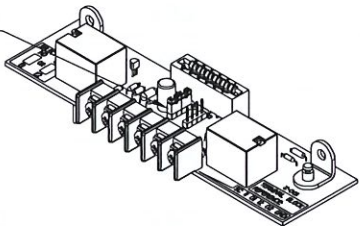
OPTIONS FUNCTION				
 No.6-32 x 15/32" 2 PCS 100-2 Two(2) Zone Controller Board (Page 7~8)	 No.6-32 x 15/32" 1 PCS 100-FA Fire Alarm Board (Page 5~6)	 Buckle piece 1 PCS Keys 1 PCS 100-K Key Lock (Page 6)		
 100-BB Battery Backup Board (Page 4)	 Batteries 2 PCS	 Cable Clamp 1PCS	 No.8-32 x 7/32" 1PCS	

100-2 INSTALLATION

The 100-2 option provides control over two zones. One or two 100-2 boards can be installed on each PS101.
NOTE: 1. 100-2 board only provides to 24VDC output.
2. Relay rated for 0.6 PF induction load.

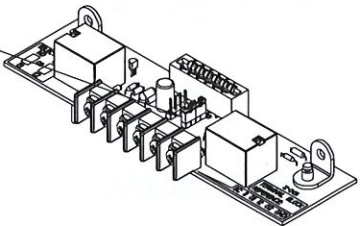
1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTION). SELECT BETWEEN INDIVIDUAL OR SEQUENTIAL OUTPUTS.

For Individual (IND) operation, install jumper on E1 as shown.



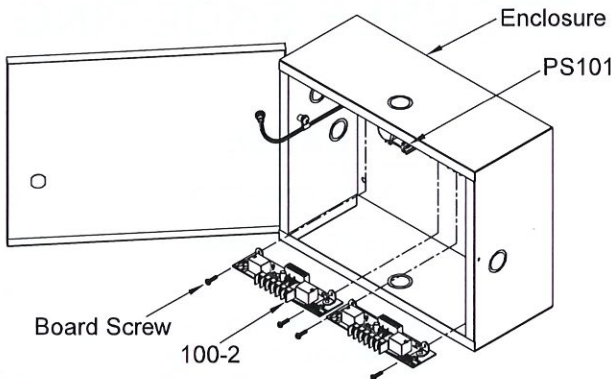
INDIVIDUAL OUTPUTS (must be field programmed):
Input 1 will control output 1.
Input 2 will control output 2.

For Sequential (SEQ) operation, install jumper on E2 as shown.

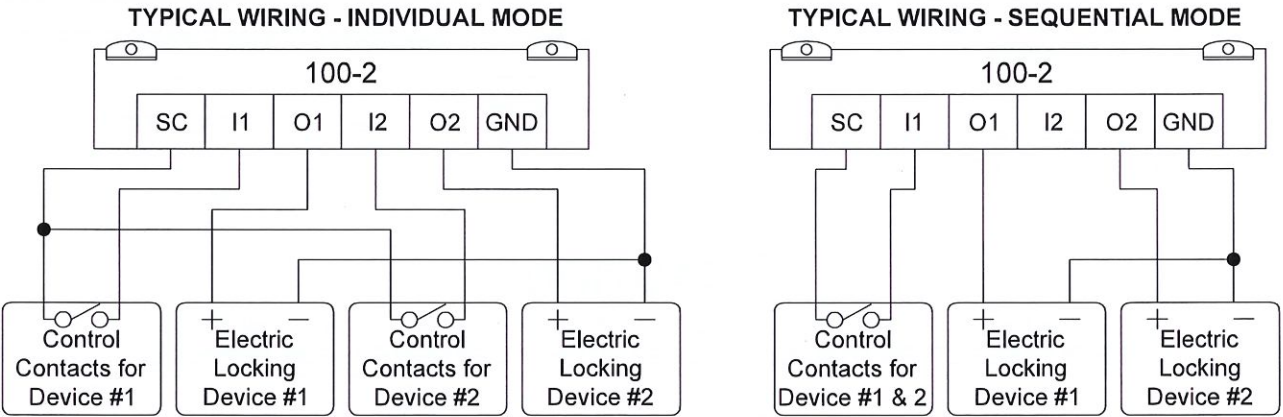


SEQUENTIAL OUTPUTS (factory shipped):
Input 1 will sequence both outputs. (O2 followed by O1)

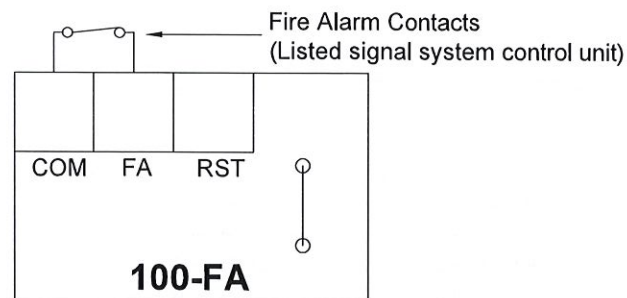
2 INSTALL 100-2 ONTO EITHER PS101 RECEPTACLE AS SHOWN.



3 CONNECT INPUTS AND OUTPUTS (WIRE AS INDIVIDUAL OR SEQUENTIAL MODE).

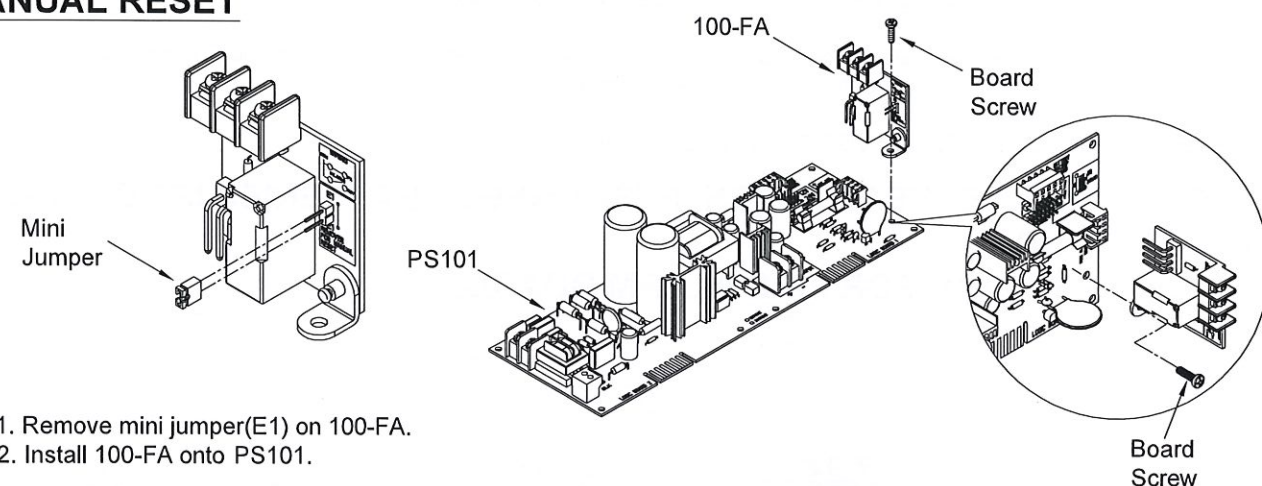


NOTE: When using an ELR device :
Use 12 AWG stranded wire for outputs O1 and O2 between PS100 and ELR device (200' run maximum).
Use 14 AWG stranded wire for outputs O1 and O2 between PS100 and ELR device (100' run maximum).
Use 18 AWG stranded wire for control contact input I1 and I2 (1000' run maximum) to actuator button, access control devices, etc.

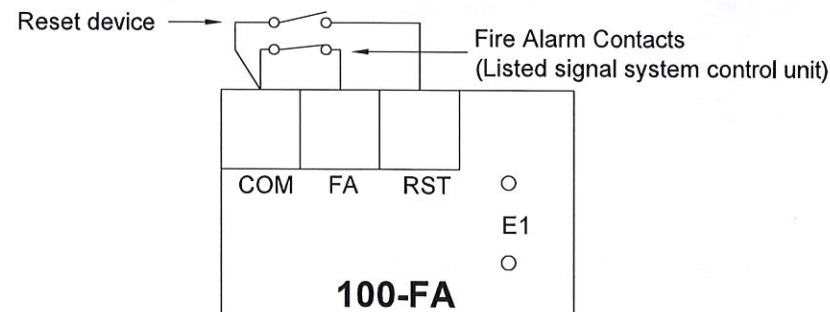


2. Connect normally closed fire alarm contacts.
3. Restore AC input voltage and reconnect batteries (if you have this option).
The green LED on the power supply will illuminate.

MANUAL RESET

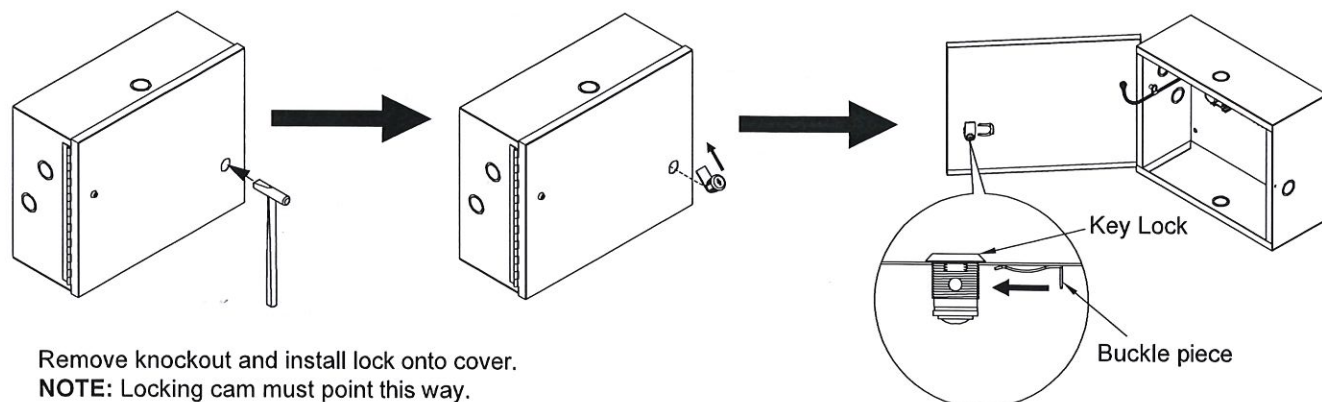


1. Remove mini jumper(E1) on 100-FA.
2. Install 100-FA onto PS101.



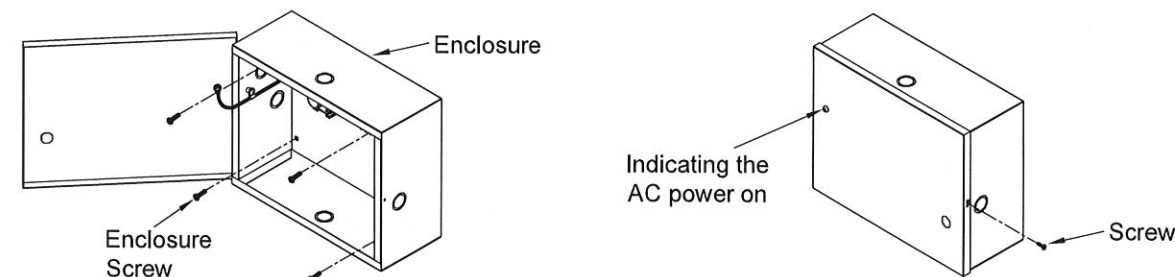
3. Restore AC input voltage and reconnect batteries (if you have this option).
 4. Momentarily close the reset device contacts. The green LED on the power supply will illuminate.
- NOTE:** If the reset device contacts are left in the closed position, the 100-FA will not work properly.

100-K KEYLOCK OPTION



PS101 / PS102 POWER SUPPLY

1 MOUNT POWER SUPPLY.



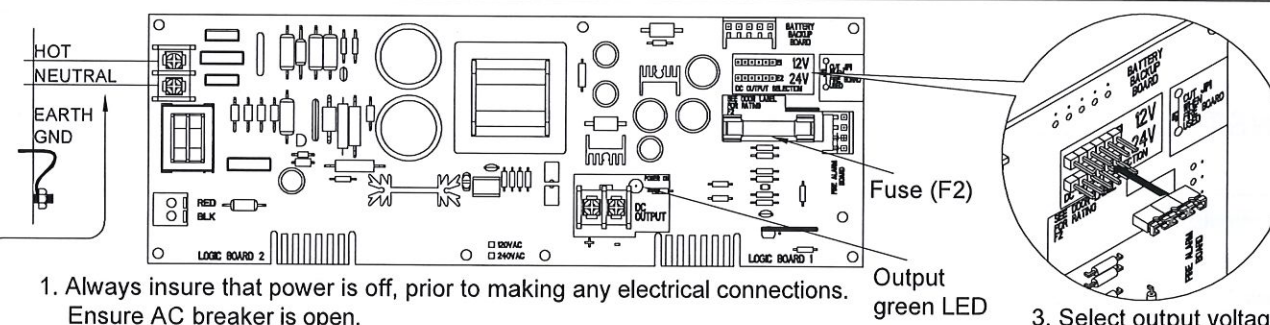
Install power supply with fore(4) screw.

NOTE: 1. For surface mounting only.

2. AC power wire must be installed with conduit.

To secure door closed, install screw as shown.

2 AC POWER CONNECTION.



1. Always insure that power is off, prior to making any electrical connections.
Ensure AC breaker is open.
2. For supply connections, use wire suitable for at least 90°C temperature.
3. Select output voltage (12 VDC or 24 VDC).
4. Connect AC voltage to two(2) 6" black and white leads (hot and neutral) or remove the 6" leads and apply the AC voltage directly to terminal block.

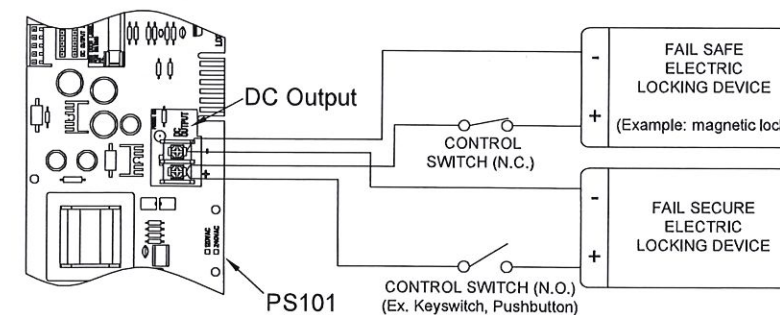
NOTE: Maintain 1/4" spacing between AC input wiring and any other wiring (such as DC output wiring, switch contact wiring, etc.).

5. Close breaker to turn on power supply, verify green LED on cover is illuminated.

6. Verify green LED is illuminated, indicating output voltage is present.

NOTE: PS101 supports optional logic cards (such as 100-2 board) which perform door control and monitoring function.

3 BASIC WIRING INFORMATION.



Fail Safe: Upon ultimate power loss, the locking device will unlock. Use of the PS101 controlled output is not intended to replace the function of Listed panic hardware for emergency exit.

Fail Secure: Upon ultimate power loss, the locking device will remain locked. Install after consulting with local authority having jurisdiction. Listed panic hardware may be required to allow emergency exit from the secured area. Use of the PS101 controlled output is not intended to replace the function of Listed panic hardware for emergency exit.

1. Temporarily remove AC voltage from PS101 while connecting loads to output terminal block.
2. Wire Devices.
3. See "TROUBLE SHOOTING" table at end of instructions if devices do not work properly.

100-BB BATTERY BACKUP BOARD

SPECIFICATIONS:

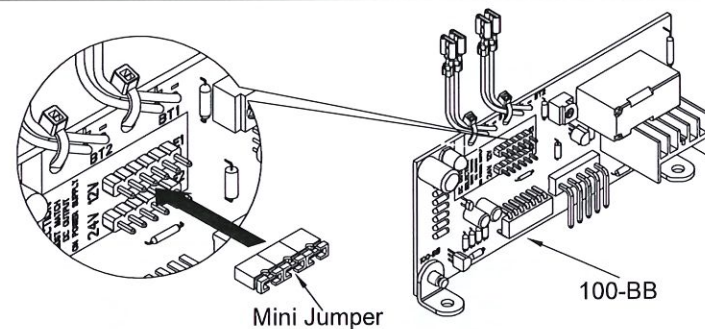
BATTERY BACKUP TIME: 2 hours at 100% load

BATTERIES: Two(2) 12V,7AH Lead Acid

CAUTION: Charge only specifications:12V , 7AH Lead acid batteries. Other types of batteries may burst causing personal injury and damage. Observe the proper polarity when connecting the batteries.

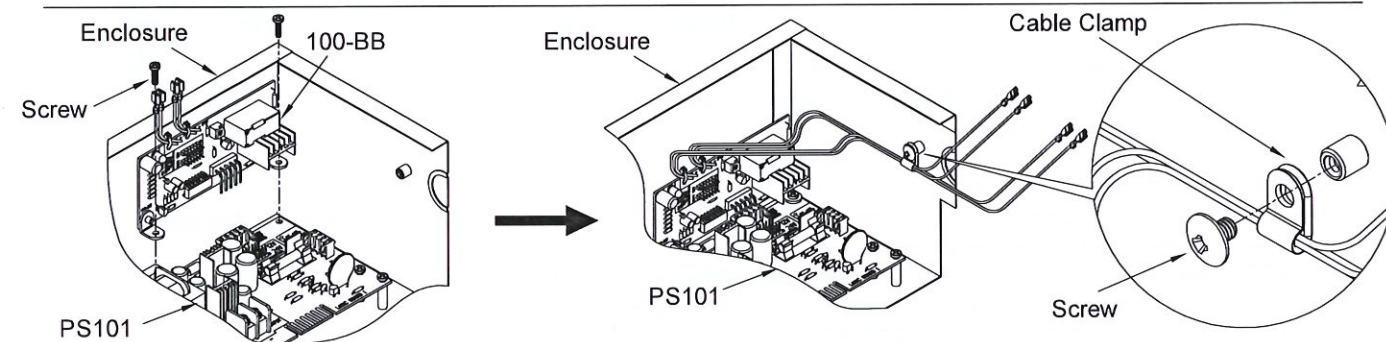
ATTENTION:Utiliser avec une batterie plomb-acide 12V-7AH uniquement. L'utilisation d'autres types de batteries présente un risque d'explosion qui peut provoquer des dommages matériels et des blessures corporelles. Respecter la polarité lors de l'installation des batteries.

1 ENSURE AC BREAKER IS OPEN. PREPARE BATTERY BACKUP BOARD FOR POWER SUPPLY.



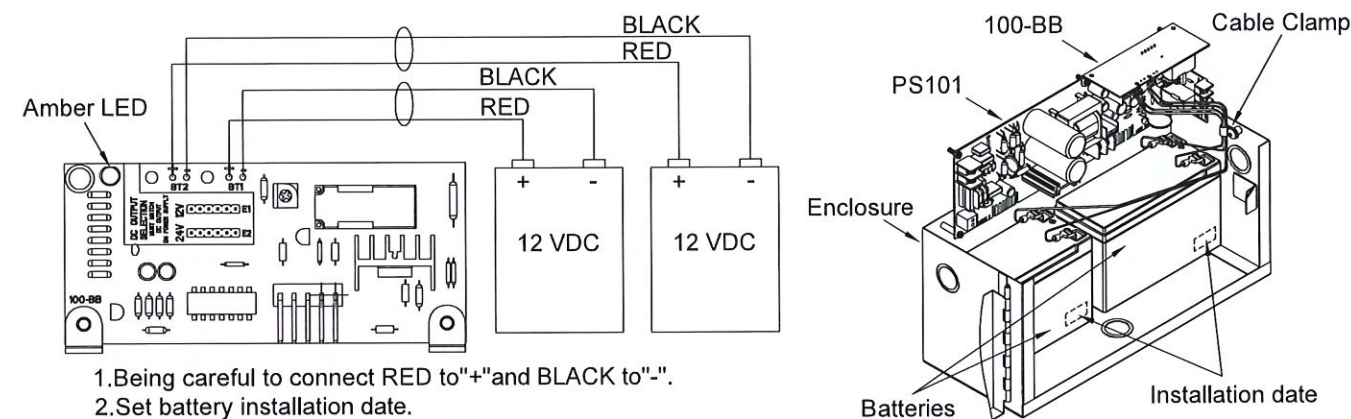
1. Ensure AC breaker is open.
2. Select output voltage. Must match power supply voltage (12 VDC or 24 VDC).

2 INSTALL 100-BB ONTO PS101.



1. Install 100-BB onto PS101.
2. For 100-BB wiring ,Install Cable Clamp on Enclosure as shown.

3 CONNECT 100-BB LEADS TO BATTERIES.



1. Being careful to connect RED to "+" and BLACK to "-".
2. Set battery installation date.
3. Place batteries in bottom of enclosure.
4. Close AC breaker. If the batteries is low, the amber LED on.

100-FA FIRE ALARM BOARD

The 100-FA option consists of one printed circuit board that plugs onto the PS101 power supply. In the event a fire alarm is active, this board will remove power from the PS101 output and any logic board output. The Fire Alarm board can be configured for Automatic or Manual reset.

NOTE: 1. Listed Panic Hardware shall be used to allow emergency exit from the protected area.
2. Fire Alarm, then all wirings between FACP and Power Supply need to be wired for Fail Safe.
3. Relay rated for resistive load.

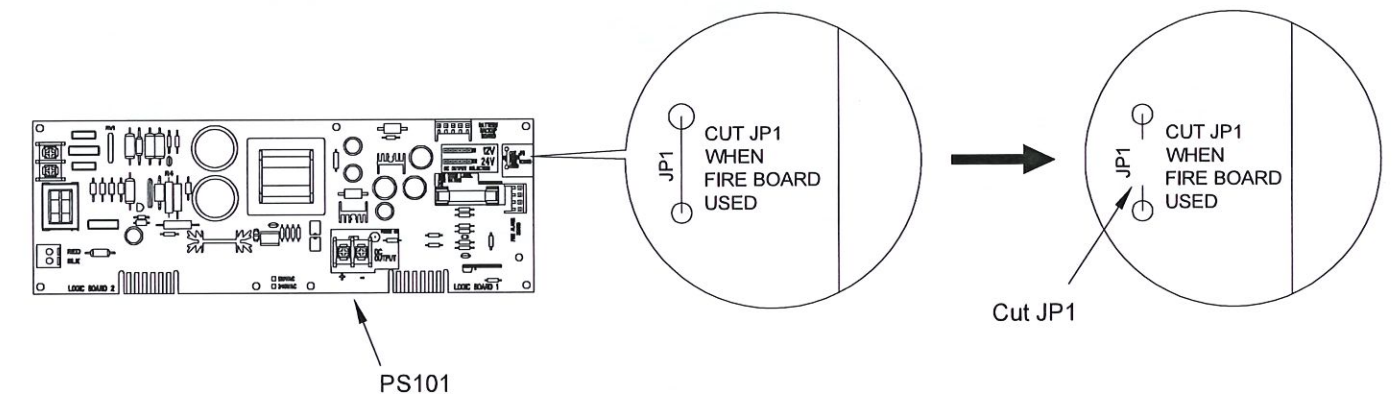
SPECIFICATIONS:

AUTOMATIC RESET: After a fire alarm condition is terminated, the 100-FA option will immediately restore power to all loads. The 100-FA is shipped in the Automatic configuration.

MANUAL RESET: After a fire alarm condition is cleared (or following a power outage), the 100-FA option will not restore power until a reset device has been toggled.

RESET DEVICE CONTACTS: 24 VDC, 0.1 A rating required.

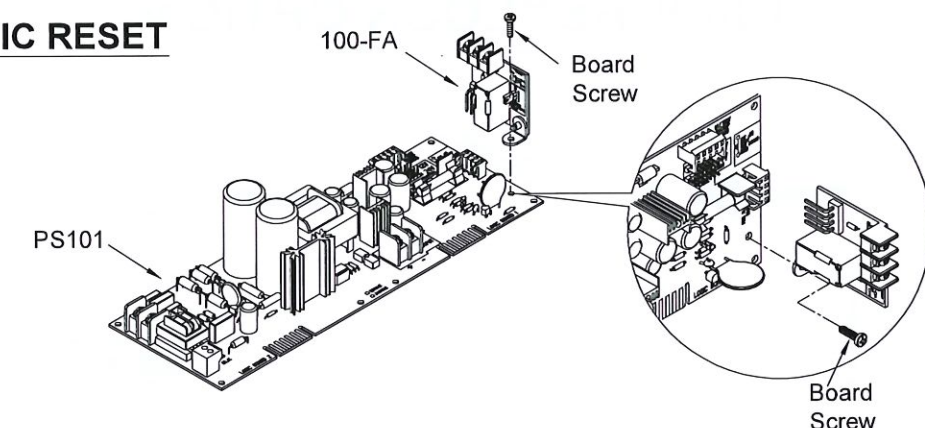
1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTION). CUT JUMPER (JP1) FOR FIRE ALARM BOARD.



Jumper labeled "CUT JP1 WHEN FIRE BOARD USED" on the left side of the JP1 and cut.

2 PREPARE FIRE ALARM BOARD FOR POWER SUPPLY. CONFIGURE 100-FA AS AUTOMATIC OR MANUAL RESET.

AUTOMATIC RESET



1. Install 100-FA onto PS101.