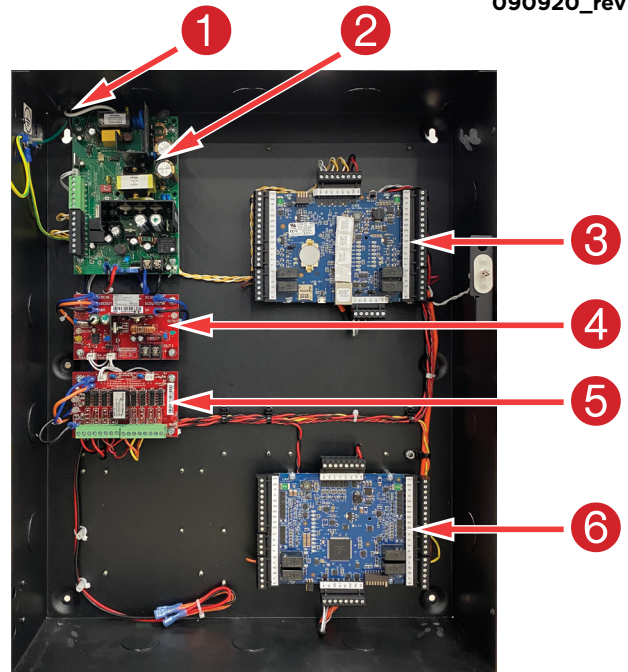**Power is knowledge.**

**LifeSafety Power**®

## Description

The ADC-AC-X1100-4PSE is a four door access control unit featuring dual voltage power and contains one prewired ADC-X1100 and one prewired ADC-X100 expansion board. The 20"x 16"x 4.5" metal enclosure includes battery space.

## Equipment List

1. Pre installed AC power cord
2. Power Supply 24VDC / 3A (model: FPV4)
3. Pre-installed ADC-X1100 controller
4. Secondary 12V supply (model: B100)
5. Distribution module (model: F8P)
6. Pre-installed ADC-X100 expansion module



Accessories included
- AC power cord
- Battery harness

## System Operation

The FPV4 power supply converts AC primary power to 24VDC for charging the battery set and powering the ADC-X1100 controller, ADC-X100 expansion module, B100, locking device(s), and 24V auxiliary devices. The B100 is powered from the FPV4 main output terminals and steps the 24V down to 12V to power reader(s) and other 12V auxiliary devices. The F8P distribution module provides 8 separate Class 2 outputs, each of which can be set for 12V or 24V and for fire alarm control.

The battery set is charged by the red/black harness in the top right corner of the FPV4. The battery set MUST be two 12V batteries in series for a 24V battery set. Observe polarity or damage to the system will occur.

Positive lock power is prewired to the ADC-X1100 and ADC-X100 lock relay Common terminals. The lock positive should be wired to the NC (Fail Safe) or NO (Fail Secure) terminal as appropriate. Each lock negative should be wired directly to the F8P (-) terminal to minimize noise and surges in the system.

## Terminal Output Ratings

**Max currents listed are for individual terminals - total current at 12V and 24V not to exceed max rating of supply

| Board | Terminal | Voltage | Max Current** | Notes |
|---|---|---|---|---|
| FPV4 | DC OUT | 24V | 3A | Set for continuous output. FAI controlled by F8P |
|  | AUX OUT | 24V | 1.5A | For additional 24V devices |
| B100 | DC OUT | 12V | 2A | For additional 12V devices |
| F8P | Outputs 7 & 8 | 12 or 24V | 2.5A | For additional 12V or 24V devices with or without FAI control |
| ADC-X1100 | OUT1 (NO or NC) | 24V | 1.5A | Switched Lock Output - Ground at F8P OUT3 (-) Terminal |
|  | OUT3 (NO or NC) | 24V | 1.5A | Switched Lock Output - Ground at F8P OUT4 (-) Terminal |
| ADC-X100 | OUT1 (NO or NC) | 24V | 1.5A | Switched Lock Output - Ground at F8P OUT5 (-) Terminal |
|  | OUT3 (NO or NC) | 24V | 1.5A | Switched Lock Output - Ground at F8P OUT6 (-) Terminal |

# Wiring Diagram

AC ON
L N
24V
⚠ Power Supply voltage factory pre-set for 24V **DO NOT CHANGE!**
FAI

**FPV4**
24V PS/Charger

BATTERY
− +

24VDC
MAIN
+ −
DC

12V Battery
12V Battery

**B100**
24 to 12V converter
DC IN
DC OUT
BR
DC IN
DC OUT
BR
DC OUT
− +

B100 Screw Terminals May be used for 12V Aux Power

B1 (24V)
B2 (12V)
B1 (24V)
B2 (12V)
**F8P**
Auxiliary Outputs
BR
OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8
BR

**F8P Jumper Settings**

| | | |
|---|---|---|
| 1 | Pos 1 - 24V Constant Power | |
| 2 | Pos 2 - 24V Enable on FAI | |
| 3 | Pos 3 - 24V Disable on FAI | |
| 4 | Pos 4 - 12V Constant Power | |
| 5 | Pos 5 - 12V Enable on FAI | |
| 6 | Pos 6 - 12V Disable on FAI | |

**NOTE:** All F8P Jumpers Factory Set for **Position 1** (24V Constant Power)

Cabinet Tamper Switch

**X1100**
Reader Power
Ground
Data0/Data
Data1/Clock
Ground
Green LED
Red LED
Beeper
Ground
In1+
In1-
In2+
In2-
NO
C Out1
NC
NO
C Out2
NC
Reader Power
Ground
Data0/Data
Data1/Clock
Ground
Green LED
Red LED
Beeper
Ground
In3+
In3-
In4+
In4-
NO
Out3 C
NC
NO
Out4 C
NC
Tamp+
Tamp-
ACF+
ACF-
Bat+
Bat-
Ground
+12-24VDC
Micro USB
Ethernet
TR+
TR-
Ground
TR+
TR-
Ground
Port 1 Port 2
IO Modules

**X100**
Reader Power
Ground
Data0/Data
Data1/Clock
Ground
Green LED
Red LED
Beeper
Ground
In1+
In1-
In2+
In2-
NO
C Out1
NC
NO
C Out2
NC
Reader Power
Ground
Data0/Data
Data1/Clock
Ground
Green LED
Red LED
Beeper
Ground
In3+
In3-
In4+
In4-
NO
Out3 C
NC
NO
Out4 C
NC
Tamp+
Tamp-
ACF+
ACF-
Bat+
Bat-
Ground
+12-24VDC
TR+
TR-
Ground
TR+
TR-
Ground
+12-24VDC
Port 1 Port 2
IO Modules