

UL 1034 UL 294

# **CX-PS150UL** POWER SUPPLY / CHARGER FOR ACCESS CONTROL AND EGRESS DOORS

### INSTALLATION INSTRUCTIONS

### THIS PACKAGE INCLUDES

- 1 Holding Screw
- 1 Strain Relief Connector
- 2 2K2 Resistors
- 1 Camden Programming Harness
- 1 Instruction manual

# **1. GENERAL DESCRIPTION**

The CX-PS150UL is a power supply and charger that delivers a consistent supply of 1.7 amps (1 amp for locking devices, 500mA for battery charging and 200 mA for devices that need to stay powered regardless of the Fire Alarm status) at a nominal voltage of either 12VDC or 24VDC. It features two output terminals, one output is intended for maglock while the other is intended for a strike, and is safeguarded against over current by a 2.5 amp P.T.C. This power supply unit is designed to accommodate a 1 - 4Ah battery. It is UL listed, adhering to the 7th Edition of UL294 standards, and also meets the requirements of ULC-S533.

### 2. SPECIFICATIONS

Input	60Hz 1.8A max,120VAC for CX-PS150UL
Output	1 Amp continuous @ 12/24VDC
Auxiliary Output	200mA @ 12/24VDC
Dimensions	8-7/16"W x 9-5/16"H x 3-9/16"D (214 mm x 236 mm x 91 mm)

### **3. KEY FEATURES**

- Incorporates a built-in 500 mA battery charger for sealed lead acid or gel cell batteries.
- Features battery reversal protection to safeguard against potential damage.
- Designed for automatic switch over to stand-by battery in the event of AC power failure.
- Equipped with LED indicators on the enclosure door for easy power source monitoring: green LED for AC power, blue LED for DC power.

# **UL294 PERFORMANCE LEVEL**

Destructive Attack	Level I
Line Security	Level I
Endurance Level	Level IV
Standby Power	Level IV



# 4. BATTERY STAND-BY SPECIFICATION

Output:	Stand-by 4 hr	Alarm 5 min
12VDC /4AHBattery	500mA	1A
24VDC /4AHBattery	500mA	1A

# 5. DIMENSIONS



# NOTE:

This power supply should be installed in compliance with the National Electric Code (NFPA 70) CSAC22.1, Canadian Electric Code, Part 1 and all applicable Local Codes. Installation to be performed by qualified technical personnel.

**INSTALLATION INSTRUCTIONS** 

#### **6. INSTALLATION**

1. Mounting: Secure the power supply to your desired location using the 4 mounting holes.

**Note:** The power supply should be used only in an indoor protected area with a controlled environment. Avoid installing in exterior conditions.

2. Connecting Mains Power: Disconnect the mains power before starting. Connect leads to the AC Input Fuse Terminal Block, observing the correct wiring phase and polarity: Ground/Earth=Green (or Yellow), Neutral=White (or Blue), Live=Black (or Brown). This equipment should be connected to the 120 Volt mains via a readily accessible, dedicated external disconnect device with maximum 15 Amp branch protection. Select the operating output DC voltage 12/24 with the JV jumper: Jumper OFF for 12VDC, Jumper ON for 24VDC. Measure the output voltage before connecting the Magnetic Lock or Electric Strike to confirm the device's correct voltage level.

**Note:** Connect the Mains AC input 120V AC as shown in the installation diagram. The entry knock-outs are on the left of the enclosure. Keep low voltage wiring separate from the AC wiring.

- 3. Power Activation: Switch ON the AC. The green LED indicates the presence of AC power and the blue LED signifies that the output voltage is active.
- 4. Connecting Locking Device: Connect the Magnetic Lock by respecting the positive polarity to terminal + Mag Lock and negative polarity to terminal -COM. For the Electric Strike, connect positive polarity to the terminal +STRIKE and negative polarity to the terminal -COM.
- 5. Fire Alarm / Access Control Interface Connection: The Normally Open (NO), Normally Closed (NC) input from the Fire Alarm Control Panel (FACP) or Access Control Panel (ACP) can trigger the CX-PS150UL series operation. Connect the NO or NC from the FACP or ACP output to the FIRE/ ACP TRIGGER terminals. Install the provided 2.2K Ohm end-of-line resistor (EOLR) at the FACP or ACCESS CONTROL PANEL as shown in the diagram.
- 6. REX/Engineering Reset Input Connection: This option is available when the Jumper JL is removed (JL OFF). This will cause the CX-PS150UL to latch upon receiving an alarm from the FACP or ACP. With this option in place, and when the FIRE/ACP TRIGGER resets, CX-PS150UL will only reset by activating the RESET/REX input. JL ON will cause the unit to follow the FIRE/ACP TRIGGER. Install the provided 2.2K Ohms resistor at the Key Switch or Push Button to perform this operation.
- 7. Securing the Enclosure: Secure the cabinet door with the provided screw.

VOLTAGE SELECTION CHART:				
Output	JV1 Position	Stand-by Load	Alarm Load	Battery (optional)
12VDC	OFF	500mA	1AMP	12VDC
24VDC	ON	500mA	1AMP	24VDC

Terminal Block	Connection Description
ACAC	Low voltage input from Transformer
AUX+/-	Auxiliary 12/24 VDC output to power Access Devices. Output not affected by Fire Alarm Triggering, Access Request, Reset Switch.
FIRE TRIGGER	Supervised Fire Input with choice of N/O or N/C configuration.
RESET	Supervised input with choice of N/O or N/C configuration Reset Switch to reset to a normal operation when in Latch Mode or Fire Marshal Operation.
Request Access	Shorting this input will unlock the Maglock or Electric Strike.
Battery +/-	Is STANDBY when in or out of alarm.

LED INDICATIONS:		
GREEN	LED ON = AC ON, LED OFF = LOSS OF AC	
BLUE	LED ON = DC OUTPUT ON, LED OFF = NO DC OUTPUT	
YELLOW	LED ON = TRIGGERED BY FIRE ALARM CONTROL PANEL OR ACCESS CONTROL PANEL	

# 7. CONNECTION



### **CX-PS150UL Power Supply**

**INSTALLATION INSTRUCTIONS** 

#### The JL Jumper Modes and Their Functions:

The JL jumper has 4 modes: Auto Reset, Manual Reset, Auto Restore AC Mains, Manual Reset AC Mains.

#### 1. Latching Output (Auto Reset).

When the JL jumper is ON (shorting both pins) it is in latching mode (auto reset). When the Fire Input is closed the output power is dropped, it will restore power when the Fire Input is open.

#### 2. Non-Latching (Manual Reset).

When the JL jumper is OFF (both pins open) it is not in latching mode (manual reset). When the Fire Input is closed and the output power is dropped, it will not restore power when the Fire Input is open, but only when the RESET input is used.

#### 3) Mains Fail (Manual Reset).

Using the provided Camden Set Switch tool, place the connector end over the two pins marked as JL. Press the switch 3X (0.5 second per press). The outputs now will not restore when the AC Mains are restored. It will need a manual reset to restore the outputs.

#### 4) Mains Fail (Auto Reset).

Using the provided Camden Set Switch tool, place the connector end over the two pins marked as JL. Press the switch 4X (0.5 second per press). The outputs now will auto restore when the AC Mains are restored.

**Note:** After setting the AC Mains Fail mode, ensure you place the JL jumper on the JL pins if needed. Refer to the table below for what your application requires.

Jumper	Default	Fire Input Triggered/Reset	Auto Reset after AC Mains Lost/Restored
JL OFF Triggered 3X		Drops Power/Manual	Manual
JL ON Triggered 3X		Drops Power/Auto	Manual
JL OFF Triggered 4X		Drops Power/Manual	Auto
JL ON Triggered 4X	Yes	Drops Power/Auto	Auto



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