

## HP312CX: Power Supply/Charger Kit

### 1 Overview

The HP312CX switching power supplies/charger kit converts low voltage AC input into 6 VDC or 12 VDC @ 2.5 A of continuous supply current, or 1 A @ 24 VDC. This general-purpose power supply has a wide range of applications for access control, security and CCTV systems that require additional power. For convenient operation, this power supply unit includes the power supply board (p/n HPS3), a plug-in transformer, steel enclosure (p/n HPB407), 5 Ah 12 V battery, battery leads, and connecting hardware.

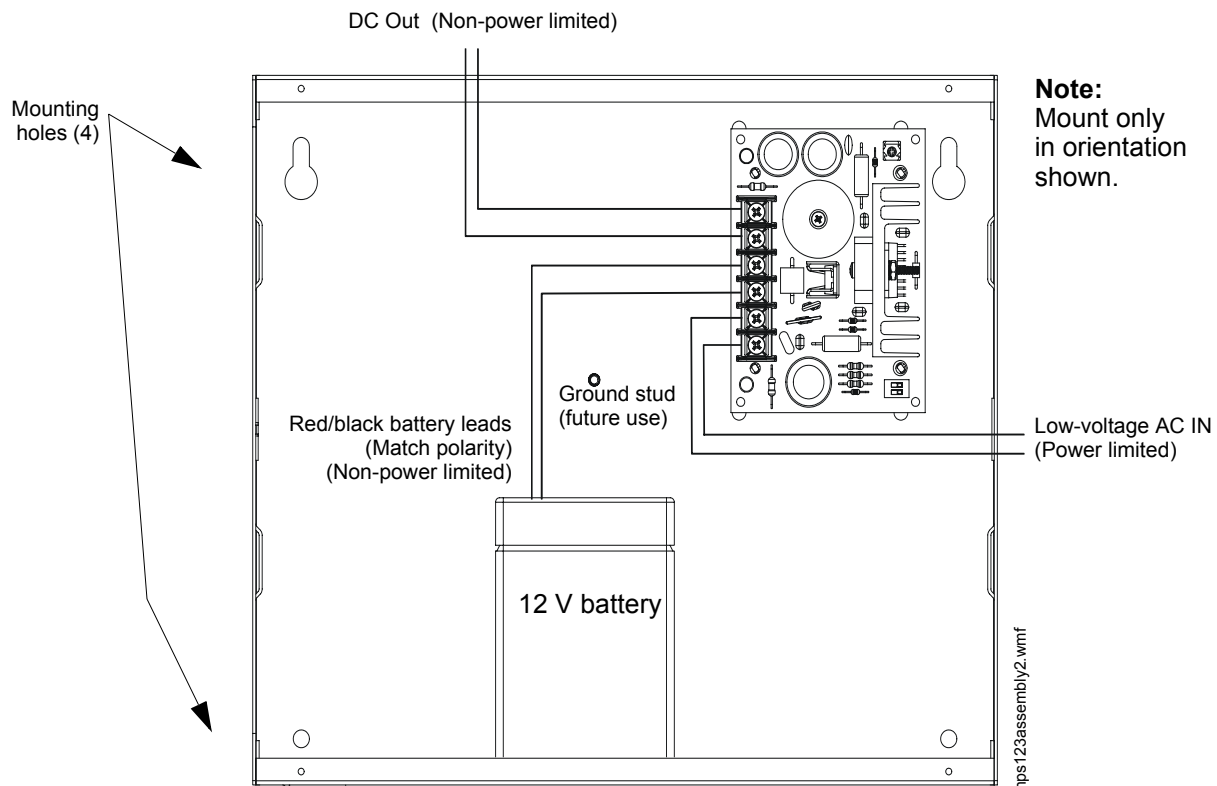
### 2 Specifications

- Switch selectable 6 VDC/12 VDC.
  - At 6 VDC or 12 VDC, the output is 2.5 A total; at 24VDC, the output is 1 A total.
    - If a battery charger is used, subtract max charge current of 400 mA from total to determine allowable load.
  - Input HPS3: 2.3 A max at 24 VAC 60Hz, Transformer: 0.5 A max at 120 VAC 60Hz
- HP312CX includes the power supply (HPS3) and a 24 VAC thermally limited 50 VA plug-in transformer.
  - Do not use enclosed battery for 6 VDC output; use a 6 VDC, 5 Ah battery (suggested: Powersonic PS-650L).
- UL-listed to UL294 Access Control Systems and UL2044 CCTV Equipment.
- Filtered and electronically regulated output.
- Built-in charger for sealed lead acid or gel type batteries.
- Stand-by specification:
  - At 6 VDC, unit provides one hour of stand-by at 1.7 A with a 6 V, 5 Ah battery.
  - At 12 VDC, unit provides one hour of stand-by at 2.1 A with a 12 V, 5 Ah battery.
  - At 24 VDC, unit provides one hour of stand-by at 600 mA with two 12 V, 5 Ah batteries.
- Automatic switchover to stand-by battery when AC fails.
- Thermally limited design.
- Circuit breaker battery protection.
- AC input (green) and DC output (red) LED diagnostic indicators.
- Hinged cover and vented enclosure with five convenient knockouts.
- Temperature range: 32°F to 120°F (0°C to 49°C); indoor use only.
- Enclosure dimensions: 10" H x 11.5" W x 4.875" D (25.4 cm H x 29.21 cm W x 12.38 cm D).

### 3 Installation Instructions

1. Unpack product. Do not discard packing materials until installation and checkout are successfully completed.
2. Pre-drill holes where enclosure is to be mounted. Choose a vertical surface, strong enough to support the full weight of the assembly, located in an area without excessive amounts of moisture. Indoor installation only.
3. Secure enclosure to the desired location, using appropriately sized fasteners that can support the full weight of the assembly.
4. Configure power supply using dip switches to select output voltage desired.
5. Mount power supply inside enclosure with snap-in stand-offs supplied as shown in Figure 1.

6. Locate wall outlet for plug-in transformer and disconnect power to its branch circuit.  
*DO NOT connect to an outlet controlled by a switch.*
7. For UL294 applications, install a UL-listed tamper switch (not supplied) such as Ademco model 112 with model 28 clip mounting bracket, and connect to your alarm system.
8. Route wire to enclosure from transformer. Connect incoming AC (low voltage) into the incoming input terminals as shown.
9. Connect external loads to appropriate DC terminals observing polarity.
10. Connect battery if applicable to battery +/- terminals observing polarity using supplied red/black leads.
11. Route all power-limited wiring at least 1/4" (6.1 mm) from any non-power limited wiring, observing wire routing on diagram below.
12. Energize branch circuit. The green LED should illuminate to indicate voltage is reaching the unit. The red LED should illuminate showing DC voltage is present at the output.
13. Secure the cabinet cover with metal screws to prevent access by unauthorized personnel.



**Figure 1 Typical Assembled Kit and Wiring Diagram**



**WARNING:**

To reduce risk of electric shock, do not expose unit to rain or excessive moisture, and disconnect power before servicing unit.

- A readily accessible switched circuit breaker must be available to disconnect mains power as required.
- All power-limited wiring should be routed so that it cannot touch non-power-limited wiring; minimum spacing 1/4" (6.35 mm).
- No user-serviceable parts inside. Installation & servicing should only be made by qualified personnel.
- Install in accordance with all local regulations and the National Electrical Code



**NOTE:** This instruction sheet shall be the only document referenced when installing this product.

## 4 Voltage Output Selection Table

Output	SW1 (on is up)	SW2 (on is up)
24 VDC	Off	On
12 VDC	Off	Off
6 VDC	On	Off

## 5 LED Diagnostics

Red (DC) LED	Green (AC) LED	Status
ON	ON	Normal operation.
ON	OFF	Loss of AC. Operating on standby power (if equipped).
OFF	ON	No DC output. Short circuit or thermal overload present.
OFF	OFF	No DC output. Loss of AC. Battery discharged or not present.

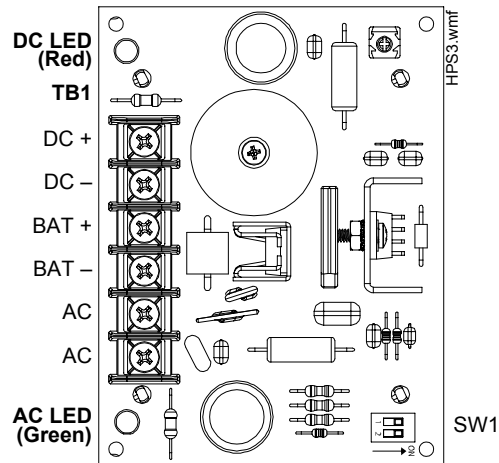


Figure 2 HPS3 Diagram



**NOTE:** For additional information

- Visit our website: <http://www.honeywellpower.com>
- Contact Technical Support: (800) 627-3473
- Email us: [hpp\\_techserv@fla-whq.com](mailto:hpp_techserv@fla-whq.com)