

## 1. Introduction

The PS4350/R is an external Battery Charger for use with PC4010/4020 Panels.

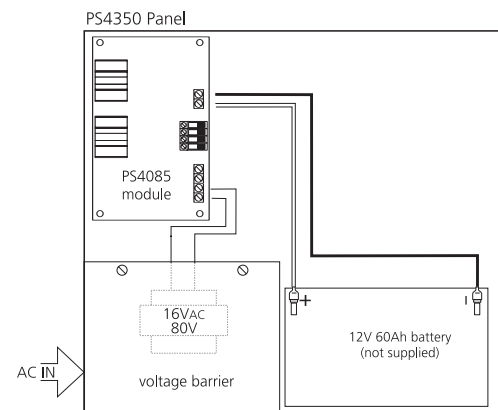
## 2. Features and Specifications

### Features

- Stand-by battery (not supplied)
- AC Trouble output
- Low Battery output
- Battery Test output
- Automatic shutdown to prevent deep battery discharge
- Self-resetting solid state over current protection devices eliminate the need for replacement fuses
- Selectable battery charging rates: 400mA, 700mA or 1.8A

### Specifications

- Transformer supplied: 16Vac, 80VA
- Output:  
13.95VDC, 400mA (jumper on A-B), 700mA (jumper on B-C), 1.8A (jumper removed)
- AC Trouble, Low Battery and Battery Test Outputs:  
50mA maximum, switched to ground through 100Ω resistor
- Dimensions:  
145mm L × 83mm W × 56mm H over heat sinks  
5.7" L × 3.3" W × 2.2" H over heat sinks



INSTALL BATTERY AND AC WIRING AS SHOWN ABOVE  
 IMPORTANT: A minimum of 1/4" (7mm) separation must be maintained at all points between battery/primary AC wiring and all other wiring and connections.

## 3. Installing the PS4350

### 3.1 Unpacking

The PS4350/R package includes the following parts:

- One beige PC4055C cabinet OR one red PC4055CR cabinet (15.0"H × 15.0"W × 6.9"D)
- One PS4085 multi-rate charger module
- One PT1012 transformer, 16 Vac, 80VA
- Space for one 60Ah, 12 volt sealed lead-acid battery (not included)

### 3.2 Mounting the Cabinet

When mounting the cabinet for the PS4350/R, select a dry location within 1m/3.3ft of the control panel.

To mount the cabinet:

1. From the back of the cabinet, press in the four white circuit board stand-offs into the raised mounting holes.

**Please refer to the System Installation Manual for information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.**

2. Holding the cabinet in position, pull all wiring into the cabinet through the hole in the back.
3. Using the provided mounting screws and appropriate wall anchors, mount the cabinet securely to the wall.
4. Press the PS4085 module onto the plastic stand-offs.

### 3.3 Wiring

Before beginning to wire the unit, ensure that all power (AC transformer and battery) is disconnected from the control panel.

Consult the wiring diagrams above for instructions.

### 3.4 Battery Charge Current

**Select the battery charge current using jumper "J1". To avoid damage to the battery, do not select a battery charge rate greater than 0.1 times the battery AHr rating.**

Jumper Setting	Charge Current
A-B	400mA
B-C	700mA
None	1.8A

### 3.5 Applying Power

After all wiring is completed, apply power to the control panel. Connect the battery leads to the battery, then connect the AC transformer. For more information on control panel power specifications, see the control panel Installation Manual.

**NOTE:** Do not connect the power until all wiring is complete.

**Now that you have completed the installation steps and connected the wiring as shown in the wiring diagram, the PS4350 should be completely functional. AC Fail and Low Battery trouble indications will now function normally.**

## 4. Additional Terminal Functions

This section describes optional functions for PS4350 terminals.

The ACT terminal activates when there is an AC failure, and the LBT terminal activates when there is a low battery condition. On activation, these terminals energize at 50mA maximum. These outputs may be used to activate an indicating device, such as an LED, or a relay to activate devices requiring more current.

The ACT and LBT terminals may also be connected to a control panel alarm zone to generate an alarm and to have the system report the trouble condition.

To report AC failure and low battery conditions with individual reporting codes, connect the ACT and LBT to individual alarm zones. The ACT and LBT terminals may also be connected to a single alarm zone. When so connected, both trouble conditions will be reported with a single reporting code.

The TEST Terminal activates during the automatic battery test. A battery test is performed every 5 seconds. During the test, the AC power is lowered to allow the battery to supply the load. If the battery voltage is low, the test terminal activation is extended 40 seconds. This allows the panel to capture the low battery condition.

The TEST terminal may be used to activate an indicating device, such as an LED. An RM-1 relay may also be connected to the TEST terminal to switch a load into the power supply during the battery test. The test load should be of a resistance sufficient to test the battery under the expected maximum load.