

ELK-P1224

Power Supply / Battery Charger Kit

Installation and Setup Guide

ELK-P1224

APPLICATION

The ELK-P1224 Power Supply/Battery Charger Kit is a plug-in 14VDC Power Supply (ELK-P1426) combined with an intelligent Charger Board (ELK-P1224CB). It can supply up to 2.4 Amps of current at 12VDC (nominal). The charger board features a Low Battery Supervision output, Low Battery Cutoff, as well as a Manual On/Off switch. The Power Supply features built-in overload reset and screw terminals for connections.

FEATURES

- Auto-Resetting Overload Protection
- Built-In Battery Charging Circuit
- Low Battery Trouble Output
- Low Battery Deep Discharge Cutoff Protection
- Master Power Switch
- Lifetime Limited Warranty

SPECIFICATIONS

ELK-P1426

Plug-in power supply with receptacle mounting bracket

- Input Voltage Range: 100 - 240 Volts AC, 50/60Hz
- Input Current: 0.8 Amps AC
- Output Voltage Range: 13.8 to 14 Volts DC.
- Continuous Output Current: 2.6 Amps DC
- Complies with UL 60950
- Compliant with Energy Star EISA Level V
- RoHS compliant (RoHS2-2011/65/EU)
- Size w/ mounting bracket: 3.07" x 2.83" x 1.5" (78 x 72 x 38 mm)
- AC input plug style: NEMA 1-15P (non-polarized)
- Positive and Negative screw terminals on DC output

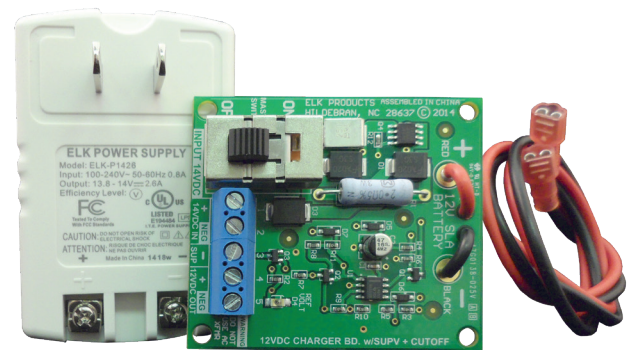
ELK-P1224CB

- Power Supply Input: 14 Volts DC provided by ELK-P1426
- Continuous Output Current: 2.4 Amps. **
- Low Battery Trouble: 11 Volts. (nominal)
- Low Battery Cutoff: 9 Volts. (nominal)
- PCB Board Size: 2.25" X 2.5" (57.15mm X 63.5mm)
- Standby Battery Charging Capacity: 1 to 12 Ah, Sealed Lead Acid
- Battery Wire Length: 16" with F1-Faston No. 187 Receptacles
- Master Power Switch turns On/Off the DC Input and Battery

- Operating Temp: 32° to +120° degrees F
- Humidity: 95% RH (max.), non-condensing

** Higher output current (up to 2.5 Amps) may be drawn for a short time provided a fully charged battery is connected.

Features or Specifications subject to change without notice.



ELK-P1426

ELK-P1224CB

AVAILABLE PART NUMBERS/CONTENTS

ELK-P1224 **Power Supply/Charger Kit** (pictured above)
ELK-P1426 Plug-in Power Supply
ELK-P1224CB Circuit Board

ELK-P1426 **Plug-in Power Supply ONLY, 14VDC @ 2.6A**

OPERATION

Master Power Switch

This switch allows users to turn On or Off all power from the DC Output terminals for servicing.

Battery Supervision

If DC power from the ELK-P1426 is lost (i.e. AC power outage), the battery should continue to supply power to the ELK-P1224CB DC Output terminals. The battery's voltage is then monitored and if the voltage drops to 11 volts, then the -SUP low battery supervision output will turn ON (pull to ground) indicating a Low Battery condition.

The -SUP output can be connected to an LED, 12 Volts DC Sounder, or a zone on a Security Control to report a low battery condition.

Note: The -SUP output will only work until Low Battery Cutoff activates, (see below) at which time -SUP becomes inactive since all power to the P1224CB board will be completely shutoff.

Low Battery Cutoff

If DC power from the ELK-P1426 continues to be lost for an extended period, the battery should continue to supply power to the ELK-P1224CB DC Output terminals. The battery's voltage is monitored during this time and if the voltage drops to 9 volts, then the battery will be Cutoff (disconnected) from the DC Output terminals. This helps to prevent "deep discharging" of the battery.

Hookup

1. Observe **correct polarity** on all connections.
2. The ELK-P1224CB circuit board can be mounted directly on top of a battery. Connect the two battery wires to the battery terminals. Red wire to positive, Black wire to negative.
3. Connect **ONLY** the ELK-P1426 Power Pack to the DC Input terminals. **DO NOT CONNECT** an AC TRANSFORMER.
Two-conductor jacketed cable having Red and Black color coded wires are recommended, minimum 18 AWG. Maintain polarity if using non-color coded Zip cord. The consequences of using too small of a wire gauge, or extending the wire length beyond the recommended lengths may harm the ability to properly charge the battery, especially at full DC Output Load.
If using 18AWG - Do NOT exceed a distance of 10 feet.
If using 16AWG - Do NOT exceed a distance of 15 feet.
If using 14AWG - Do NOT exceed a distance of 25 feet.
4. Plug the ELK-P1426 into a constant 120VAC source.
5. Connect the DC Output to the desired load.
6. Turn on Master Power Switch.

