# **Power Supply**

## ELK-P412

## 4 Amp, 12 Volt DC Power Supply & Battery Charger with Enclosure

### APPLICATION

The ELK-P412 is a general purpose high current power supply and battery charger. It is ideal for alarm, access control, and CCTV applications requiring up to 4 Amps. It distributes 12 Volts D.C. power to three (3) sets of DC power terminals, each having a voltage present indicator LED and automatic resetting overload protection. Built-In Low Battery Cutoff circuit protects the battery from deep discharging if AC power is lost for an extended period of time.

#### FEATURES

- Switching Power Supply, no transformer needed.
- Regulated 12VDC Output, capable of delivering 4 Amps.
- Automatic Resetting Overload Protection.
- Three Individually PTC Fused (2.5A) DC Power Outputs.
- Master AC and Battery ON / OFF Power Switch.
- Visual AC and DC LED Power Indicators.
- Built-In Battery Charging Circuit.
- Includes (1) Six foot AC Power Cord and cable clamp.
- Heavy Duty Enclosure.
- Lifetime Limited Warranty, call for details.
- Automatic Low Battery Cutoff Circuit Protects Battery from Deep Discharge.

#### SPECIFICATIONS

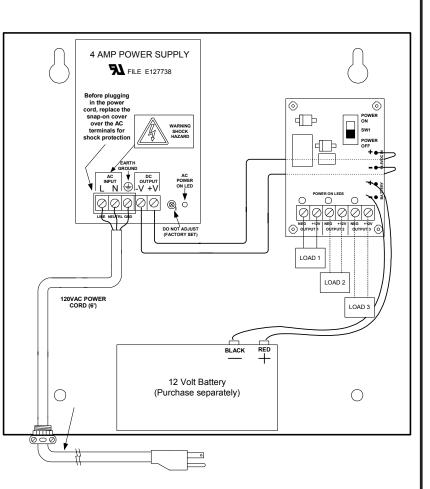
- DC Output Voltage: 13.8 Volts D.C.
- Current Rating: 4 Amps .
- Auto Resetting "fuseless" circuit breakers (PTC).
- AC Input Voltage Range: 85~264VAC @ 47~63Hz.
- Low Battery Cutoff: ~=10 Volts.
- Ripple & Noise: 100mVp-p.
- Enclosure Dimensions: 12"H x 12"W x 3.25"D. Features and Specifications subject to change without notice.

#### INSTALLATION/OPERATION

- 1. Set Master Power Switch (SW1) to Power Off.
- Mount enclosure in secure location near an AC power outlet that is not controlled by a switch (supplied power cord is 6 feet long)
- Connect devices to be powered to the screw terminals for DC output. The power distribution board has three sets of outputs, each set is limited to 2.5 amps. If a device requires more that 2.5 Amps, parallel two sets of terminals. (DO NOT EXCEED 4 AMPS)
- 4. Connect Battery to the battery wires, observe polarity.
- Plug in the AC cord. Warning High Voltage is now present at the power supply AC input terminals.
- Set the Master Power Switch to Power On. The LEDs at the power outputs should be on (if any are off, check for overloaded condition). The connected devices are now powered.
- If AC power is lost, the Low Battery circuit will disconnect the battery if it's voltage drops below 10 Vdc. This helps to prevent "deep discharging" of the battery.

**FLK** PRODUCTS, INC.

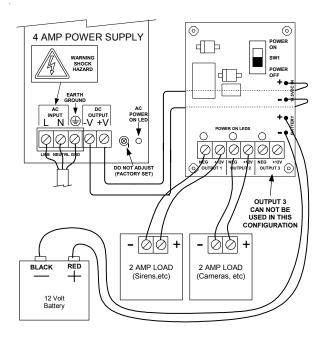
P.O. Box 100 • Hildebran, NC 28637 USA • 828-397-4200 • 828-397-4415 FAX http://www.elkproducts.com • email: info@elkproducts.com



## **ELK-P412 Installation & Hookup Examples**

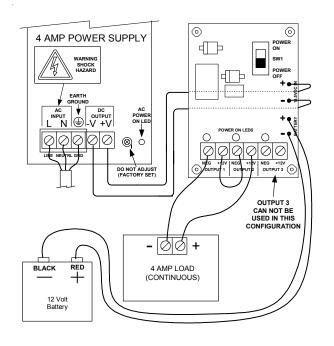
### **APPLICATION: DUAL 2 AMP HOOKUP**

For two separate 2 Amp continuous loads. DO NOT EXCEED 4 AMPS TOTAL. The third output <u>can not</u> be used in this configuration.



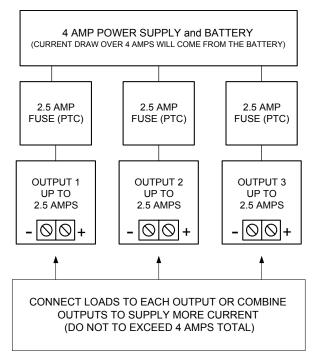
### **APPLICATION: 4 AMP HOOKUP**

Parallel any two outputs together for heavy loads up to 4 AMPS continuous. The third output <u>can not</u> be used in this configuration.



## **BLOCK DIAGRAM of DC Output Terminals**

Each output can provide up to 2.5 Amps each (fused at 2.5 amps). However, the <u>combined</u> load from all outputs must not exceed 4 Amps continuously.



## **APPLICATION: AC Power Failure Indicator**

This hookup will activate a 12 volt sounder if AC Power is lost. The ELK-912 relay will be energized while AC Power is ON. If AC Power is lost then the relay will turn off closing the COM and N.C. contacts to activate the sounder. The sounder is powered from the Battery.

