



# LPS3AC - Linear Power Supply/Charger

## Overview:

LPS3AC linear power supply/charger will convert a low voltage AC input to a 12VDC/24VDC output. This power supply is specifically designed to provide the power needed by the most demanding security and access control applications.

## Specifications:

### Input:

- 16VAC or 28VAC (refer to Voltage Output/Transformer Selection Chart).

### Output:

- 12VDC/24VDC selectable output.
- 2.5 amp continuous supply current.
- Filtered and electronically regulated output.
- Thermal overload and short circuit protection.

### Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current 500mA.
- Automatic switch over to stand-by battery.
- Fused battery protection (circuit breaker available).
- Includes battery leads.

### Supervision:

- Provides AC Fail supervision (Form "C" contacts).

### Visual Indicators:

- AC input and DC output LED indicators.

### Board Dimensions (approximate):

6.5"L x 3.5"W x 1.75"H

Specified at 25° C ambient.

## Voltage Output/Transformer Selection Table:

Output Voltage	Switch Position	Transformer Requirements (Recommended Altronix Part #'s)
12VDC	Closed	16VAC / 56 VA (T1656).
24VDC	Open	24VAC or 28VAC / 100VA (Altronix model T2428100)

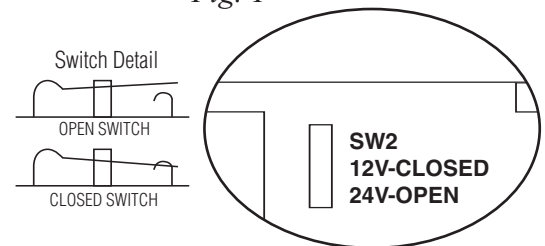
**Note:** Transformers with higher VA ratings may be used.

## Installation Instructions:

The LPS3AC should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the LPS3AC in desired location / enclosure.
2. Set DC output voltage using switch SW2 (Fig. 1) (refer to Voltage Output/Transformer Selection Chart).
3. Connect proper transformer to terminals marked AC (refer to Voltage Output/Transformer Selection Chart).
4. Measure output voltage before connecting devices. This helps avoid potential damage.
5. Connect devices to be powered to terminals marked [ – DC +].
6. When the use of stand-by batteries are desired, they must be lead acid or gel type.  
Connect battery to terminals marked [+ BAT –] on the unit (battery leads included).  
Use two (2) 12VDC batteries connected in series for 24VDC operation.
7. When batteries are not used a loss of AC will result in the loss of output voltage.
8. Connect supervisory trouble reporting devices to outputs marked [AC Fail].

Fig. 1

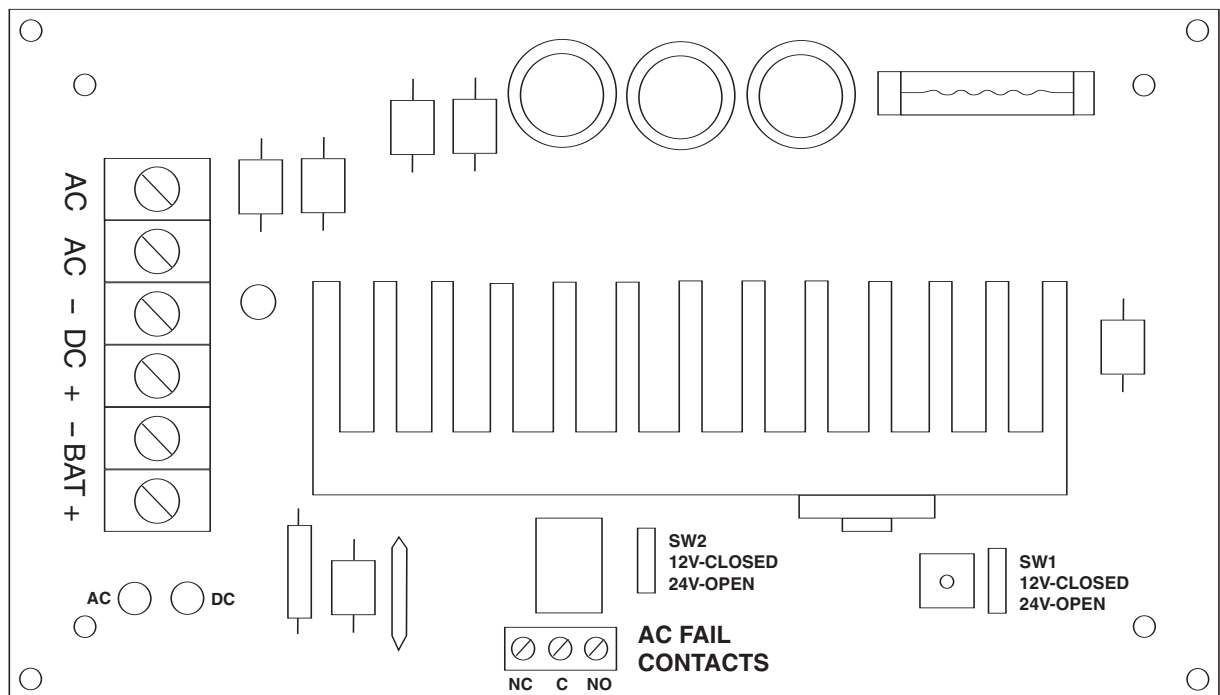


## LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC, Stand-by battery supplying power.
OFF	ON	No DC output. Short circuit or thermal overload condition or defective unit.
OFF	OFF	No DC output. Loss of AC. Discharged or no battery present.

## Terminal Identification:

Terminal Legend	Function/Description
AC/AC	Low voltage AC input ( <i>refer to Voltage Output/Transformer Selection Chart</i> ). For 12VDC output use 16VAC with 56VA power rating or higher. For 24VDC output use 28VAC with 85VA power rating or higher.
- DC +	12VDC-24VDC @ 2.5 amp continuous output.
- BAT +	Stand-by battery connections. Maximum charge rate 500mA.
AC FAIL N.C., C, N.O.	Used to report loss of AC (e.g. connect to audible device or alarm panel). Relay normally energized when AC power is present. Contact rating 1 amp @ 120VAC / 28VDC.



Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.