



AL600ULXD - Power Supply/Charger

Overview:

The AL600ULXD power supply converts a 115VAC or 230VAC / 50/60Hz input, to a 12VDC or 24VDC non-power limited output, (see specifications).

Specifications:

- UL Listed fire and access control power supply (UL1481, UL294).
- Switch selectable 12VDC or 24VDC non-power limited output.
- Input 115VAC / 60Hz, 1.9 amp or 230VAC 50/60Hz, .95 amp.
- Maximum charge current .7 amp.
- 6 amp continuous supply current at 12VDC / 24VDC.
- Filtered and electronically regulated output.
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.
- AC input and DC output LED indicators.
- AC fail supervision (form "C" contacts).
- Low battery and battery presence supervision (form "C" contacts).
- Thermal overload protection.
- Short circuit protection.
- Unit is complete with power supply, enclosure, cam lock and open frame transformers.
- Includes battery leads.



Enclosure Dimensions: 15.5”H x 12”W x 4.5”D

Note: Enclosure accommodates up to two (2) 12AH batteries

Power Supply Voltage Output Selections:

Output	Switch Position
12VDC	SW 1 Closed
24VDC	SW1 Open

Stand-by Specifications:

Output	4 hr. of Stand-by & 5 Minutes of Alarm	24 hr. of Stand-by & 5 Minutes of Alarm	60 hr. of Stand-by & 5 Minutes of Alarm
12VDC / 40 AH Battery	Stand-by = 6.0 amp Alarm = 6.0 amp	Stand-by = 1.0 am Alarm = 6.0 amp	Stand-by = 300mA Alarm = 6.0 amp
24VDC / 12 AH Battery		Stand-by = 200mA Alarm = 6.0 amp	
24VDC / 40 AH Battery	Stand-by = 6.0 amp Alarm = 6.0 amp	Stand-by = 1.0 amp Alarm = 6.0 amp	Stand-by = 300mA Alarm = 6.0 amp

Installation Instructions:

The AL600ULXD should be installed in accordance with article 760 of The National Electrical Code or NFPA 72 as well as all applicable Local Codes.

1. Mount the AL600ULXD in desired location.
2. Connect input power from a separate unswitched AC circuit to the transformers. Secure green wire lead to earth ground. (Fig. 1).
 For 115VAC input: Connect Yellow and White leads from transformer primary to neutral.
 Connect Blue and Black leads from transformer primary to line (Fig. 2).
 For 230VAC input: Connect Blue and Yellow leads of transformer 1 together. Connect Blue and Yellow leads of transformer 2 together. Connect White lead from both transformers to neutral.
 Connect Black lead from both transformers to line (Fig. 3).

Keep power limited wiring separate from non-power limited wiring (115VAC 50/60Hz or 230 50/60Hz Input, Battery Wires). Minimum .25” spacing must be provided.

3. Measure output voltage before connecting devices. This helps avoid potential damage.
4. Connect devices to be powered to terminals marked [- DC +] (Fig. 1).
5. For Access Control applications, batteries are optional. When batteries are not used a loss of AC will result in the loss of output voltage. When the use of stand-by batteries is desired, they must be lead acid or gel type. Connect battery to terminals marked [+ BAT -] (Fig. 1) (battery leads included). Use two (2) 12VDC batteries connected in series for 24VDC operation.
6. Connect appropriate trouble reporting devices to AC Fail & Low battery (Fig. 1) supervisory relay outputs marked [N.C., C, N.O.]. Use 22 AWG to 18 AWG for AC Fail / Low Battery reporting. AC Failure will report in 5 minutes. For a 6 hour delay on reporting cut resistor R1 (Fig. 1).

Maintenance:

Unit should be tested at least once a year for the proper operation as follows:

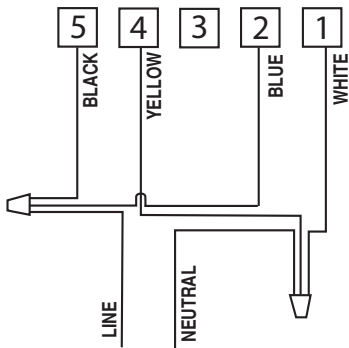
Output Voltage Test: Under normal load conditions, the DC output voltage should be checked for proper voltage level (Power Supply Voltage Output Specifications Chart).

Battery Test: Under normal load conditions check that the battery is fully charged, check specified voltage both at battery terminal and at the board terminals marked [- BAT +] to insure there is no break in the battery connection wires.

Note: Maximum charging current under discharges is .7 amp.

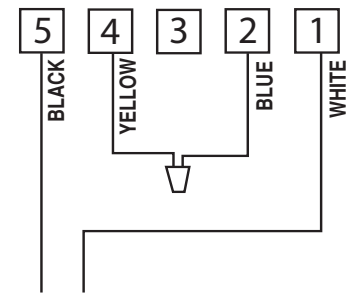
Note: Expected battery life is 5 years, however it is recommended changing batteries in 4 years or less if needed.

Fig. 2 - 115VAC Input



115VAC Input

Fig. 3 - 230VAC Input



230VAC Input

230VAC Input

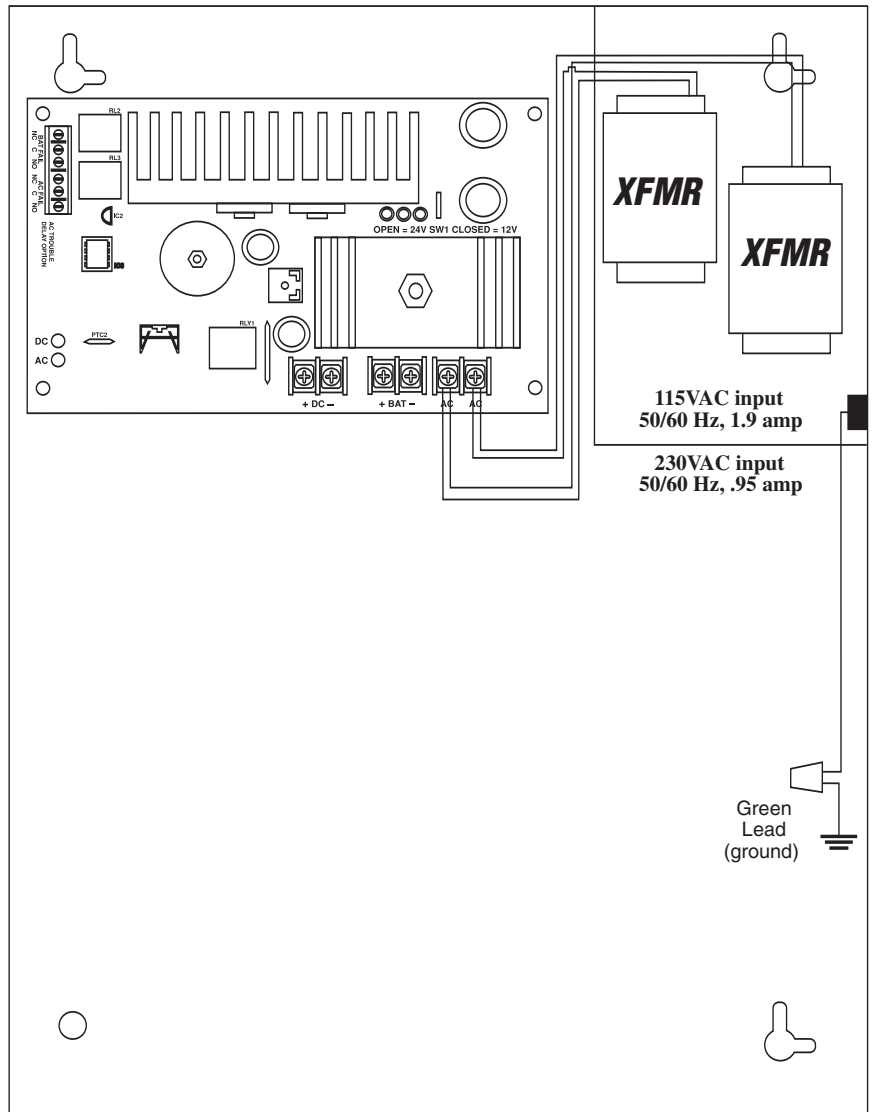


Fig. 1

LED Diagnostics:

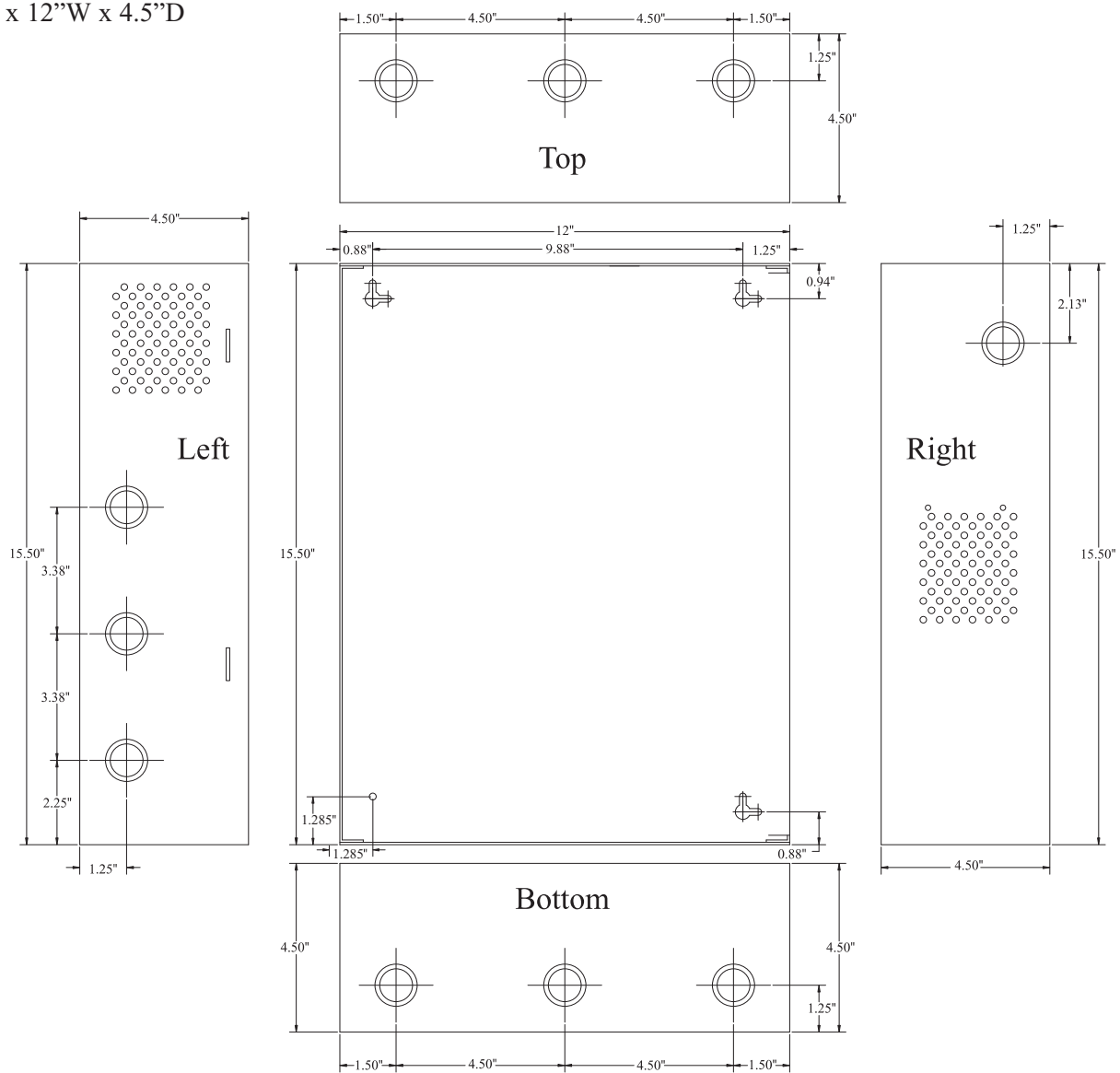
Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition
ON	OFF	Loss of AC, Stand-by battery supplying power
OFF	ON	No DC output
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output

Terminal Identification:

Terminal Legend	Function/Description
AC / AC	Low voltage AC input (28VAC / 200VA). Two (2) Altronix part # T2885D.
+ DC -	12VDC / 24VDC @ 6 amp continuous non-power limited output.
AC FAIL C, N.C., N.O.	Used to notify loss of AC power, e.g. connect to audible device or alarm panel. Relay normally energized when AC power is present. Contact rating 1 amp @ 28VDC
Low Battery N.O., N.C., C	Used to indicate low battery condition, e.g. connect to alarm panel. Relay normally energized when DC power is present. Contact rating 1 amp @ 28VDC
- BAT +	Stand-by battery connections. Maximum charge rate .7 amp.

Enclosure Dimensions:

15.5"H x 12"W x 4.5"D



MEMBER