INSTALLATION INSTRUCTIONS

SUITABLE FOR FIXED INSTALLATION ONLY. THIS UNIT MUST NOT BE CONNECTED EXTERNALLY.

1. Mount box on a flat vertical surface in correct orientation with hinge on the left hand side (if applicable). The PSU should be installed to allow maximum air movement where possible. Avoid areas with high humidity.

2. Connect a suitable mains supply with an external disconnect device. **This must be a 3Amp fused unswitched spur installed by a qualified Electrician certified to Part P.**

3. Ensure voltage across battery leads is 3-5V. On connection of a serviceable battery this will rise to 27.6 – 28V. If voltage does not rise battery is unserviceable.

4. **Remove Mains Fuse.**

5. Connect load and all associated wiring observing correct polarity of DC outputs. The cable size must be of sufficient rating to carry currents for all loads connected to the PSU.

6. Mains and low voltage cables should be routed separately. Where entry/exit holes are used in the cabinet the close fitting cable protective bushes should be used. All cables should be securely fastened within the cabinet with suitable cable ties.

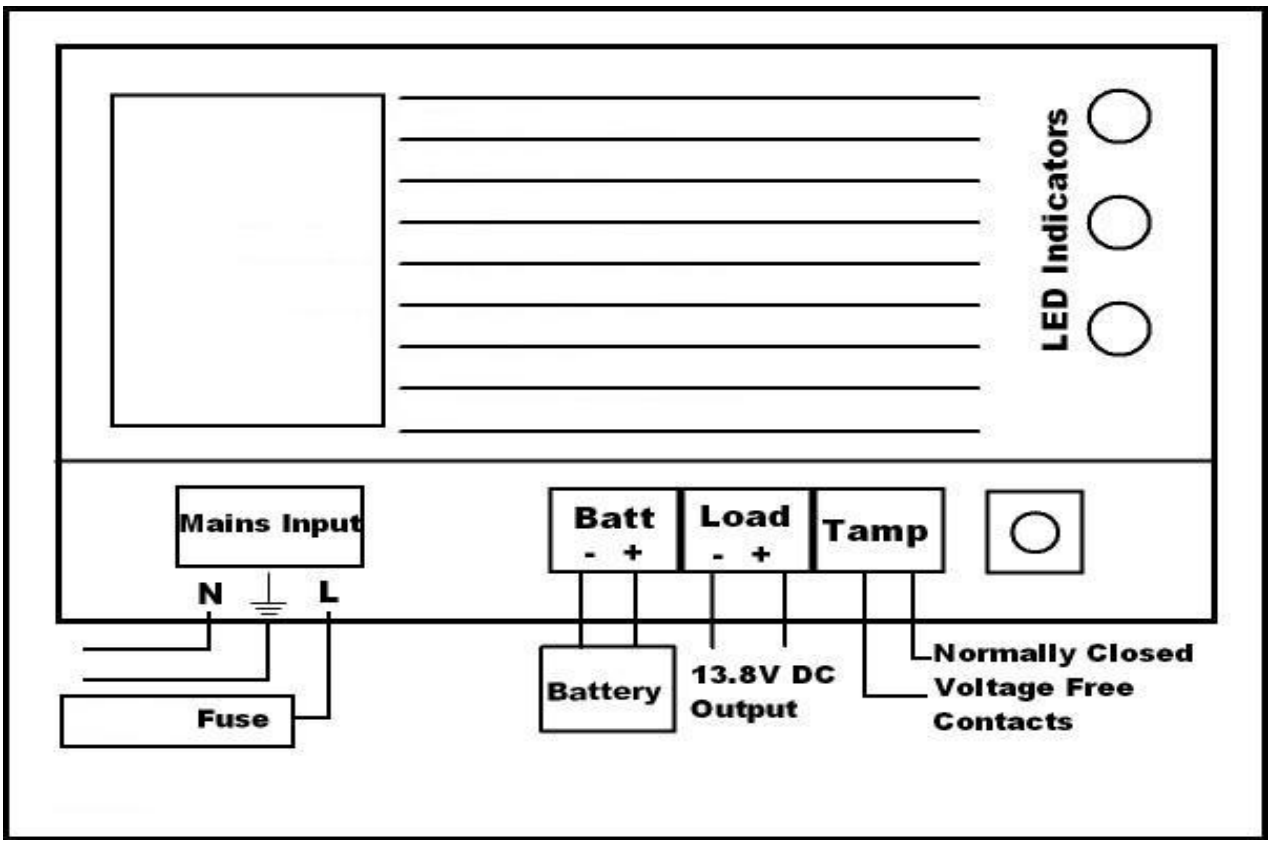
7. **Refit mains fuse**

8. Connect Sealed Lead Acid battery if applicable. (Red +, black -)

9. Ensure green/yellow earth lead is connected and pushed fully onto tab on lid. Close lid and secure with screw provided.

TECHNICAL SPECIFICATION

MAINS INPUT	230V AC +/-10% 50/60Hz
OUTPUT	27.6V DC @Full load
VOLTAGE REGULATION	5% Maximum
RIPPLE	<5% of output voltage
ENVIRONMENT	Ambient Temp -20 to +40ºC Relative Humidity 10 to 90%
BATTERY	Up to 2 x 17Ah SLA
FUSES	PTC self resetting fuses fitted as standard for load and battery protection mains fuse as table.



24V SWITCH MODE POWER SUPPLY

Model	2401SM	2402SM	2403SM	2405SM
Max Rated DC Output	1.5A	2.5A	3.5A	5.5A
Load Current	1.0A	2.0A	3.0A	5.0A
Battery Charging Current	0.7A	0.7A	0.7A	0.7A
Mains Indicator	Green LED	Green LED	Green LED	Green LED
Battery Indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Output Fault Indicator	Red LED	Red LED	Red LED	Red LED
Load Fuse	PTC	PTC	PTC	PTC
Battery Fuse	PTC	PTC	PTC	PTC
Max Battery Size	2 x 17Ah Sealed Lead Acid	2 x 17Ah Sealed Lead Acid	2 x 17Ah Sealed Lead Acid	2 x 17A Sealed Lead Acid
Mains Fuse	T2.0A	T3.15A	T4.15A	T5.15A

FEATURES

User Friendly High Quality Power Supply for use in security and access control systems requiring 24V DC Supply.

- 27.6V DC Regulated Output
- Full Current to Load
- Additional Battery charging current
- Overload indication and protection
- Short Circuit protection with automatic restart
- Internal current limiting
- Deep Discharge Battery Protection
- PTC Self Resettable fuses

IMPORTANT BATTERY INFORMATION

This power supply has a battery discharge protection circuit which means the supply voltage cuts off at approx 21.0V DC. This protects the life of the battery. To activate the charging circuit on installation only good/new batteries with an individual voltage of above 10.5V must be fitted.

GENERAL INFORMATION

- This power supply unit is intended for installation by qualified persons only.
- There are no user serviceable parts under cover, therefore no regular maintenance is required other than ensuring all cables are securely fixed and free from damage.
- Batteries should be tested periodically with suitable battery testing equipment. Please refer to battery manufacturer's specifications.
- The tamper switch terminals are voltage free contacts and must not be used for any other purpose.

CAUTION!

Risk of explosion if battery is replaced with incorrect type. Use only Sealed Lead Acid batteries. Dispose of batteries in accordance with local and national regulations.

Fault Diagnosis

LED Indicators (Battery Connected)				
Green	**Yellow**	**Red**	**Condition**	**Action**
ON	OFF	OFF	No Fault	
OFF	OFF	OFF	AC Fail	Check Mains fuse
PULSE	OFF	OFF	Overload	Reduce load
ON	ON	OFF	Reversed Battery	Check battery leads
OFF	OFF	ON	Output Short Circuit	Check load for faults
OFF	OFF	ON	Low Battery Voltage	Monitor or replace battery
Battery Not Connected				
OFF	OFF	OFF	Output Short Circuit	Check load for faults