

### ST-2406-3AEQ

## Power Supply/Charger with Enclosure Manual



### Features:

- Automatic recharging of backup batteries
- Automatic switchover to backup battery if main power is lost or cut
- Built-in battery short-circuit protection
- Low-battery cutoff
- LEDs indicate power status
- Programmable DC voltage output
- Regulated and filtered output voltage
- · Fused output for a regulated charge

- Heavy-duty steel case to protect power connections
- Enclosure has space for up to two 4Ah or one 7Ah backup batteries
- Includes battery leads for easy installation
- High efficiency at full load
- Heat sink free design





### **ENFORCER Power Supply/Charger with Enclosure**

#### Introduction:

SECO-LARM's ST-2406-3AEQ power supply/charger ensures that alarm systems and access control systems have enough power to do their job. Protected by fused battery outputs, input polarity protection diodes, and backup battery polarity reverse protection, this power supply/charger can be used to maximize the security and efficiency of nearly any alarm or access control installation. Enclosure has space for up to 2 backup batteries (leads included for one optional backup battery).

### Specifications:

DC Volt	tage	6,12,24	
Operating voltage		12~24 VAC/VDC for 6VDC, 18~24 VAC/VDC for 12VDC, 24~28 VAC or 26~28 VDC for 24VDC	
Status	AC Input	Green	
LEDs	DC Output	Red/Blue (Blue indicates 24V)	
Current (continuous)		2.5A	
Current (peak)		3.0A	
Current output (max. charge)		6V=100mA, 12V=220mA, 24V=450mA	
Maximu	ım AC input	See Transformer Selection in Table 3, pg. 3	
Master	fuse	5A	
Low battery cutoff		When battery voltage is <20%	
Operating temperature		-4°~149° F (-20°~65° C)	
Dimens	Board	2 <sup>7</sup> / <sub>8</sub> "x2 <sup>7</sup> / <sub>8</sub> "x1 <sup>3</sup> / <sub>8</sub> " (73x73x35 mm)	
	Enclosure	10"x7 <sup>3</sup> / <sub>4</sub> "x3 <sup>1</sup> / <sub>2</sub> " (254x196x89 mm)	

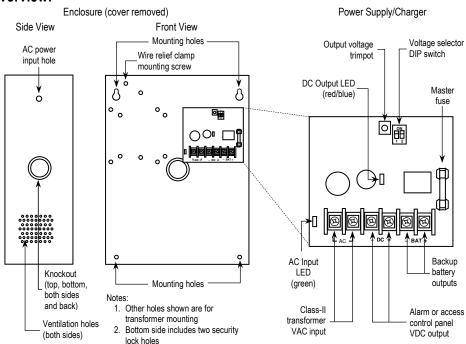
### Parts List:

1x Power supply/charger unit 3x Wire leads for backup battery 1x Flange nut for wire relief clamp

1x Wire relief clamp 2x Screw-on wire nuts 1x Large grommet

1x Small grommet 1x Manual

### Overview:



### Installation:

- 1. Mount the power supply/charger enclosure in the desired location to be easily accessible for future servicing.
- Set the desired DC output voltage (6, 12, or 24VDC) of the power supply using the DIP switch settings as shown in Table 1.

**IMPORTANT:** Disconnect power before changing these DIP switch settings (Note the default voltage output setting is 12VDC).

- Connect a Class-II transformer with appropriate specifications (See Table 2 right).
- 4. Connect a sealed lead-acid or gel-type backup battery if desired.
- Connect the wires to their respective terminals (see "Overview," pg. 2 and "Notes" below). Use the supplied grommets to protect the wires entering the enclosure and secure the AC power wire with the wire relief clamp and flange nut.

Table 1:

Voltage	SW1	SW2
6V	ON	ON
12V	ON	OFF
24V	OFF	OFF

Table 2:

6VDC	<b>ST-UV16-W50Q</b> 16VAC/50VA				
12VDC	<b>ST-UVDA-W100Q</b> 24~28VAC/100VA				
24VDC	<b>ST-UVDA-W100Q</b> 24~28VAC/100VA				

### Notes:

- Before connecting any external devices, temporarily power up the unit and measure the DC output voltage at the device connection point to avoid damage to devices. If voltage drop is large, adjust the voltage using the output voltage trimpot (see Fig. 1). Then disconnect power before connecting external devices.
- 2. See ST-2406 3FAQ LFD status indicators in Table 3.
- The ST-2406-3EAQ comes with a 5A fuse. Use only the correct fuses to prevent short-circuits and damage to the power supplies/chargers or the alarm access control panel.
- 4. The automatic low-battery cutoff will cut power when battery voltage drops below 20% of the set output voltage.

# Fig. 1 Output voltage trimpot Min. Min. Max.

Table 3

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Green	Red/Blue	Status			
LED	LED				
ON	ON*	Normal			
OFF	ON*	No VAC input			
ON	OFF	No VDC output			
OFF	OFF	No VAC input and			
		no VDC output			

\*Red=6,12VDC, Blue=24VDC

### Warning:

- 1. Installation and servicing must be performed by qualified service personnel.
- 2. The power supply must be installed in accordance with all national and local electrical codes.
- 3. Do not use a higher AC input than recommended (rated max. 28VAC).
- 4. DISCONNECT THE POWER SUPPLY BEFORE CHANGING THE DIP SWITCH SETTINGS OR PERFORMING ANY TYPE OF SERVICE. There are no user serviceable parts inside.
- Do not touch any exposed metal parts, electrical, or electronic components as these parts may become very hot under load.
- Keep power-limited wiring separate from non power-limited wiring (115VAC input, battery wires). Provide at least 1/4" (7mm) spacing.
- Connect the power supply/charger only to a rechargeable backup battery. Use of a non-rechargeable backup battery could result in damage to the power supply/charger or the alarm access control panel.

### **ENFORCER Power Supply/Charger with Enclosure**

### Also Available from SECO-LARM®:

12VDC High-Amp Switching CCTV Power Supplies

Relay Boards

**Low Battery Cutoff** 

Power Supply/Charger Boards







PC-U1810-PULQ shown

SR-2212-C5AQ shown

ST-BD01Q

ST-2406-5AQ shown

## 12VDC Plug-In AC Adapters



ST-UV12-S1.0Q shown

Power Converters



ST-LA130-TTQ shown

### Plug-and-Play Backup Batteries



SB-L10V1-20Q shown

## Open-Frame Transformers



ST-UVDA-W100Q shown

### **Troubleshooting:**

No DC output

- Check whether the AC input voltage or backup battery voltage is normal
- Check whether the output voltage setting is correct
- Check whether the AC input wattage is correct (see chart, pg. 3)
- Low DC voltage output
- If the battery is supplying power, check whether the battery voltage is normal
- Check whether the power supply board is overloaded
- No backup battery power
- Check whether the battery voltage is normal or already discharged
- Check whether the master fuse has burned out.

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