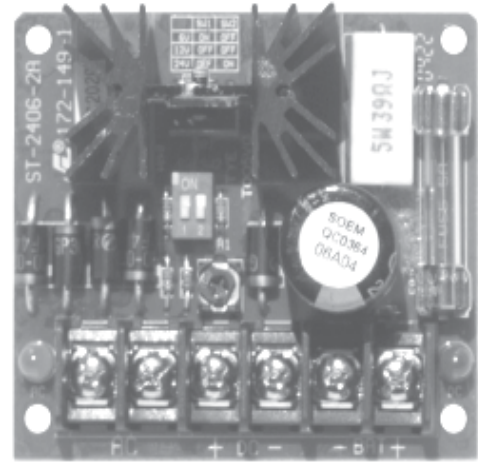


Installation Manual

ENFORCER[®]

ST-series

Power Supplies/Chargers



ST-2406-2AQ shown

Features:

- Automatic recharging of back-up batteries.
- Several models to choose from.
- Programmable DC voltage output.
- Built-in battery short-circuit protection.
- Fused output for a regulated charge.
- Automatic switch-over to the backup battery if main power is lost or cut.
- LEDs indicate power status.
- Includes foam tape and battery leads for easy installation.
- Regulated and filtered output voltage.

What it is:

SECO-LARM's ST-series of power supplies/chargers ensure that alarm systems and access control systems always have enough power to do their job. Protected by fused output, input polarity protection diodes, and back-up battery polarity reverse protection, these power supplies/chargers can be used to maximize the security and efficiency of nearly any alarm or access control installation.

Model #	DC Voltage	Current (continuous)	Current (peak)	Current Output (maximum charge)	PCB Size
ST-1206-1.5AQ	6, 12	1.5A	2.0A	6 V = 200mA, 12 V = 400mA	2 ⁷ / ₈ " x 2 ¹ / ₄ " x 1" (73 x 57 x 25 mm)
ST-2406-2AQ	6, 12, 24	1.5A	2.0A	6 V = 180mA, 12 V = 350mA, 24 V = 700mA	2 ⁷ / ₈ " x 2 ¹ / ₂ " x 1 ³ / ₈ " (73 x 64 x 35 mm)
ST-2406-3AQ	6, 12, 24	2.5A	3.0A	6 V = 180mA, 12 V = 350mA, 24 V = 700mA	3 ³ / ₈ " x 2 ⁷ / ₈ " x 1 ⁵ / ₁₆ " (81 x 73 x 33 mm)
ST-2406-5AQ	6, 12, 24	4.0A	5.0A	6 V = 180mA, 12 V = 350mA, 24 V = 700mA	3 ³ / ₄ " x 2 ⁷ / ₈ " x 1 ⁹ / ₁₆ " (95 x 73 x 40 mm)
ST-2406-7AQ	6, 12, 24	7.0A	7.5A	6 V = 180mA, 12 V = 350mA, 24 V = 700mA	5 ¹ / ₂ " x 5 ¹ / ₈ " x 2 ¹ / ₆₄ " (140 x 130 x 55 mm)
ST-2406-10AQ	6, 12, 24	9.0A	10.0A	6 V = 180mA, 12 V = 350mA, 24 V = 700mA	5 ¹ / ₂ " x 5 ¹ / ₈ " x 2 ¹ / ₆₄ " (140 x 130 x 55 mm)

Fused Output:

The ST-1206-1.5AQ comes with a 3A fuse. The ST-2406-2AQ, ST-2406-3AQ, and ST-2406-5AQ models come with a 5A fuse. The ST-2406-7AQ and ST-2406-10AQ come with a 10A fuse. Use only the correct fuses to prevent short circuits and damage to the power supplies/chargers or the alarm access control panel.

WARNING:

Connect these power supplies/chargers only to a rechargeable back-up battery. Use of a non-rechargeable back-up battery could result in damage to the power supplies/chargers or the alarm access control panel, as well as leakage or explosion of the battery.

Installation:

1. Mount the PC board in the desired location or enclosure. It must be easily accessible for future servicing.
2. DC Power Output Setting:
 - a. To program ST-1206-1.5AQ DC voltage output:
 1. 6VDC — Cut the wire loop, and connect to a 12VAC/20VA transformer.
INSULATE THE CUT WIRE LEADS so that they do not come in contact with the power supplies/chargers.
 2. 12VDC — Leave the wire loop uncut, and connect to a 16VAC/40VA transformer.
 - b. To program ST-2406 Series DC voltage output:
 1. Set the desired DC output voltage (6, 12, or 24 VDC) of the power supply using the DIP switch.
See Table 2.
 2. The default voltage output setting is 12 VDC.



Figure 1 – ST-1206-1.5AQ wiring diagram

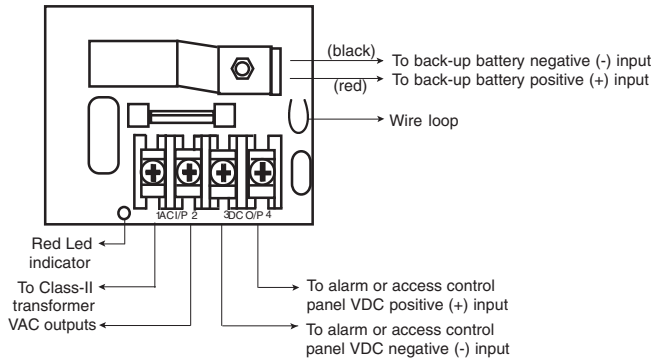
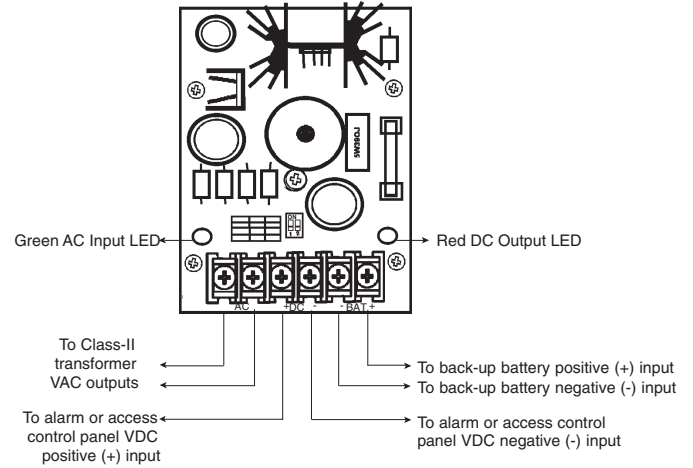


Figure 2 – ST-2406 Series wiring diagram



3. Connect the wirings to their respective terminals (see Figure 1 and 2).

- NOTE:
- Before connecting any external devices, temporarily power up the unit and measure the DC output voltage to avoid damage to devices. Then disconnect power before connecting external devices.
 - LED status — for ST-1206-1.5AQ, Red LED on indicates connections to AC power. for ST-2406 series, see Table 3.

- WARNING:1. Using a higher AC input than recommended may damage the unit.**
- When a power supply/charger is used at its maximum load for an extended period of time, the heatsink portion of the power supply/charger will be very hot.
 - DO NOT USE METAL SPACERS TO MOUNT THE POWER SUPPLY'S PC BOARD.**
 - Measure DC output before connecting devices.

Table 1: Transformer selection table:

Output voltage	ST-1206-1.5AQ	ST-2406-2AQ	ST-2406-3AQ	ST-2406-5AQ	ST-2406-7AQ	ST-2406-10AQ
6VDC	12VAC/20VA	12VAC/20VA	ST-UV24-W50Q 24VAC/50VA	ST-UV16-W100Q 16VAC/100VA	ST-UVDA-W180Q 24-28VAC/180VA	ST-UVDA-W180Q 24-28VAC/180VA
12VDC	16VAC/40VA	16VAC/40VA	ST-UVDA-W100Q 24-28VAC/100VA	ST-UV16-W100Q 16VAC/100VA	ST-UVDA-W180Q 24-28VAC/180VA	ST-UVDA-W180Q 24-28VAC/180VA
24VDC	N/A	ST-UV24-W50Q 24VAC/50VA	ST-UVDA-W100Q 24-28VAC/100VA	ST-UVDA-W180Q 24-28VAC/180VA	24-28VAC/210VA	ST-UV28-T350Q 28VAC/350VA

Table 2: To program DC voltage output:

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

* For ST-1206-1.5AQ model. See point 2 under Installation.

Table 3: LED status for ST-2406 series:

Green LED	Red LED	Status
ON	ON	Normal
OFF	ON	No VAC input
ON	OFF	No VDC output
OFF	OFF	No VAC input and VDC output

NOTICE: The information and specifications printed in this manual are current at the time of publication. However, the SECO-LARM policy is one of continual development and improvement. For this reason, SECO-LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints or typographical errors. Copyright © 2008 SECO-LARM U.S.A., Inc. All rights reserved. This material may not be reproduced or copied, in whole or in part, without the written permission of SECO-LARM.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.