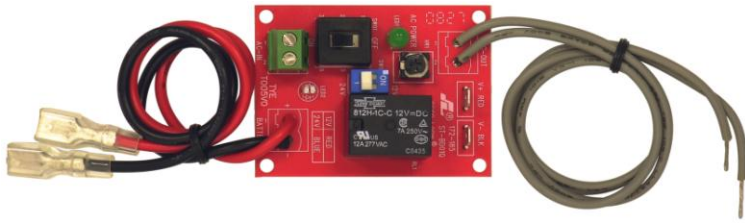




## ST-BD01Q

### Low-Voltage Battery Cut-Off

## Manual



The ENFORCER ST-BD01Q Low-Voltage Battery Cut-Off prevents the deep discharge of the backup batteries. The ST-BD01Q ties directly into most 12 or 24 VDC power supplies or alarm panels for easy plug-and-play installation. A Master ON/OFF switch easily connects or disconnects the battery and AC power supply from the control panel.

- Selectable input 12/24VDC
- Adjustable voltage cut-off and restore point
- Master ON/OFF switch
- Green LED AC power indicator
- Dual-color DC LED indicator
- Includes double-sided tape

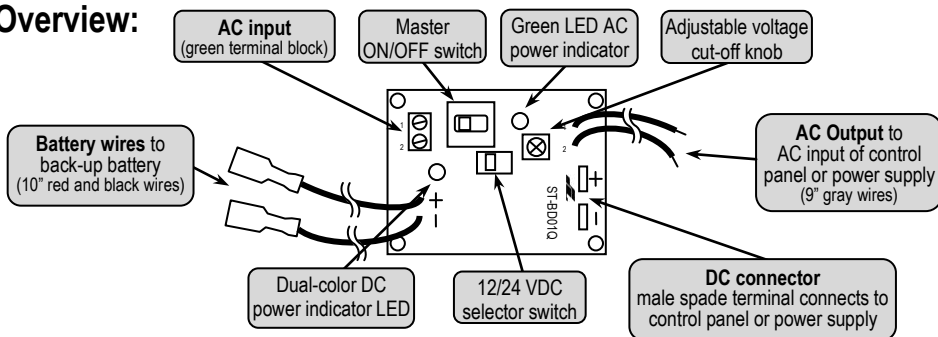
## Specifications:

For operating voltages please see Table 1 on Page 3.

Relay contact rating		7Amp@30VDC
LED indicators	AC	Green
	DC	Red: 12VDC
		Blue: 24VDC
Connections	AC input	Terminal block
	AC output	Gray wire leads
	DC	Quick-connect terminal (battery side)
		On-board male spade terminal*
Dimensions		2 <sup>3</sup> / <sub>8</sub> " x 1 <sup>3</sup> / <sub>4</sub> " x 7/ <sub>8</sub> " ( 60 x 45 x 22 mm)

\*Must connect for proper operation.

## Overview:



## Installation:



**IMPORTANT: The polarity on all wiring connections MUST be connected properly; incorrect polarity connection will damage the unit. When using 24VDC the voltage selector switch MUST be set at 24VDC, incorrectly setting the unit may cause damage.**

1. Disconnect the AC power and back-up battery from the control panel or power supply.
2. Turn the master switch of the ST-BD01Q OFF (factory default is OFF).
3. Select the correct voltage setting (12 or 24 VDC) via the 12/24 VDC selector switch (factory default is 12VDC).
4. If necessary, connect the low voltage AC to the AC input terminal block.
5. Connect the AC output gray wires from the ST-BD01Q to the AC input of the control panel or power supply.
6. Connect the male spade terminals of the ST-BD01Q to the DC output terminals of the control panel or power supply.

**Must connect for proper operation.**

7. Connect the female spade lugs of the battery wires to the back-up battery.

**Observe correct polarity.**

8. Use the included double sided tape and secure the ST-BD01Q module on the desired location.
9. Double check all connections before turning the master switch ON.

## Operation:

### Voltage Cut-Off:

1. The ST-BD01Q's voltage cut-off point is preset at approximately 9.6VDC when set at 12VDC setting and about 19.6VDC when set at 24VDC setting.
2. To adjust the voltage cut-off point, carefully turn the adjustable voltage cut-off knob clockwise to increase and counter-clockwise to decrease. See the Table 1 below for the adjustable voltage cut-off range.

### Master ON/OFF Switch:

1. The ST-BD01Q turns off both AC and DC power to the control panel or power supply.
2. The green LED indicates AC power is present.
3. The dual-colored LED indicates DC power is present and if it is 12 or 24VDC (see Table 2).

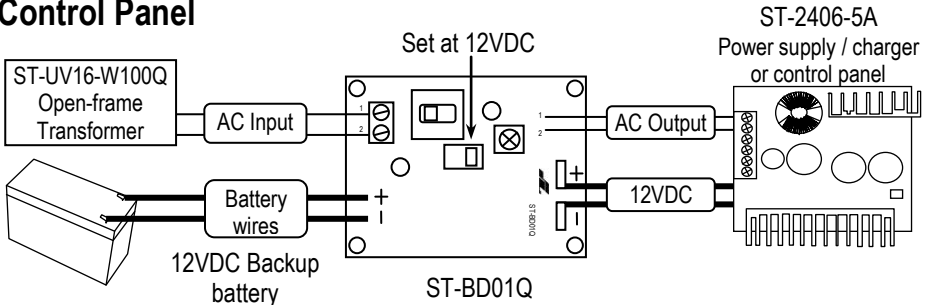
**Table 1: Operating Voltage**

	12VDC	24VDC
DC operating voltage	10~14 VDC	22~28 VDC
AC input	12~18 VAC	24~30 VAC
Adjustable cut-off range	9~10 VDC	19.2~20.3 VDC

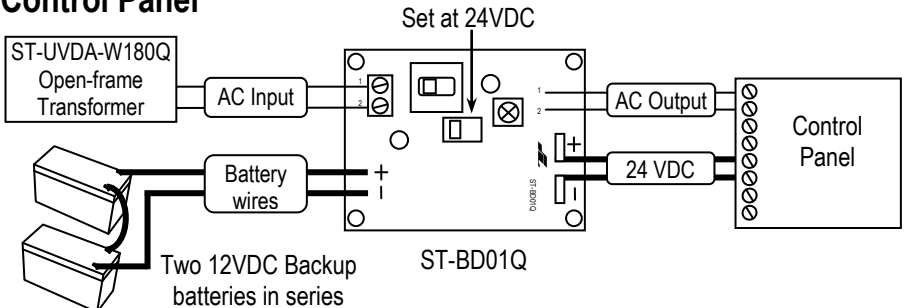
**Table 2: LED Indicators**

Green LED	Off, AC power not present
	On, AC power present
Dual-color LED	Off, DC power not present
	Red, 12VDC present
	Blue, 24 VDC present

## Sample Application #1: Connecting to a 12VDC Power Supply or Control Panel



## Sample Application #2: Connecting to a 24 VDC Power Supply or Control Panel



## Troubleshooting:

- Power indicator LED not lit
- Check to make sure AC power is on
- Check AC power input and output connections
- Check the main switch if it is on
- Voltage selector switch set at 12VDC but dual-color DC LED is blue
- Voltage selector switch set at 24VDC but dual-color DC LED is red
- No voltage present on DC connector (male spade terminals)
- Must have initial voltage from DC power supply or Control Panel at DC connector to activate latching relay
- Dual-color DC LED is off

## Also Available from SECO-LARM:

### Voltage Converter Series



**ST-LA110-TTQ**

(shown)

### Power Supply / Charger Series



**ST-2406-7A**

(shown)

### Programmable Timer Series



**SA-025Q**

(shown)

### Voltage Boosters



**ST-HB105-TTQ**

(shown)

### Open-Frame Transformers



**ST-UV28-T350Q**

(shown)

### Switching Power Supply Series



**ST-UV12-S3.0Q**

(shown)

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