

Low-Voltage Battery Cut-Off

ST-BD01Q

Installation 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 mounting tape

Parts List

1x Low-voltage battery cut-off

2x Double-stick mounting tape

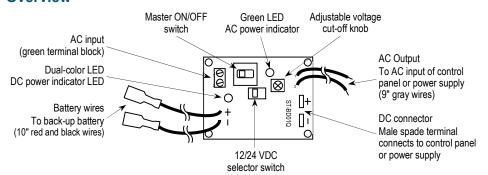
2x Manual

Specifications

Relay contact rating		7A@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 terminals*	
Operating humidity		Up to 90%, non-condensing	
Operating temperature		-40°~149° F (-40°~65° C)	
Dimensions		2 ³ / ₈ "x1 ³ / ₄ "x ⁷ / ₈ " (60x45x22 mm)	
Weight		2.2-oz (63g)	

^{*}Must connect for proper operation

Overview



Important Note



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. Incorrect setting may cause damage.



Installation

- 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 voltage setting (12 or 24 VDC) via the 12/24 VDC selector switch (default: 12VDC).
- 4. If necessary, connect the low voltage AC to the AC input terminal block.
- 5. Connect the gray AC output 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.

NOTE: Must be connected for proper operation.

- 7. Connect the female spade lugs of the battery wires to the back-up battery. **IMPORTANT:** Correct polarity must be observed!
- 8. Use the included double-sided tape and secure the ST-BD01Q module in the desired location.
- 9. Double check all connections and settings before turning the master switch ON.

Operation

Voltage Cut-Off

- The ST-BD01Q's voltage cut-off point is preset at approximately 9.6VDC when set at 12VDC and about 19.6VDC when set at 24VDC.
- 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 Table 1 for the adjustable voltage cut-off range.

Master ON/OFF Switch

- The Master ON/OFF switch on 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 whether it is 12 or 24VDC (see Table 2).

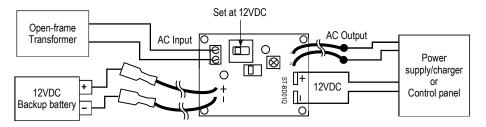
Table 1

	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

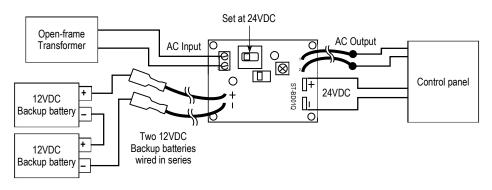
Fig. 2

Green LED	OFF – AC power not present		
Green LED	ON – AC power present		
	OFF – DC power not present		
Dual-Color LED	Red – 12VDC present		
LLD	Blue - 24VDC present		

Sample Application – Connect to 12VDC Power Supply



Sample Application – Connect to 24VDC Power Supply



Troubleshooting

Power indicator LED not lit

Check to make sure AC power is on
Check AC power input and output or

- 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 wrong setting

Voltage selector switch set at 24VDC but dual-color DC LED is red

No voltage present on DC connector (male spade terminals)

Dual-color DC LED is off

 Must have initial voltage from DC power supply or Control Panel at DC connector to activate latching relay

IMPORTANT: Users and installers of this product are responsible for ensuring that the installation and configuration of this product complies with all national, state, and local laws and codes. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.

California Proposition 65 Warning: These products may contain chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for one (1) year from the date of sale to the original 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 60d, 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 the 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 damage of any kind to the purchaser or anyone else.

NOTICE: The SECO-LARM policy is one of continual development and improvement. For that reason, SECO LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints. All trademarks are the property of SECO-LARM U.S.A., Inc. or their respective owners. Copyright © 2024 SECO-LARM U.S.A., Inc. All rights reserved.

SECO-LARM ® U.S.A., Inc.

16842 Millikan Avenue, Irvine, CA 92606 Phone: (949) 261-2999 | (800) 662-0800 Website: www.seco-larm.com Email: sales@seco-larm.com

Order Part# 763-163-3% MI_ST-BD01Q_240126.docx