

SECO-LARM®

Electric Deadbolts

Installation Manual



SD-997B series shown



Model	Operating Voltage	Fail-Safe/Secure	Delay Timer
SD-997A-GBQ	12/24 VDC	Fail-secure	0/3/5/9 secs
SD-997BQ	12VDC	Fail-safe	0/2.5/5/9 secs
SD-997B-GBQ	12/24 VDC	Fail-safe	0/2.5/5/9 secs

SECO-LARM Electric Deadbolts add concealed deadbolt security to most wood or hollow metal doors, with the convenience of electrical operation. They are designed for hollow metal door frames and not recommended for wooden door frames, though the door can be wood or metal.

- Stainless steel for strength and long life with stainless steel bolt, $\frac{5}{8}$ " diameter, $\frac{5}{8}$ " throw
- Magnetic switch senses door position for positive locking
- Door open/close monitor (NO/NC/COM)
- Adjustable door lock delay timer
- Shallow design for use with most metal door jambs
- Powered by a solenoid

SD-997A-GBQ & SD-997B-GBQ includes all the above features plus:

- Attempts to relock multiple times if the door is not closed properly
- Dual voltage – 12/24 VDC

Parts List

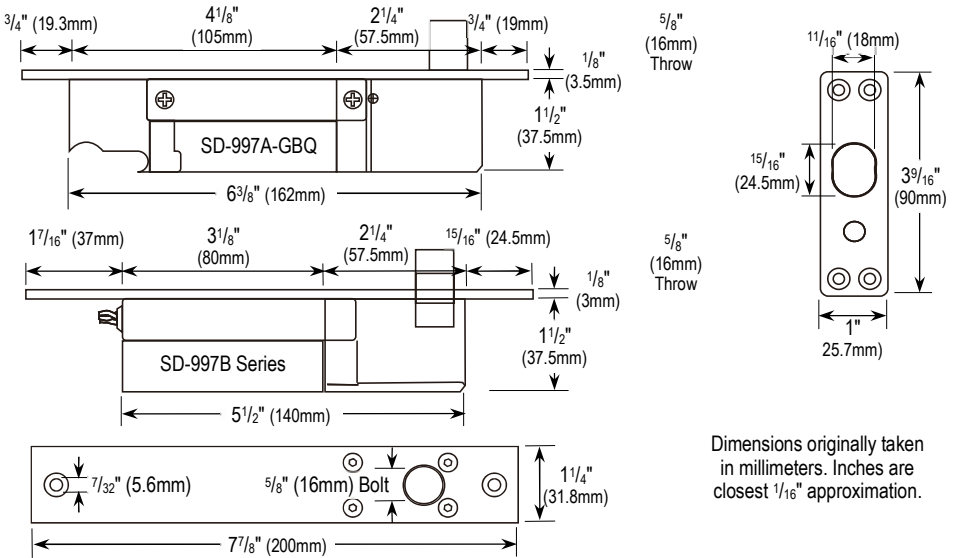
1x Electric deadbolt	2x Mounting tabs (small)	1x Strike plate	4x Templates	1x Manual
1x 6-Pin connector*	2x Mounting tabs (large)	1Pkg Mounting screws	1x Faceplate	3x Keys†
1x 3-Pin connector**	1x Manual lock cylinder†	2x Oval cylinder plate†		

*Do not cut the plugs from the wiring connectors as this will void the warranty †SD-997A-GBQ only

Specifications

Model	SD-997A-GBQ	SD-997BQ	SD-997B-GBQ
Operation type	Fail-secure		Fail-safe
Operating voltage	12/24 VDC	12VDC	12/24 VDC
Current draw	Standby	330mA@12VDC, 205mA@24VDC	
	Active	880mA@12VDC, 470mA@24VDC	
Door status sensor	SPDT 250mA@12VDC (NO/NC/COM)		
Lock delay timer	0/3/5/9 sec (adjustable)	0/2.5/5/9 sec (adjustable)	
Operating humidity	0~85% non-condensing		
Operating temperature	32~194° F (0~90° C)		
Dimensions	Lock	77/8"x11/4"x19/16" (200x31.8x40.5 mm)	
	Strike plate	39/16"x1"x1/8" (90x25.7x3 mm)	
Weight	2-lb 5-oz (1kg)		1-lb 13-oz (0.8kg)

Overview

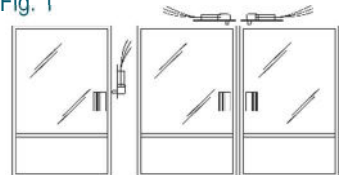


Mounting Location

The deadbolt can be mounted opposite the door hinges, or on the header or on top of the door away from the hinges (see Fig. 1). Mounting on the bottom of the door is not recommended because of the possibility of dirt and dust buildup.

NOTE: If mounted vertically, the SD-997B series must be mounted so the wires exit from the top of the device.

Fig. 1



Installation

1. Tape the templates to the door frame and door (see Fig. 2).
 - a. Align the templates so that the deadbolt of the lock body template is centered on the deadbolt hole of the strike plate template.
 - b. For metal doors, make sure to leave enough space at the ends of the lock body and strike plate templates for the mounting tabs.
2. In the door frame, cut out the space for the lock body (see Fig. 3) and, for SD-997A-GBQ, the holes for the manual lock cylinder (see *Manual Lock/Unlock Cylinder*, pg. 4).
3. Test the fit. The lock body should fit snugly inside the space.
4. Drill two $\frac{3}{16}$ " (5mm) screw holes as on the template, one for each mounting tab, and use screws to affix the mounting tabs inside the door jamb.
5. For wood doors (For metal doors, skip to step 6),
 - a. Drill a $\frac{1}{2}$ " (12mm) magnet hole $\frac{3}{8}$ " (9mm) deep.
 - b. Use a chisel to knock out the $\frac{1}{8}$ " (3mm) deep space as shown on the template.
 - c. Use 4 wood screws to mount the strike plate in the chiseled space. The magnet should fit in the magnet hole.
 - d. Drill the deadbolt hole to $\frac{5}{8}$ " (16mm) depth.
6. For hollow metal doors,
 - a. Cut out the space for the strike plate.
 - b. Drill 2 screw holes for each of the mounting tabs.
 - c. Use screws to fix the mounting tabs inside the hollow metal door.
 - d. Screw the strike plate to the mounting tabs.
7. Set the door lock delay timer (see *Setting the Door Lock Delay Timer*, pg. 4).
8. Connect the wires (see *Wiring Diagram*, pg. 4) and insulate them.
9. Carefully push the wires into the door frame and insert the lock body, taking care not to crimp any wires. Insert the manual lock cylinder for SD-997A-GBQ (see *Manual Lock/Unlock Cylinder*, pg. 4). Remove the faceplate's vinyl covering and place the faceplate over the face of the lock body. Screw the faceplate and lock body to the mounting tabs.

Fig. 2

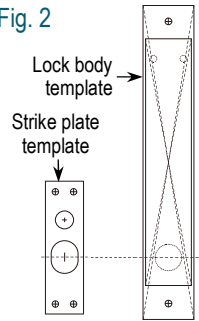
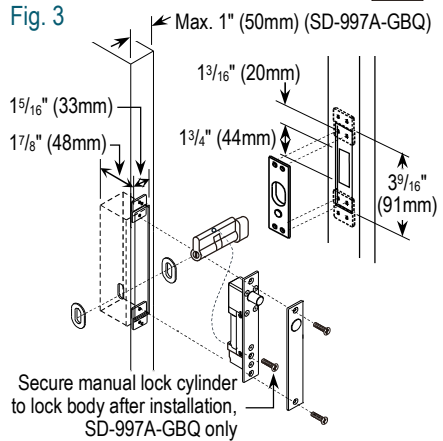


Fig. 3



IMPORTANT NOTES (SD-997A-GBQ & SD-997B-GBQ ONLY)

- **The lock body and strike plate must be properly aligned and in close proximity for the product to function properly.** The gap between the two should be within $\frac{3}{8}$ " (10mm) or less. The lock body has a sensor to detect when the strike plate is near to determine whether the door is closed. If the door is not opened within 4 seconds after an egress button is triggered, the deadbolt automatically relocks.
- If the strike plate is not properly aligned, the sensor may indicate the door is closed, and yet the deadbolt is unable to extend. In this case, the lock repeatedly tries to relock and, if unsuccessful, eventually stops to prevent solenoid burnout.
- If the lock body and strike plate are too far apart, the sensor cannot detect it and the lock body will not attempt to lock the door.

Setting the Door Lock Delay Timer

The door lock delay is set using a pair of DIP switches on the side of the lock body.

Fig. 4

Refer to the diagram in Fig. 4 to determine the settings for your model and your desired delay.

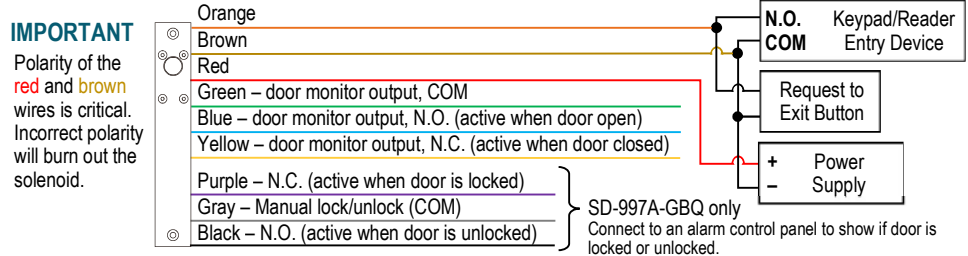
Series				
SD-997A	0s	3s	5s	9s
SD-997B	0s	2.5s	5s	9s

Manual Lock/Unlock Cylinder

Because the SD-997A-GBQ offers fail-secure operation, the door locks if power to the unit is cut. For such a situation, a separate manual lock/unlock cylinder is provided for manual operation.

1. Use the manual door lock cylinder templates provided to cut the required holes (see Fig. 3, pg. 3).
2. Insert the manual door lock cylinder, secure with the long screw through the lock body, and affix the oval cylinder plates.

Wiring Diagram



NOTE: Cutting the wire connectors will void the warranty.

Troubleshooting

Deadbolt does not activate when door closes	<ul style="list-style-type: none"> • Try adjusting the strike plate, lock body position, or shims to reduce the distance between the lock body and the magnet in the strike plate.
Deadbolt activates when door is closed, but does not lock the door	<ul style="list-style-type: none"> • Make sure the deadbolt is going into the deadbolt hole and not hitting the strike plate. Reposition the strike plate if necessary. • If the deadbolt is going into the hole, it may be hitting the bottom of the hole (if it is in a wooden door). In this case, drill a deeper hole.
Need to reset the unit	<ul style="list-style-type: none"> • When testing, if necessary, reset by grounding the orange wire momentarily.
Other problem	<ul style="list-style-type: none"> • Replace the unit, and test again. A problem unit can also be substituted for a working unit in another door frame to see if it works there.

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 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 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 © 2023 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

PITSW2

ML_SD-997x-GBQ_230928.docx