

# SECO-LARM®

## SD-962H-8LAQ

### Mechanical Keypad Door Lock

#### Manual



#### Features:

- Non-handed installation
- External and internal entry lever
- 13 code buttons, over 8,000 possible codes
- Lock code easily changed
- Suitable for door thicknesses from 1<sup>3</sup>/<sub>16</sub>"~2<sup>1</sup>/<sub>8</sub>" (30~54 mm)
- Tubular latchbolt included
- Heavy-duty steel case US32D/630
- Fully mechanical
- No batteries or other power source required
- Free egress from inside
- Simple Installation

# SECO-LARM Mechanical Keypad Door Lock

## Introduction:

The SECO-LARM Mechanical Keypad Door Lock provides secure locking while avoiding the hassle and cost of dealing with providing, duplicating, or replacing keys. Unlike keyed locks, the lock code can be easily changed by the user at any time. The code is not sequential, so the code letters/digits can be entered in any order. Since it is completely mechanical, there is no need to run wires from a power supply or replace batteries. The inside handle always operates to allow safe egress in an emergency.

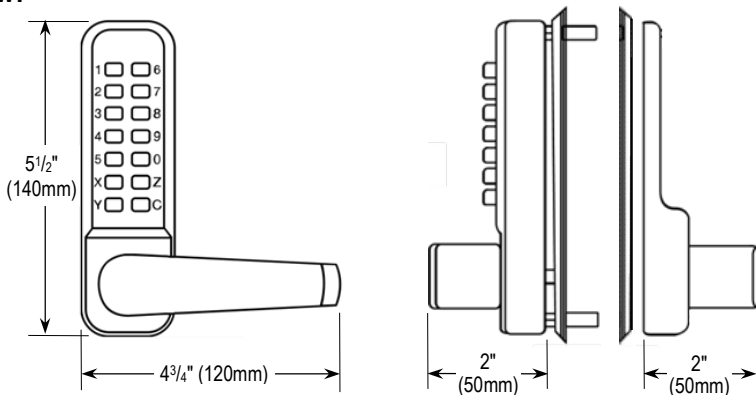
## Parts List:

1x Exterior handle assembly (with buttons)	4x Code tumblers (2 red, 2 blue)	4x Wood screws (2 for latchbolt, 2 for plate)
1x Interior handle assembly	1x Latchbolt support post	2x Machine screws (36mm)
1x Strike plate	2x Hexagonal mounting posts	2x Machine screws (48mm)
1x Strike dust box	3x Spindles (75, 85, 100 mm)	2x Neoprene door seals
1x Latchbolt	1x Code card	1x Tweezers
1x Hex wrench	1x Manual	

## Specifications:

Type	Fully mechanical keypad lock
Code length	4-6 Digits (0-9, X, Y, and Z)
Handed	Field reversible (factory default – internal, right-handed / external, left-handed)
Bolt throw	1/2" (13mm)
Backset	2 3/4" (70mm)
Housing	Heavy-duty satin finish stainless steel US32D/630
Dimensions	2" x 4 3/4" x 5 1/2" (50x120x140 mm)
Weight	3-lb 1-oz (1.35kg)

## Overview:



## The Lock Code:

Each lock assembly is given a random code at the factory and that code is printed on a card shipped with the lock. The code can be easily changed as shown below.

### NOTES:

- A. When changing the lock code, it is crucial that you press and hold the "C" button throughout the duration of the code changing process. Failure to do so will damage the lock code module.
- B. **Never** remove the tumbler from the "C" position (Fig. 2).
- C. Take care to insert the lock code tumblers properly. The red or blue marks on the code tumblers should all be in line if the code tumblers are inserted correctly.
- D. Place a drop cloth on a good, flat surface to help prevent screws and code tumblers from accidentally bouncing off the table and getting lost.
- E. The lock code is not sequential. In other words, if the lock code numbers are 135Y, any sequence (Y135, 513Y, 3Y51, etc.) will unlock the door

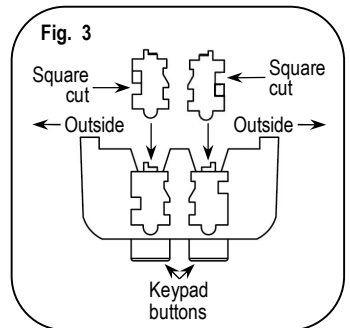
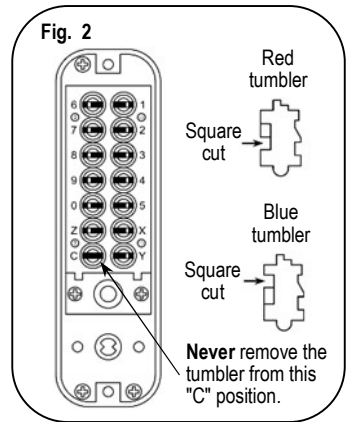
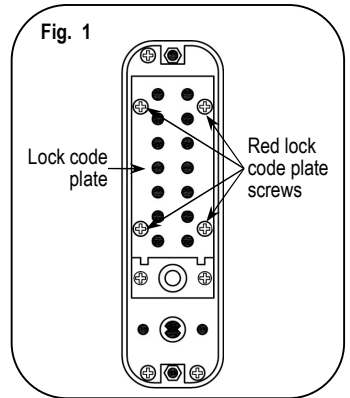
**IMPORTANT:** Failure to adhere to the above could result in a damaged lock code module or lost parts.

## Changing the Lock Code

1. From the back of exterior assembly, remove the 4 RED lock code plate retaining screws (see Figs. 1 and 2).
2. The factory setting uses 5 RED active lock code tumblers, 8 BLUE inactive lock code tumblers, and 1 code clearing tumbler in the "C" position.

**IMPORTANT:** Never remove the code clearing tumbler from the "C" position.

3. Determine the desired lock code and write it down to avoid any mistake. Use that to determine which code tumblers must be replaced. Red code tumblers represent the code and blue code tumblers represent the numbers/digits that are not part of the code.
4. While pressing the "C" button, use the provided tweezers to remove one or more code tumblers as needed for the desired lock code (the numbers for each button are etched into the housing next to its corresponding code tumbler, see Fig. 2).
5. While continuing to hold the "C" button down, insert the appropriate colored code tumbler(s) as needed. Ensure that each code tumbler is inserted such that the side with one square cut is facing the outside of the housing (see Fig. 3).



# SECO-LARM Mechanical Keypad Door Lock

## Setting the Lock Code (Continued):

6. Replace the lock code plate and secure it with the 4 RED screws.
7. Check the code to ensure accuracy before installing. First press the "C" (Clear) button followed by the chosen code and move the handle on the keypad assembly to test the lock.

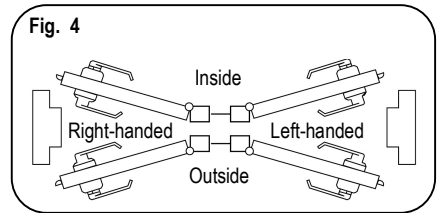
### IMPORTANT NOTES:

- A. Spare code tumblers are provided to increase the number of code digits if needed.
- B. Carefully note each code tumbler's orientation as it is inserted into the lock code assembly. The square cut should be oriented toward the outside of the housing.
- C. Do not leave any code tumbler position empty.
- D. Store the manual, actual code, and unused code tumblers in a safe place.

## Determine Door Swing and Handedness:

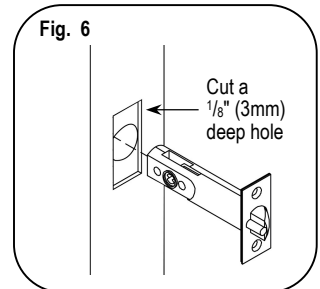
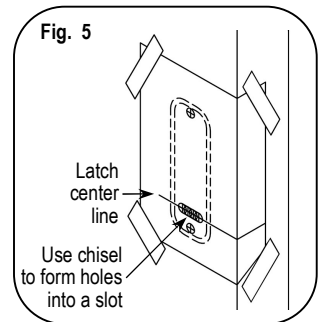
Determine whether the door is right- or left-handed.

When facing the door from the outside, if the hinge is on your right, then the door is right-handed. If the hinge is on your left, the door is left-handed (see Fig. 4).



## Prepare the Door and Install the Latchbolt:

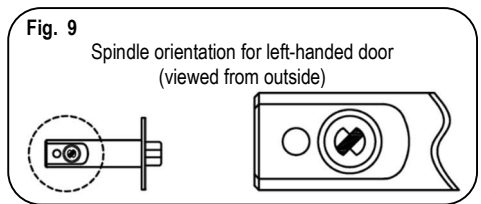
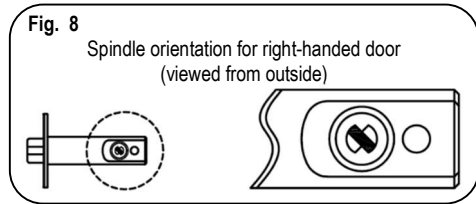
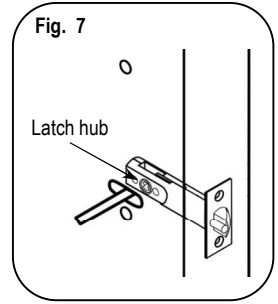
1. Fold the template on the dotted line and place it on the door so that the line marked "Latch center line" is aligned with the latch strike plate's center line when the door is closed. Use tape to hold the template temporarily in place (see Fig. 5).
2. Drill the six  $\frac{3}{8}$ " (10mm) holes as shown on template.
3. Viewing the door from the latch edge, mark the horizontal center point on the "Latch center line" and drill a 1" (25mm) hole to a depth of  $3\frac{3}{4}$ " (95mm).
4. Use a chisel to form the 4 horizontally-aligned  $\frac{3}{8}$ " (10mm) holes into a single slot.
5. Insert the latch into the latch hole and mark around the faceplate to determine the size of the recessed area needed to allow the faceplate to be flush with the door.
6. After marking around the faceplate, remove the latch and use a chisel to cut a  $\frac{1}{8}$ " (3mm) deep hole as marked. This will ensure that the faceplate fits flush with the door (Fig. 6).
7. Insert the latch assembly, ensuring that curved part of the latchbolt is correctly oriented for the door's swing. Secure the latch assembly with 2 wood screws provided.



**Prepare the Door and Install the Latchbolt (Continued):**

**Positioning the Spindles**

8. Choose the correct spindle that best matches the door's thickness. For doors less than  $1\frac{7}{16}$ " (37mm), use the shorter spindle  $2\frac{15}{16}$ " (75mm). For doors  $1\frac{7}{16}$ "~ $1\frac{15}{16}$ " (37~50mm) use the  $3\frac{3}{8}$ " (85mm) spindle. For thicker doors, use the  $3\frac{15}{16}$ " (100mm) spindle.
9. Position the spindle in the center, through the latch hub (Fig. 7) according to the door's handing as shown in Figs. 8 and 9.



**Prepare the Lock for Mounting:**

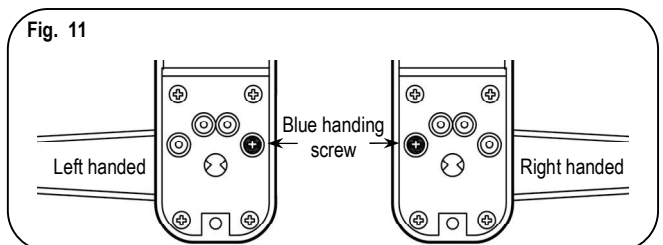
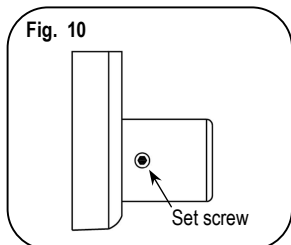
**Changing the Interior Latchbolt Handedness (for left-handed doors)**

**NOTES:**

- A. The interior lock assembly is set for right-handed doors from the factory. You should only need to set the handedness of this unit if your door is left-handed.
- B. The exterior lock assembly is already set for left-handed doors from the factory.

*Interior Lock Assembly*

1. Hold the interior handle assembly as it would be oriented for the handedness and swing of the door to determine the correct handle orientation.
2. Loosen the set screw (see Fig. 10) and rotate the handle to its correct horizontal position if necessary (see Fig. 11). Tighten the set screw to maintain handle position.
3. Check that the lever handle now turns in a clockwise direction and returns freely.
4. Viewing the interior handle assembly from the back, note the blue handing screw's location—right side for left-handed and left side for right-handed doors (see Fig. 11).
5. If necessary, remove and change the location of the blue screw depending on the orientation of the interior handle.



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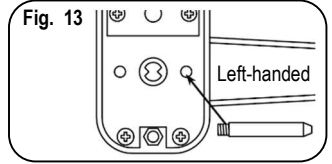
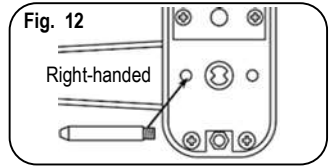
## Prepare the Lock for Mounting (Continued):

### Exterior Handle Assembly

The handedness of the external handle assembly (default, left-handed) will be set after installation.

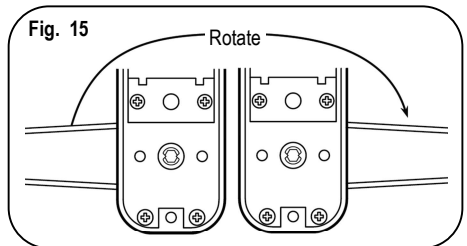
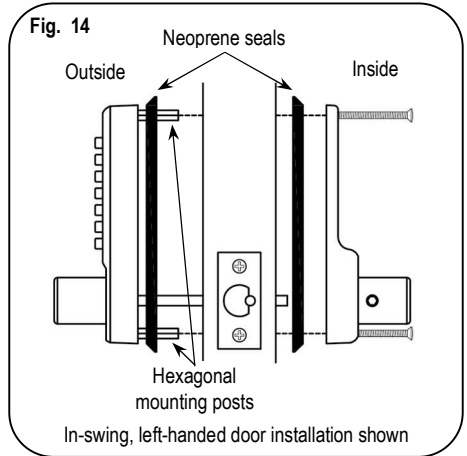
### Installing the Latchbolt Support Post

From the back of the exterior handle assembly, fit the latchbolt support post in the correct position. For right-handed doors, the support post should be fitted on the left. For left-handed doors, the support post should be fitted on the right (Fig. 12 and 13).



## Mount the Lock:

1. Select the appropriate screws depending on the door's thickness. For doors less than  $1\frac{7}{8}$ " (48mm), use the shorter  $1\frac{7}{16}$  (36mm) screws.
2. Fit the neoprene seals to both the exterior and the interior handle assemblies (see Fig. 14).
3. Screw the two hexagonal mounting posts in place to the exterior handle assembly (Fig. 14).
4. Hold the exterior handle assembly onto the door with the spindle in place and ensure that the latchbolt support post engages the hole in the latchbolt assembly.
5. Hold the interior handle assembly in place on the inside of the door so that the spindle is properly set in the handle interior handle assembly hub.
6. Screw both sides together using the machine screws on the top and bottom.
7. Before final tightening of screws, make sure the door lock is vertical. Test to make sure the lock functions correctly and moves easily.

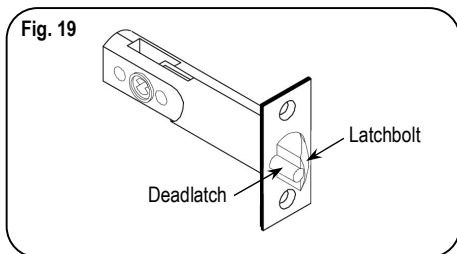
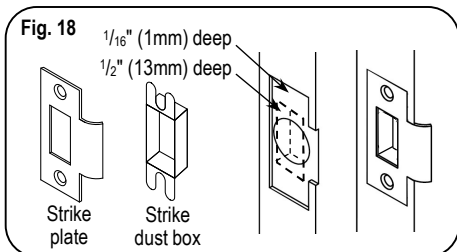
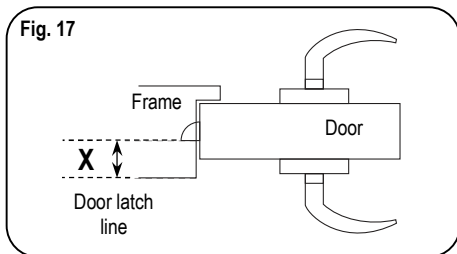
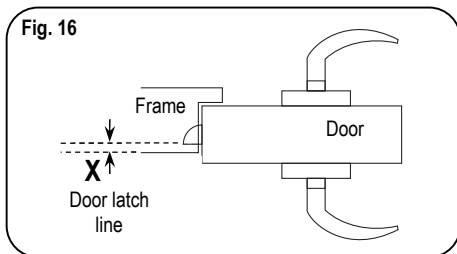


**NOTE:** DO NOT over-tighten the machine screws as this can lead to poor operation or damage the lock assembly.

8. For right-handed doors, change the exterior lever handing at this time.
  - a. To prevent damage from forced entry the external handle is fitted with a clutch.
  - b. To change the handle's orientation, simply apply force to rotate the handle to its proper handing (see Fig. 15).
9. Check that the set code is able to unlock the door before closing it to avoid being locked out.

## Install the Strike Plate:

1. Partially close the door and mark where the latchbolt contacts the door frame.
2. Close the door. With the door in a closed position, measure the distance from the door latch to the edge of the door frame. This is the door latch line. This is shown as "X" in Figs. 16 and 17.
3. Open the door and mark the door latch line on the frame.
4. Using the strike plate as a template, mark the outer edges of the strike plate, the inner hole and the screw holes.
5. Using a chisel, cut a  $\frac{1}{16}$ " (1mm) deep recess for mounting the strike plate so that it fits flush with the frame. (Fig. 18.)
6. Use the strike dust box as a template to mark, drill, and chisel out the latchbolt hole to a depth of at least  $\frac{1}{2}$ " (13mm) to accommodate the strike dust box (Fig. 18, dotted lines).
7. Insert the strike dust box into place along with the strike plate. Secure both with the provided wood screws.
8. Test that the door closes easily and that latchbolt fits securely into the strike plate aperture. Ensure that that the deadlatch (Fig. 19) does not enter the strike plate aperture. If it does, loosen and reposition the strike plate as necessary.



## User Operation:

To unlock the door:

1. Press the "C" (clear) key to make sure that no keys are already pressed or partially pressed.
2. Press each key in the lock code in any order. The lock code is not sequential and therefore the keys can be pressed in any order. For example, if the lock code numbers are 135Y, any combination of these numbers (Y135, 513Y, 3Y51, etc.) will unlock the door.
3. Turn the lever to open the door.

In case of an error or if the door doesn't unlock, press the "C" (clear) key and press the keys in the lock code again.

# SECO-LARM Mechanical Keypad Door Lock

## Troubleshooting:

The code doesn't unlock the door.

- Press the "C" (clear) key and enter the passcode again.
- Ensure that each key (including the "C" key) has been fully pressed.
- Remove the lock and the lock code plate to ensure that each letter/digit in the chosen code is represented by a red code tumbler and all other code tumblers are blue.
- Remove and reinsert the code tumblers, ensuring that they are correctly oriented and fully inserted.

The latch lever turns, but the latchbolt does not retract

- The spindle used is too short for the door's thickness. The spindle must be long enough to simultaneously engage both the interior and exterior levers. Use a longer spindle.

## Also Available from SECO-LARM®:

### Door Closers



SD-C121-S shown

### Surface Mount Magnetic Contacts



SM-S200Q/W shown

### Recessed-Mount Magnetic Contacts



SM-207-5Q/BR shown

### Miniature Single Photobeam Sensors



E-964-S50TB shown

**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 related to locking and egress devices. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.

**LIMITED LIFETIME WARRANTY:** This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for the lifetime of the product (one (1) year from the date of sale to the original customer for the finish). 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. For products sold in countries other than the US, the warranty is 1 (one) year from the date of sale to the original customer.

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## SECO-LARM® U.S.A., Inc.

16842 Millikan Avenue, Irvine, CA 92606  
Phone: (949) 261-2999 | (800) 662-0800

Website: [www.seco-larm.com](http://www.seco-larm.com)  
Email: [sales@seco-larm.com](mailto:sales@seco-larm.com)



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