Essentials of Operating the
X-09/X-10 Combination Lock

DoD Lock Program
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https://www.navfac.navy.mil/go/locks
Turning the dial in either direction operates a generator, which powers the lock

- **Full wrist turns** should be used when dialing this lock.
- When any display appears on the LCD, the lock is fully powered.
- When the lock is fully powered, the display will remain for 40 seconds.
- **After 40 seconds of no dialing** (or after very slow dialing), the LCD will go blank.
- **After another 2 minutes**, the lock is completely powered down.
- If the LCD goes blank while you are operating the lock, you must begin the operation again – the lock "forgot" whatever you had done.

Entering the Combination

- Dial the combination: left, right, left, then right to retract the bolt
- **Left = counterclockwise (CCW), right = clockwise (CW).**
- Stop on the target number when it appears on the LCD; reverse direction to select your choice and proceed to the next number.
- If you pass the target number, continue dialing until the number reappears.
- If you pass the target number by no more than three numbers, slowly reverse direction. The display will jump four numbers up (or down); reverse direction again, carefully dial to your target number, and continue.
- After entering the third number of the combination, turn right; “OP” will be displayed, with an arrow to the right. Continue dialing right to retract the bolt.
- **DO NOT** continue spinning to the right after the bolt retracts.
- **DO NOT FORCE THE DIAL**

Lightning Bolts

- Indicate a violation of the lock’s protective software
- Five possible causes:
  - Entering an incorrect combination.
  - Entering the combination in less than 10 seconds.
  - Turning the dial more than 1-1/3 revolutions without pausing at least 1/4 second
  - Reversing dialing direction without pausing at least 1/4 second
  - Turning the dial with short jerky movements
- **Penalty Mode:** If there have been ten consecutive failed attempts (lightning bolt generated), the lock will not be able to be operated until it has been kept powered up for 3 minutes. If the number of failed attempts reaches 15, the penalty increases to 4 minutes. Dialing the lock open clears this penalty and "failed attempts" count.
Audit Features

- May be displayed only when powering the lock up from a powered-down condition

**Total openings count**

- Powering the lock up to the right will yield a flashing display: a left arrow followed by two digits, alternating with two digits followed by a right arrow. This is a four-digit number, indicating the number of times the lock has been opened.

- This number is not resettable. After the lock has been opened 9,999 times, the display will indicate 9999; after the next opening, it will indicate 0000, etc.

**Failed attempts count**

- When the lock is powered up to the left (or dialed left after being powered up to the right), a lightning bolt with a two-digit number will be displayed if there have been 3 consecutive failed attempts since the last opening. The number on this display will increase to a maximum display of 99 if there are continued failed attempts. The display will vanish as you continue dialing left. The failed attempts count (and the penalty, above) will reset the next time the lock is opened.

**Firmware level and date (X-10 ONLY)**

- Allow the lock to power down. (After 40 seconds, the display will go blank).

- Once the audit count is displayed, you may continue to Dial to the Right (CW) to determine the Firmware Level and Date.
  
  - **FL prompt (Firmware Level)** will be followed by the six-digit firmware identification. Example: 00.01.18
  
  - **Fd prompt (Firmware Date)** will be followed by the six-digit firmware date. Example: 05.07.12

- After the firmware level and date has been determined; you may dial to the Left (counter-clockwise) to start dialing a combination or let the lock power down.

To check whether an X-09/X-10 in a container or door is locked:

1. Try to turn the dial right a complete turn.
2. Try to turn the handle the correct amount in the correct direction.
3. If you can do 1) but can’t do 2), the lock is locked and the container or door is locked.
When changing the combination:

- Open the drawer or door.
- Release the bolt work of the drawer or door so that it is fully extended.
- Extend the bolt of the lock by turning the dial left a complete revolution.
- Use only the proper change key.
- Proceed with the changing sequence.
- **Remove the change key** after the changing sequence is completed and “PO” is displayed.
- Test the new combination before closing the drawer or door.
- **IMPORTANT** - Fill out a new **SF700 form** with the new combination and store the form appropriately.