

Revision 2
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The attached "Comparative Reference Guide" was compiled by Andy Dennison, CPS, CPL using information provided by the manufacturer of the X-0 series of locks. It may be freely distributed as long as it remains unchanged in text and format and credit is given to its compiler/author.

The margins & page format is designed to be printed double sided, with room for punching holes in the left side of the guide so it may be placed in a binder, notebook, folder, etc.

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Save paper, print it double sided!

Some trouble was found with the images after converting the guide into a PDF file. If you find odd colors in the images, try setting your print setup to print only in black & white. The document is black and white anyway.

--Andy Dennison, CPS, CPL
--Silver Spring, MD

COMPARATIVE REFERENCE GUIDE

X-07 - X-08 - X-09

This is a guide to compare the similarities and differences between the X-07, X-08 and X-09 locks. It may be used as a guide for each lock, however the Operating Instruction manual for each lock may give more detail. The biggest difference in operating the three locks is the dialing procedures. The X-07 and X-09 are dialed and opened in a Left-Right-Left-Right sequence, while the X-08 is powered up to the Left, but dialed and opened to the Right. The X-08 also has a very different wrong combination penalty. It will go into and stay in an "SA" condition until reset. The X-07 and X-09 have timed penalties. Instructions and procedures regarding the X-08's error conditions and reset combination are not contained here. These may be found in the X-08 operating instructions manual.

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This reference compiled and edited by Andy Dennison, CPS, CPL

X-08

Note: If at any time the dial remains stationary for more than 10 seconds, the lock will reset (LCD will go blank) requiring the operator to re-dial the entire combination or restart the operation.

X-07 and X-09

Note: If at any time the dial remains stationary for more than 40 seconds, the lock will reset (LCD will go blank) requiring the operator to re-dial the entire combination or restart the operation.

OPEN THE LOCK (Factory Combination = 50-25-50)

Single Combination Mode:

1. Dial **left** until lock is "powered". Stop. **E1**→ will be displayed.
2. Dial **right** to first number of combination. **E2**→ will appear.
3. Dial **right** to second number of combination. **E3**→ will appear.
4. Dial **right** to third number of combination. **OP**→ will appear.
5. Dial **right** to retract bolt.

Dual Combination Mode:

First Operator

1. Dial the first combination as in Single Mode.
2. **←dL** will appear. Dial left. **C2**→ will be displayed.

Second Operator

3. Within 10 seconds dial **right** to first number of the second combination. **E2**→ will appear.
4. Dial **right** to second number of combination. **E3**→ will appear.
5. Dial **right** to third number of combination. **OP**→ will appear.
6. Dial **right** to retract bolt.

Single Combination Mode:

1. Dial **left** until lock is "powered".
2. Continue dialing **left** to first number of combination.
3. Dial **right** to second number of combination.
4. Dial **left** to third number of combination.
5. Dial **right**. After **OP**→ is displayed, continue dialing right to retract bolt.

Dual Combination Mode:

First Operator

1. Dial the first combination as in Single Mode.
2. Dial **right** until **←C2** or **←E2** is displayed.* (see note)

Second Operator

3. Within 40 seconds dial **left** to first number of the second combination.
4. Dial **right** to second number of combination.
5. Dial **left** to third number of combination.
6. Dial **right**. After **OP**→ is displayed, continue dialing right to retract bolt.

* **Note:** "Enter second combination" is displayed as **E2** on an X-07 and as **C2** on an X-08 or X-09

X-07, X-08 and X-09

Supervisory/Subordinate Mode:

• To Unlock (UL)

To enable lock access for the Subordinate combination, dial the Supervisor combination as if dialing the combination to open the lock. **UL** will appear on the display. Once the lock is in an Unlocked status, the Subordinate combination can be used to open the lock at any time.

• To Lock Up (LU)

To disable lock access for the Subordinate combination, reenter the Supervisor combination. **LU** will display and the Subordinate combination will no longer open the lock.

COMPARATIVE REFERENCE GUIDE

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X-08

X-07 and X-09

SET OPERATING MODE and CHANGE COMBINATION(s):

1. Insert Change Key into back of lock.
2. Release container locking bolts if necessary.
3. Dial **left** until lock is "powered". The Change Key symbol will be displayed and **EI→** will appear.
4. Dial **right** to dial the current combination(s)* (see note), or the lock Serial Number may be used.** (see note) **SL→** will appear.
5. Dial **right** and stop on the number for your mode selection:
1-Single Mode, **2**-Dual Mode, or
3-Super/Sub Mode
Once the mode is selected, **←dL** will appear.

If selection 1, Single Combination Mode:

6. Dial **left** until **EC→** appears.
7. Dial **right** to dial the new combination as if dialing the combination to open the lock. The new combination will be displayed twice, two digits at a time†† (see note), followed by **PO**.
8. Pull Out the change key. **←dL** will appear.
9. Dial **left**. **CC→** will appear.
10. Dial **right** to dial new combination again. Once **OP→** is displayed, the new combination is set.

If selection 2 or 3, Dual or Super/Sub Mode:

6. Dial **left** until **C1→** appears.† (see note)
7. Dial **right** to dial the first new combination (Supervisory if Super/Sub Mode) as if dialing the combination to open the lock. The new combination will be displayed twice followed by **←dL**.
8. Dial **left** until **C2→**† (see note) appears.
9. Dial **right** to dial the second new combination (Subordinate if Super/Sub Mode) as if dialing the combination to open the lock. The new combination will be displayed twice, two digits at a time†† (see note) followed by **PO**.
10. Pullout the Change Key. **←dL** will appear.
11. Dial **left** until **CC→** appears.
12. Dial **right** to dial new combinations again for confirmation.
13. Once **OP→** is displayed, the new combinations are set.

Notes for changing combination(s):

**If the lock is currently in Dual Mode, both combinations must be entered. If the lock is currently in Supervisor/Subordinate Mode; both combinations must be entered for the X-07, only the Supervisor Combination is entered for the X-08 or X-09.*

***If using the serial number method on an X-07 or X-09, dial an incorrect combination to get a lightning bolt before inserting change key. For an X-08, simply use the serial number in place of the current combination.*

†"Enter first combination" is displayed as E1 on an X-07, but as C1 on an X-08 or X-09. "Enter second combination" is displayed as E2 on an X-07, but as C2 on an X-08 or X-09.

††For all three models, if the desired new combination is not displayed, you may pull out the change key and the lock will allow you to re-dial the desired new combination. You must pull out the change key while the display is still flashing. When EC appears, insert the change key again and dial the desired combination.

1. Insert Change Key into back of lock.
2. Release container locking bolts if necessary.
3. Dial **left** until lock is "powered". The Change Key symbol will be displayed.
4. Dial **left-right-left** to dial the current combination(s)* (see note), or the lock serial number may be used.** (see note)
5. Dial **right** until **←SL** is displayed.
6. Dial **left** to select the mode of operation:
1-Single Mode, **2**-Dual Mode, or
3-Super/Sub Mode
Once the mode is selected, pause briefly.

If selection 1, Single Combination Mode:

7. Dial **right** until **←EC** appears.
8. Dial **left-right-left** to dial the **new combination** as if dialing the combination to open the lock.
9. Dial **right**. The new combination will be displayed three times on an X-07 or twice on an X-09, two digits at a time†† (see note), followed by **PO**.
10. Pull Out change key. **←CC** will appear.
11. Dial **left-right-left** to dial **new combination** again for confirmation. Once **OP→** is displayed, the new combination is set.

If selection 2 or 3, Dual or Super/Sub Mode:

7. Dial **right** until **←E1** or **←C1** appears.† (see note)
8. Dial **left-right-left** to dial the **first new combination** (Supervisory if Super/Sub Mode) as if dialing the combination to open the lock.
9. Dial **right**. The new combination will be displayed three times on an X-07 or two times on an X-09, two digits at a time, followed by **PO**.
10. Dial **right** until **←E2** or **←C2** appears.† (see note)
11. Dial **left-right-left** to dial the **second new combination** (Subordinate if Super/Sub Mode) as if dialing the combination to open the lock.
12. Dial **right**. The new combination will be displayed three times on an X-07 or twice on an X-09, two digits at a time†† (see note), followed by **PO**.
13. Pull Out change key. **←CC** will appear.
14. Dial the **new combinations** once again for confirmation.
15. Once **OP→** is displayed, the new combinations are set.

COMPARATIVE REFERENCE GUIDE

X-07 - X-08 - X-09

X-08

X-07 and X-09

CLOSE / RE-LOCK CONTAINER

1. Close container door.
 2. Turn dial **left** a minimum of one complete revolution to extend the bolt.
 3. Turn dial **right** a minimum of one complete revolution to ensure it is locked.
- Note:** *The Dial should turn freely in either direction without catching or binding when the bolt is extended and the container is locked.*

TO CHECK THE NUMBER OF SUCCESSFUL OPENINGS

1. When lock is powered down and in the locked position. Dial **continuously** to the **left** to display the total number of successful openings (two digits at a time).
 - Flashing number with left arrow represents the first two digits of openings count. Example ←00.
 - Flashing number with right arrow represents last two digits of openings count. Example 54→.
1. Dial **right** when lock is powered down. When lock “powers up”, Two numbers will be flashed.
 - Flashing number with left arrow represents the first two digits of openings count. Example ←00.
 - Flashing number with right arrow represents last two digits of openings count. Example 54→.

TO CHECK UNSUCCESSFUL ATTEMPTS COUNT

1. Dial left when lock is powered down. OR
2. Dial left after checking successful openings count (For an X-08, simply pause at this point.)
 - A two digit number with a Lightning Bolt represents unsuccessful attempts count. This count only appears if three or more attempts were made.

IF THE SAFE IS LOCKED WITH THE CHANGE KEY INSERTED IN THE LOCK

1. Dial **left** until lock is "powered". Pause briefly.
2. **Continuously** dial left until **E1** is displayed **without change key symbol** on display.
3. Dial the current combination(s) just as you normally would to open the lock.
1. Allow the lock to power down. (After 40 seconds, the display will go blank. Wait an additional minute for full power down.)
2. Dial right until lock is "powered" and the number of successful openings is flashing.
3. Dial the current combination(s) just as you normally would to open the lock.

Note: *During step 2, you must not stop or pause. The display will go blank at some point, however you must still keep dialing left.*

WRONG COMBINATION PENALTIES

X-07

An X-07 lock will initiate a lockout of approximately **two minutes** after **ten** consecutive wrong combinations have been dialed.

X-08

An X-08 lock will register a Surreptitious Entry Attempt (SA) condition when **fifteen** unsuccessful attempts to open the lock are made. The condition must be reset using the **Reset Combination** before the lock will open and operate normally.

For "Error Conditions" (SA, CE and SC) and other matters concerning Reset Combinations, refer to the X-08/CEX-08 Operating Instructions manual.

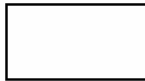
X-09

An X-09 lock will initiate a timed lockout of **3 minutes** when **ten** consecutive wrong combinations have been dialed. *Each additional unsuccessful attempt to open the lock will initiate another timed lockout.* If the number of consecutive unsuccessful attempts reaches **fifteen**, the timed lockout increases to **4 minutes**. *The lockout period is only timed while the lock is powered.* To keep the lock powered until the timed lockout has expired, turn the dial every 30 seconds. A successful opening resets the error count.

COMPARATIVE REFERENCE GUIDE

X-07 - X-08 - X-09

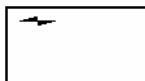
Guide to LCD symbols

**Blank Display**

The lock has been reset or is powered down.

**OP**

Open Right. (Arrow always points to right.)

**Lightning Bolt**

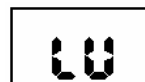
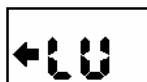
Incorrect Combination Dialed.

**Lightning Bolt with Error Count**

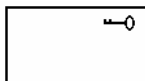
Incorrect combination dialed xx times. (The error count is only displayed when there have been 3 or more consecutive unsuccessful attempts.)

**UL**

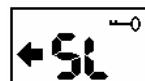
Unlocked. (Arrow points left on X-07. No arrow on X-08 and X-09.)

**LU**

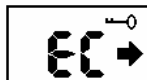
Lock Up. (Arrow points left on X-07. No arrow on X-08 and X-09.)

**Key**

Change Key Symbol (The Change Key has been inserted and the lock is in Change Combination Mode.)

**SL**

Select Mode of Operation. (Arrow points right on X-08, left on X-07 and X09.)

**EC**

Enter Combination. (Arrow points right on X-08, left on X-07 and X09.)

**PO**

Pull Out Change Key. (Arrow points left on X-07. No arrow on X-08 and X-09.)

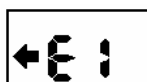
**CC**

Confirm Combination(s). (Arrow points right on X-08, left on X-07 and X09.)

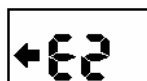
COMPARATIVE REFERENCE GUIDE

X-07 - X-08 - X-09

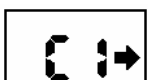
Guide to LCD symbols



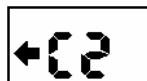
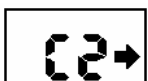
E1 (X-07 only)
Enter First Combination. (Arrow always points to left.)



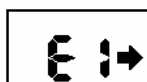
E2 (X-07 only)
Enter Second Combination. (Arrow always points to left.)



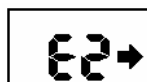
C1 (X-08 and X-09)
Enter First Combination. (Arrow points right on X-08, left on X09.)



C2 (X-08 and X-09)
Enter Second Combination. (Arrow points right on X-08, left on X09.)



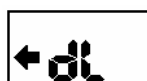
E1 (X-08 Only)
Enter First number of Combination. (Arrow always points to right.)



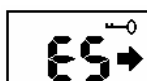
E2 (X-08 Only)
Enter Second number of Combination. (Arrow always points to right.)



E3 (X-08 Only)
Enter Third number of Combination. (Arrow always points to right.)



dL (X-08 only)
dial Left.



ES (X-08 only)
Enter Serial number. (Arrow always points to right.)



SA (X-08 only)
Surreptitious entry Attempt exists.

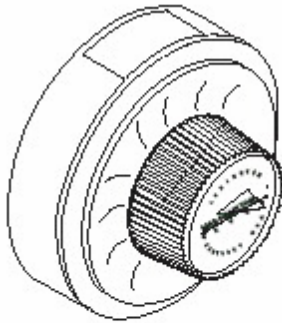
CA (Covert entry detection Active) and CE (Covert Entry) are found only on CEX-07 and CEX-08 locks. SC (Surreptitious attempt and Covert entry) is only found on CEX-08 locks. These symbols will be displayed similar to SA above. More information may be found in the operating instruction manuals.

Note: The change key symbol may or may not be displayed with some of the symbols.

COMPARATIVE REFERENCE GUIDE

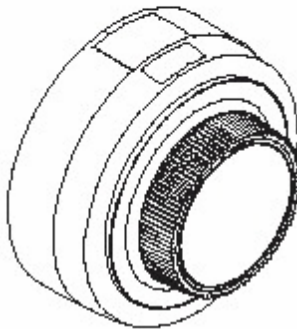
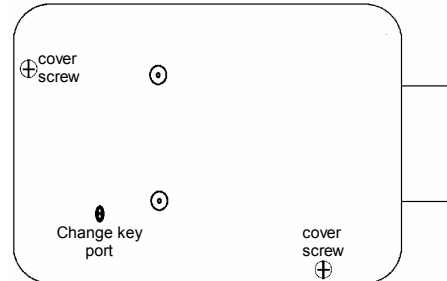
X-07 - X-08 - X-09

Visual Differences



X-07

- Smaller dial.
- Shallower dial ring.
- Black in color.
- Normal LCD display.
- No LOBC pin.

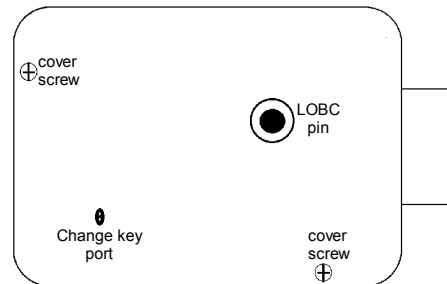


X-08

- Larger dial.
- Deeper dial ring.
- Black in color.
- Normal LCD display.
- LOBC pin on back.

X-09

- Larger dial.
- Deeper dial ring.
- Gray in color.
- Limited view LCD display.
- LOBC pin on back.



Note: X-08 and X-09 locks must have the LOBC pin installed.
Without them the locks do not meet specifications.