OPERATING INSTRUCTIONS

X-08™/CEX-08™

Type 1F
HIGH SECURITY ELECTRONIC LOCK

Please read all instructions carefully before putting your X-08/CEX-08 into operation.

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For Technical Support Call: 1-800-950-4744   2

INTRODUCTION

The X-08/CEX-08 uses sophisticated computer security and makes dialing much easier than that of traditional combination locks. The microprocessor in the lock recognizes a number as part of a combination when you stop dialing on that number and wait for the number to be registered. This enters the number into the computer's memory.

Your X-08/CEX-08 lock has been shipped preset in the Single Combination Mode with the factory combination of 50-25-50.

If you have a CEX-08 lock, be sure to read the section on "CEX-08 Features".

LOCK ON BACK COVER

The **L**ock **O**n **B**ack **C**over (**LOBC**) feature provides a locking mechanism that locks the back cover in place after installation. The design is such that the back cover cannot be removed without visible damage unless the combination is known, regardless of whether the lock is locked or unlocked.

> **Note:** *Because of the LOBC feature, you cannot remove the cover to read the lock serial number after the lock is installed. Since you may need the serial number of the lock to reset it if the combination is lost or forgotten, it is important that you keep a record of the lock serial number in a secure place.*

To Remove the Lock on Back Cover:
1. Unlock the lock and retract the bolt in order to gain access to the back cover.
2. Release the container locking bolts.
3. Locate the unlocking button on the back cover.
4. Turn the dial to the left to extend the bolt.
5. Dial the combination(s) to open the lock. **OP** will appear.
6. Before turning the dial to the right to retract the bolt, pull out on the unlocking button.
7. While holding the button out, turn the dial slowly to retract the bolt to the unlocked position.

> **Caution:** *Removal of the back cover with the lock bolt extended will cause a Covert Entry condition on the CEX-08. This condition requires that the Covert Entry (CE) indicator be reset. See the section on CEX-08 Features.*

8. Remove the back cover screws.
9. Remove the back cover assembly.

DIALING THE X-08/CEX-08

DIALING METHODS

The user should dial with complete full wrist turns. Stopping to regrip produces pauses in dialing activity. This helps the X-08 distinguish between human and robotic dialers.

The X-08 may mistake a human for a robot if the user dials more than 1.3 revolutions in the ClockWise (CW) direction with no pauses in dialing activity.

> **Important:** *The X-08 has protective software that detects robotic dialing. If robotic dialing is detected, the X-08 will not open even if the correct combination has been dialed.*
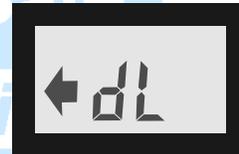
TO POWER THE LOCK

You will always **dial** to the **left** (CounterClockWise) to "**power**" the lock. It usually requires 4-6 turns of the dial to generate sufficient power for lock operations. **The lock is considered to be "powered" as soon as something appears on the display.**

When you dial left to power the lock , it will first display any error conditions that exist on the lock (SA, CE , or SC). Also, if the number of consecutive unsuccessful attempts is three or more, this count will be displayed once you stop dialing. The count will disappear when you dial right to resume operations.

> **Caution:** *If you continue to dial left once the lock is powered, the successful openings count will appear.* **You should not dial this far unless you are specifically instructed to do so during an operational procedure.** *The necessary operating procedure may vary from the normal operating instructions if you dial this far, depending on the current condition of the lock.*

> **Note:** *If a left arrow and dL (dial Left) appear at any time during dialing, you need more power to complete your operation. Dial left to generate power until the lock displays a right arrow and the previously displayed numbers or symbol(s).*

DIALING A COMBINATION

When dialing a combination, you will be prompted with **E1**, **E2** and **E3** for the first, second, and third numbers of the combination, respectively. Once the prompt for a number appears, **dial** to the **right** to select the appropriate number.

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Note: *When dialing to the right after the **E1**, **E2**, or **E3** prompts, the first numbers to appear on the LCD will alternately be 00 or 50.* ***DO NOT stop on these numbers the first time they appear if they are part of your three number combination. Continue to dial to the right until the number appears for the second time.***

If at any time the dial remains stationary for more than 10 seconds, the computer will reset (LCD will go blank) requiring the operator to redial the entire combination.

Caution: *An X-08 lock will register a Surreptitious Entry Attempt (SA) error condition when fifteen unsuccessful attempts to open the lock are made. The condition must be reset before the lock will operate normally. See the section on "Surreptitious Attempt".*

If You Pass Your Target Number When Dialing:

Example A: Target Number = 25.

If you pass your target number by 10 or more, to 35 or greater, continue dialing until you reach the target number again.

Example B: Target Number = 25.

If you pass the target number by no more than 9 numbers, to 34 or less, you may dial to the left and the display will "jump back" about 10 numbers. Now you may dial slowly to the right to the target number.

If You Dial the Wrong Number:

Example A: When dialing, you pause on the wrong number for **E1** or **E2**. **E2** or **E3** then appears on the display. Dialing left returns the display to **E1** or **E2** to allow redialing of that number in the combination sequence.

Example B: When dialing, you pause on the wrong number for **E3**. A lightning bolt is displayed to indicate an incorrect combination. **Dial left before the lightning bolt disappears** to return the display to **E3** and allow the third number in the combination to be redialed.

Redial Entire Combination If:

A. The screen goes blank before the lock bolt is retracted.

B. After backing up and redialing a correct number, a lightning bolt is displayed.

OPENING THE X-08/CEX-08 (FACTORY COMBINATION)

If you have not read the section on "Dialing the X-08", it is important that you do so before proceeding.

CW=ClockWise; CCW=CounterClockWise

1. Dial **left** (CCW) until lock is "powered". Stop. **E1** will be displayed.

2. Dial **right** (CW) until the first number of the factory combination, 50, appears on the LCD.

   Note: *When dialing to the right after the E1, E2, or E3 prompts, the first numbers to appear on the LCD will alternately be 00 or 50. **DO NOT stop on these numbers the first time they appear if they are part of your three number combination. Continue to dial to the right until the number appears for the second time.***

   Stop on 50 and wait until **E2** appears, approximately two seconds.

3. After **E2** with a right arrow appears, continue to dial **right** until you reach the second number of the factory combination, 25. Stop on 25 and wait until **E3** appears, approximately two seconds.

4. After **E3** with a right arrow appears, continue to dial **right** until you reach the third number in the factory combination, 50.

   Note: *When dialing to the right after the E1, E2, or E3 prompts, the first numbers to appear on the LCD will alternately be 00 or 50. **DO NOT stop on these numbers the first time they appear if they are part of your three number combination. Continue to dial to the right until the number appears for the second time.***

   Stop and wait until **OP** appears, approximately two seconds.

5. After **OP** with a right arrow (**OP**en right) is displayed, dial to the right to retract the lock bolt.

Practice opening the lock several times with the preset factory combination before you set a new combination. When you feel comfortable opening the X-08/CEX-08 using the preset factory combination, you are ready to put the lock into operation.

X- 8/CEX-08 LOCK SETUP

Setting up the X-08 lock for operation involves both the operating mode and the combination(s).

Before you can set a new combination, you must select and set a mode of operation. The X-08 has three modes of operation:

Single Combination Mode: The X-08 will open when one three-number combination is successfully dialed.

Dual Combination Mode: Two separate combinations are required to open the X-08. Either combination may be dialed first; however, the operator must begin entering the second combination within 10 seconds of completing the first combination.

Supervisory/Subordinate Mode or Super/Sub Mode: Two separate combinations are required to open the lock, with the Supervisory Combination controlling access of the Subordinate Combination. The Supervisory Combination must be entered first to **U**n**L**ock (**UL**) the lock. Once the Supervisory Combination has been entered, the Subordinate Combination can be used to open the lock at any time during this "unlocked" state. The Supervisory Combination can be entered again to disable lock access - **L**ock **U**p (**LU**). In this state the Subordinate Combination will no longer open the lock.

SET OPERATING MODE AND CHANGE COMBINATIONS

Use the Change Key (photo 1) provided with your X-08 to set the desired operating mode and combinations. If at any time during the process you see the Key and Lightning Bolt symbols displayed, stop sequence and return to Step 3. If at any time you see a Lightning Bolt symbol displayed, stop, remove change key and return to Step 2.

If you have not read the section on "Dialing the X-08" and "Opening the X-08/CEX-08 (Factory Combination)", it is important that you do so before proceeding.

1. Open the lock using the current combination(s), and remove the dust cover to gain access to the change key holes on the back of the lock.

Note: *Use the preset factory combination of 50-25-50 to open the lock the first time.*

2. Insert the Change Key into the change key holes on the back of the lock.

3. Release the container locking bolts. (Different containers will have different release mechanisms.)
4. Dial **left** (CCW) until the Change Key appears in the upper right hand corner of the display along with **E1** on the main part of the display.
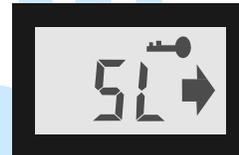
Note: *The lock will never open when the Change Key symbol is displayed.*

5. Dial the current combination or combinations, example 50-25-50, as if dialing the combination to open the lock. If currently operating in Supervisory/Subordinate mode, enter the Supervisor's combination first.

Note: *The lock serial number may be used instead of the combination if the combination has been forgotten.Using the serial number for this procedure will not open the lock. It will only allow you to set the new operating mode and combination(s)*

The symbol **SL** (**SeL**ect Mode) will now be displayed.
6. Dial **right** to select the desired mode of operation:

   1 — for Single Combination Mode

   2 — for Dual Combination Mode

   3 — for Supervisory/Subordinate Mode

Stop on the number of your selection and wait for the number to be registered, about 2 seconds. **dL** will appear.

Caution: *Do not stop on zero when selecting mode. Also, it is not recommended that you "back up" when dialing to select the mode.*

If Selection = 1, Single Combination Mode:

7. Dial **left** until the symbol **EC** (**E**nter **C**ombination) appears.
8. Dial right to dial the new combination as if dialing the combination to open the lock.

   EXAMPLE: Set Combination to30-60-90

   E1 will appear.

   Dial right to first number, 30. Stop.   **E2** will appear.

   Dial right to second number, 60. Stop. **E3** will appear.

   Dial right to third number, 90. Stop.

The new combination will be displayed twice, two digits at a time, followed by **PO**.

Note: *If the correct combination is not displayed, you may pull out the change key and the lock will allow you to reset the 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.*

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9. Pull out the Change Key. The Change Key symbol will disappear and **dL** will appear.
10. Dial **left**. **CC** (**C**onfirm **C**ombination) will appear.
11. Dial **right** to dial the new combination again for confirmation. **OP** will appear. The new combination is now set.

If Selection = 2 or 3, Dual Combination or Super/Sub Mode:

> **In Dual Combination Mode:** Either of the two combinations can be entered first.

> **In Supervisory/Subordinate Mode:** Supervisory Combination **must** be entered first.

7. Dial **left** until the symbol **C1** (enter **C**ombination **1**) appears.
8. Dial **right** to dial the first new combination (Supervisory Combination if operating in Super/Sub Mode) as if dialing the combination to open the lock.
    EXAMPLE: Set Combination to30-60-90

    > **E1** will appear.

    > Dial right to first number, 30. Stop. **E2** will appear.

    > Dial right to second number, 60. Stop. **E3** will appear.

    > Dial right to third number, 90. Stop.

    The new combination will be displayed twice, two digits at a time, followed by **dL.**

Note: *If the correct combination is not displayed, you may pull out the Change Key and the lock will allow you to reset the combination.* ***You must pull out the Change Key while the display is still flashing.*** *When **C1** appears, insert the Change Key again and dial the desired combination.*

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9. Dial **left** until the symbol **C2** (Enter **C**ombination **2**) appears.
10. Dial **right** to dial the second new combination (Subordinate Combination if operating in Super/Sub Mode) as if dialing the combination to open the lock.
    EXAMPLE: Set Combination to 25-50-75

    > **E1** will appear.

    > Dial right to first number, 25. Stop. **E2** will appear.

    > Dial right to second number, 50. Stop. **E3** will appear.

    > Dial right to third number,75. Stop.

The display will flash the new combination two times and then display the symbol **PO** (**P**ull **O**ut Change Key).

Note: *If the correct combination is not displayed, you may pull out the change key and the lock will allow you to reset the 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.*

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11. Pull out the Change Key. The Change Key symbol will disappear and **dL** will appear.
12. Dial **left** until **CC** (**C**onfirm **C**ombination) is displayed.
13. Dial **right** to dial the new combinations again for confirmation.

Note: *In Dual Combination Mode you may dial either combination first to confirm. In Super/Sub Mode you* ***must*** *dial the Supervisory combination first. and the Subordinate Combination second as you did when first entering the combinations.*

When **OP** (**OP**en right) appears on the display, the new combinations have been set.

IF YOU LOCK THE CHANGE KEY IN THE SAFE

If the door of your container is shut and the X-08 accidentally locked with the Change Key still inserted in the back of the lock, you can recover with the following procedure.

1. Dial **left** (CCW) until lock is "powered".
2. Dial **right** to dial the current combination. **SL** will be displayed.
3. Dial **right** to select <u>**ANY**</u> **valid mode** - 1,2 or 3. (**Do Not select 0.**) **dL** will appear.
4. **Dial left continously without pausing until E1 or C1 is displayed <u>without</u> the Change Key appearing in the upper right hand corner.**

Note: *Multiple symbols will be displayed during this dialing process and the LCD will go totally blank at one point.* ***Finally, E1 and C1 will appear with the Change Key still showing in the upper right hand corner. It is imperative that you continue to dial*** *until the Change Key disappears,* ***leaving either E1 or C1*** *on the display, depending on the previous operating mode.*

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5. Dial **right** to dial the existing combination. **OP** will appear.
6. Dial right to retract the bolt. You may now restart the procedure to Set the Operating Mode and Change Combination(s).

Note: *You cannot use the serial number in place of the combination for this procedure. The combination must be known.*

If you have not read the section on "Dialing the X-08", it is important that you do so before proceeding.

SINGLE COMBINATION MODE

In this mode the X-08 functions much like a standard combination lock. It will open any time the three-number combination is correctly dialed.

1. Dial **left** until lock is "powered".
2. Dial **right** to dial the combination.
   EXAMPLE: Combination = 30-60-90
   > **E1** will be displayed.
   >
   > Dial **right** to first number, 30. Stop. **E2** will appear.
   >
   > Dial **right** to second number, 60. Stop. **E3** will appear.
   >
   > Dial **right** to third number, 90. Stop. **OP** will appear.
3. Dial **right** to retract the lock bolt.

DUAL COMBINATION MODE

In this mode, two combinations must be correctly and consecutively entered to open the lock. Either combination may be entered first; however, **the second combination must be started within 10 seconds after the first combination is completed.**

First Operator:
1. Dial **left** until lock is "powered".
2. Dial **right** to dial the first combination.
   EXAMPLE: Combination = 25-50-75
   > **E1** will be displayed.
   >
   > Dial **right** to first number, 25. Stop. **E2** will appear.
   >
   > Dial **right** to second number, 50. Stop. **E3** will appear.
   >
   > Dial **right** to third number, 75. Stop. **dL** will appear.

Second Operator:
3. Dial to the **left** until **C2** (enter **C**ombination **2**) is displayed.
   EXAMPLE: Combination = 30-60-90
   > **E1** will be displayed.
   >
   > Dial **right** to first number, 30. Stop. **E2** will appear.
   >
   > Dial **right** to second number, 60. Stop. **E3** will appear.
   >
   > Dial **right** to third number, 90. Stop. **OP** will appear.
4. Dial **right** to retract the lock bolt.

SUPERVISORY/SUBORDINATE MODE

In this mode, two combinations must be correctly dialed to open the lock. However, it is different from Dual Mode because the Supervisory Combination must only be dialed once to **Un**Lock (**UL**) the lock. Once the Supervisory Combination has been entered, the Subordinate Combination can be used to open the lock at any time during this "unlocked" state.

Whenever the Supervisory Combination is redialed, the lock will display **LU** (**L**ocked **U**p), and the Subordinate Combination will no longer open the lock.

To UnLock (UL)

Supervisory Operator:

1. Dial **left** until lock is "powered".
2. Dial **right** to dial the Supervisory Combination as if dialing the combination to open the lock. **EXAMPLE: Combination = 25-50-75**

   E1 will be displayed.

   Dial **right** to first number, 25. Stop. **E2** will appear.

   Dial **right** to second number, 50. Stop. **E3** will appear.

   Dial **right** to third number, 75. Stop.

UL (**Un**Locked) is displayed indicating that the Subordinate Operator can now open the lock using only the Subordinate Combination. The X-08 will now operate as if it were in a single combination mode.

To Open the Lock

Subordinate Operator:

1. Dial **left** until lock is "powered".
2. Dial **right** to dial the Subordinate Combination.
   EXAMPLE: Combination = 30-60-90

   E1 will be displayed.

   Dial **right** to first number, 30. Stop. **E2** will appear.

   Dial **right** to second number, 60. Stop. **E3** will appear.

   Dial **right** to third number, 90. Stop. **OP** will appear.
3. Dial **right** to retract the lock bolt.
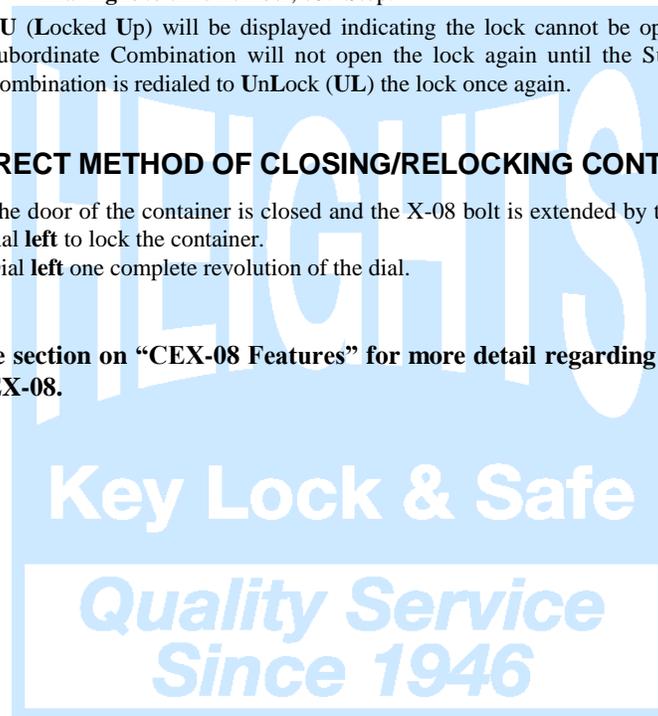
To Lock Up (LU)

Supervisory Operator:

1. Dial **left** until lock is"powered".
2. Dial **right** to dial the Supervisory Combination as if dialing the combination to open the lock. **EXAMPLE: Combination = 25-50-75**

   E1 will be displayed.

   Dial **right** to first number, 25. Stop. **E2** will appear.

   Dial **right** to second number, 50. Stop. **E3** will appear.

   Dial **right** to third number, 75. Stop.

LU (**L**ocked **U**p) will be displayed indicating the lock cannot be opened. The Subordinate Combination will not open the lock again until the Supervisory Combination is redialed to **U**n**L**ock (**UL**) the lock once again.

CORRECT METHOD OF CLOSING/RELOCKING CONTAINER

1. The door of the container is closed and the X-08 bolt is extended by turning the dial **left** to lock the container.
2. Dial **left** one complete revolution of the dial.

See the section on "CEX-08 Features" for more detail regarding usage of the CEX-08.

AUDIT FEATURES OF THE LOCK

The X-08 lock tracks the number of successful openings for the lifetime of the lock. It also tracks the number of consecutive unsuccessful attempts and will alert you upon lock power up if there have been 3 or more consecutive unsuccessful attempts to open the lock. **The lock bolt must be extended and the lock allowed to power down prior to obtaining an audit count.**

TO CHECK THE NUMBER OF SUCCESSFUL OPENINGS

Start this process when the lock is powered down (i.e., the display is **blank** and there has been no dialing for 15 seconds with the lock bolt extended). The number of successful openings is a four digit number that will be displayed two digits at a time.

1. Dial **continuously** to the **left** (CCW) until the LCD display alternately flashes two pairs of numbers. The number with the arrow flashing left represents the first two numbers of the successful openings count. The number with the arrow flashing right represents the last two numbers in the successful openings count.

   Example: A display showing 00 (arrow left) and 15 (arrow right) means the lock has been successfully opened a total of 0015 times.

The number of successful openings will reflect the total number of times the lock has been opened since it was manufactured. When the lock has been opened 9,999 times, the next time that the lock is opened the count will begin again at 0 and continue to increment.

TO CHECK THE NUMBER OF UNSUCCESSFUL ATTEMPTS

The X-08 keeps a record of the number of unsuccessful attempts to open the lock. **This count will only be displayed when there have been three or more consecutive unsuccessful attempts. Start this process when the lock is powered down (i.e., the display is blank and there has been no dialing for 15 seconds with the lock bolt extended).**

1. Dial **left** (CCW) until lock is "powered". If 3 or more consecutive unsuccessful attempts have occurred, a lightning bolt along with the two digit count will be displayed.

Once the count has been displayed, you can dial right to get the E1 display and enter your combination.

Note: *The unsuccessful attempts count resets to 0 only when the lock is successfuly opened. If the number of unsuccessful attempts exceeds 99, the count will remain at 99 until reset.*

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SURREPTITIOUS ATTEMPT

SA indicates that a **S**urreptitious Entry **A**ttempt condition exists. An X-08 lock will register a Surreptitious Entry Attempt 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.

RESET SA CONDITION

> **Note:** *If in Supervisory/Subordinate mode, you must first dial the valid supervisor combination as required to set the lock to **LU** mode before attempting the Reset SA procedure. See "To Lock Up in Supervisory/Subordinate Mode".*

If **SA** is displayed, then you will need to reset the Surreptitious Attempt using the following steps.

> **Note:** *The factory default for the Reset Combination is 50-25-50.*

1. Dial **continuously** to the **left** (CCW) until the number of successful openings is displayed.
2. After the successful openings counter starts displaying, stop dialing. The display will change to show the unsuccessful attempts counter along with a lightning bolt and a right arrow.
3. Dial right to **99**. **E1** will appear.
4. Dial the **Reset Combination** as if dialing the combination to open the lock. A lightning bolt will appear.
5. **While the lightning bolt is displayed** (indicating power is still up), dial **left** until **SA** appears.
6. Dial the correct opening combination(s) for the lock, whether it be one combination for single combination mode, two combinations for dual combination mode, or the supervisory combination (to put lock in **UL** mode) followed by the subordinate combination for Supervisory/Subordinate mode. The lightning bolt will continue to be displayed during this time.

The Surreptitious Attempt condition should now be reset.

> **Note:** *Resetting the **SA** condition will not zero the unsuccessful attempts count. You must successfully open the lock before the count will be reset to 0.*

CHANGE RESET COMBINATION

This procedure is similar to changing a combination when operating in Single Mode.

Note: *The Factory default for the **Reset Combination** = 50-25-50.*

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1. Dial **left** (CCW) until lock is "powered".
2. Dial **right** to dial the combination(s) to open the lock.
2. Insert the Change Key into the back of the lock.
3. Release the container locking bolts.
4. Dial **continuously** to the **left** (CCW) until the number of successful openings is displayed. The Change Key symbol will also be seen in the upper right hand corner of the display.
5. Dial **right** to **99**. **E1** will appear.
6. Dial **right** to dial the **Reset Combination** as if dialing a combination to open the lock. **EC** will appear.
7. Dial **right** to dial the new **Reset Combination** as if dialing a combination to open the lock. The new combination will be displayed twice followed by **PO**.
8. Pull out the Change Key. **dL** will appear.
9. Dial **left**. **CC** will appear.
10. Dial **right** to dial the new **Reset Combination** again for confirmation. **OP** will appear.
    The new Reset Combination is now set.

RECOVERING IF THE RESET COMBINATION IS FORGOTTEN

If you have an error condition on the lock that requires reset using the Reset Combination and you have forgotten the Reset Combination, you can change the Reset Combination using the serial number. **First you must open the lock so that the Change Key can be inserted.**

To Open A Lock with an Error Condition:

In **Single Combination Mode** the lock can be opened by dialing the correct combination 5 times in a row successfully. **The lock must stay powered between the combinations.** A lightning bolt will be displayed between each combination.

If in **Dual Combination Mode**, both combinations must be dialed 5 times in a row successfully. **Again, the lock must stay powered between the combinations.**
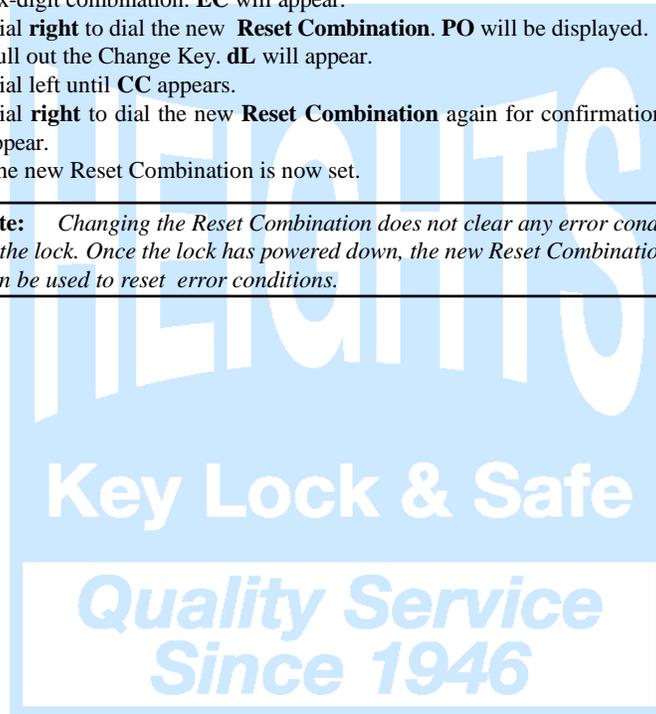
If in **Supervisory/Subordinate Mode**, the lock can still be set between locked up and unlocked status with the Supervisory Combination. The lock needs to be in unlocked status and the Subordinate Combination dialed 5 times in a row successfully. **Again, the lock must stay powered up between the combinations.**

Once the lock has been successfully opened, the **Reset Combination** can be changed using the serial number.

To Change Reset Combination using Serial Number:

1. Insert the Change Key into the back of the lock.
2. Release the container locking bolts.
3. Dial **left** until lock is "powered".
4. Dial **right** to dial the current combination(s) for the lock. **ES** (**E**nter **S**erial Number) will appear.
5. Dial **right** to dial the six-digit serial number of the lock just as you would dial the six-digit combination. **EC** will appear.
6. Dial **right** to dial the new **Reset Combination**. **PO** will be displayed.
7. Pull out the Change Key. **dL** will appear.
8. Dial left until **CC** appears.
9. Dial **right** to dial the new **Reset Combination** again for confirmation. **OP** will appear.
   The new Reset Combination is now set.

Note: *Changing the Reset Combination does not clear any error conditions on the lock. Once the lock has powered down, the new Reset Combination can then be used to reset error conditions.*

CEX-08 FEATURES

The CEX-08 lock is a variation of the X-08 lock that includes a Covert Entry detection feature. The Covert Entry function is used to indicate that the normal operation of the CEX-08 has been compromised. The following section describes the unique features and operations of the CEX-08. **You should already be familiar with the standard operation of the X-08 as described in the preceding sections before proceeding.**

CEX-08 INDICATORS

The CEX-08 will display one of four different indicators when you dial left to "power " the lock:

- **CA** - Indicates that **C**overt Entry detection is **A**ctive and access to the lock is allowed.
- **CE** - Indicates that a **C**overt **E**ntry condition exists.
- **SA** - Indicates that a **S**urreptitious Entry **A**ttempt condition exists. (This indicator is also applicable for the X-08.)
- **SC** - Indicates that both a **S**urreptitious Entry Attempt and a **C**overt Entry condition exist.

CA is the normal condition indicator that you will see displayed when you power the lock. **CE**, **SA**, and **SC** are all error conditions that need to be addressed from a security standpoint and require action to correct them.

COVERT ENTRY DETECTION

A Covert Entry condition is indicated by **CE** displayed upon lock power up.To detect Covert Entry, the microprocessor monitors the lock bolt position to make sure it matches the condition of the combination input. It must have a matching open or close condition.

A covert entry is set from the following three conditions:

1. The bolt being forced in when there is not a valid combination.
2. The lock being dialed while the last open does not have a matching close. (The lock requires at least a full turn of the dial to start into dialing. It should not be mechanically possible to turn that far while the bolt is retracted.) The reed switch monitoring the bolt may have been tampered with or the back cover removed.
3. The lock getting a close without a matching open. The reed switch monitoring the bolt may have been tampered with.

The CE condition must be reset using the **Reset Combination** before the lock will open and operate normally.

RESET CE CONDITION

If **CE** is displayed, then you will need to reset the Covert Entry condition using the following steps. The lock must be powered down before beginning the reset process. **The same Reset Combination that is used for resetting the SA condition is used for resetting the CE condition.**

Note: *The factory default for the Reset Combination is 50-25-50.*

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1. Dial **continuously** to the **left** (CCW) until the number of successful openings is displayed.
2. Dial **right** to **99**. **E1** will appear.
3. Dial the **Reset Combination** as if dialing the combination to open the lock. The Covert Entry condition should now be reset.

RESET SC CONDITION

A combination Covert Entry and Surreptitious Attempt condition is indicated by **SC** displayed upon lock power up. Both conditions must be reset to return to normal lock operation. **CE** must be reset first. For more detail than is presented below, see the individual sections in the manual on **resetting CE and SA.**

RESET CE:
1. Dial **continuously** to the **left** (CCW) until the number of successful openings is displayed.
2. Dial **right** to **99**. **E1** will appear.
3. Dial the **Reset Combination** as if dialing the combination to open the lock.

RESET SA:
1. Dial **continuously** to the **left** (CCW) until the number of successful openings is displayed.
2. After the successful openings counter starts displaying, stop dialing. The display will change to show the unsuccessful attempts counter along with a lightning bolt and a right arrow.
3. Dial right to **99. E1** will appear.
4. Dial the **Reset Combination** as if dialing the combination to open the lock. A lightning bolt will appear.
5. **While the lightning bolt is displayed** (indicating power is still up), dial **left** until **SA** appears.
6. Dial the correct opening combination(s) for the lock, whether it be one combination for single combination mode, two combinations for dual combination mode, or the supervisory combination (to put lock in **UL** mode) followed by the subordinate combination for Supervisory/Subordinate mode. The lightning bolt will continue to be displayed during this time.

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Blank Display
Means the lock has been reset or is powered down.

OP
Open Right

Lightning Bolt
Incorrect Combination Dialed. (When this symbol appears in the upper left corner of the display, simply redial combination.)

UL
Unlocked

LU
Lock Up

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

SL
Select Mode of Operation

EC
Enter Combination

E1
Enter First number of Combination

E2
Enter Second number of Combination

E3
Enter Third number of Combination

PO
Pull Out Change Key

CC
Confirm **C**ombination or Combination(s)

CE (CEX-08 only)
A **C**overt **E**ntry condition exists

CA (CEX-08 only)
Covert entry detection is **A**ctive

dL
dial **L**eft

ES
Enter **S**erial Number

Lightning Bolt and Key
Displayed during CE combination change

SA
A **S**urreptitious Entry **A**ttempt Exists

SC (CEX-08 only)
Both a **S**urreptitious Entry Attempt and a **C**overt Entry condition exists
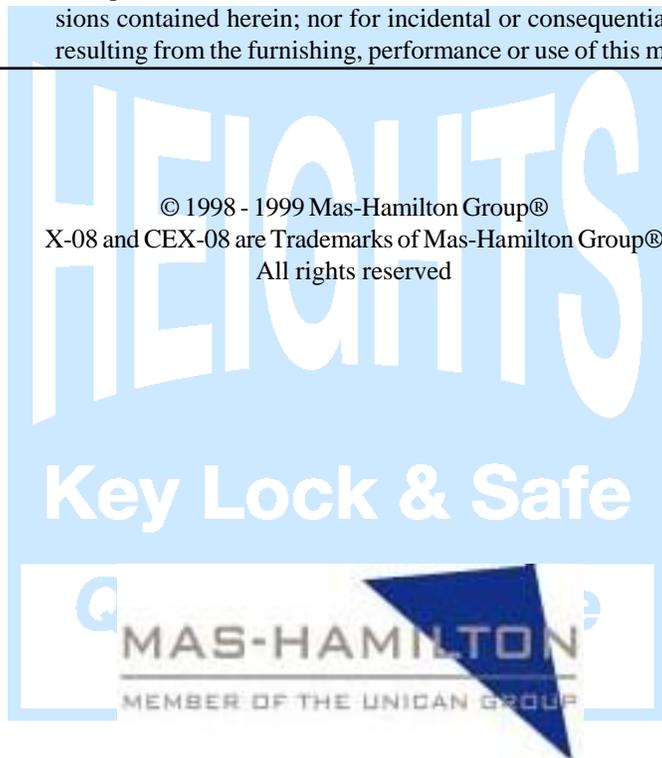
C1
Enter first **C**ombination

C2
Enter second **C**ombination.

Note: Some displays will only be seen on CEX-08 locks.

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