



# Cencon<sup>®</sup> ATM Security Lock FLM & Route Training Booklet (Swing Bolt)

December 2020

# Activation from Factory to FLM And/Or Route Mode Swing Bolt

<b>Power</b>	Lock
<b>EC</b>	Enter 50 25 50
<b>OPR</b>	Open right to retract bolt
<b>Open</b>	The door

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<b>Power</b>	Lock until <b>CLB</b>
<b>CLB</b>	Enter #50
<b>ISA</b>	Insert and hold the <b>RED SA KEY</b> to the reader
<b>INI</b>	Lock is initializing
<b>EOP</b>	Extend the bolt keeping door open

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<b>Power</b>	Lock
<b>EC</b>	Enter the activation combo
<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> or <b>YELLOW ROUTE KEY</b> in the reader
<b>OPR</b>	Retract the bolt close door
<b>Extend</b>	The bolt
<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> or <b>YELLOW ROUTE KEY</b> in the reader
<b>COO</b>	Record and report the close seal

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## Activation from FLM Mode to Route Mode Swing Bolt

<b>Power</b>	Lock
<b>EC</b>	Enter <b>FLM</b> combination
<b>IPI</b>	Insert <b>BLUE FLM KEY</b> in the reader
<b>OPR</b>	Open right to retract bolt
<b>Open</b>	Door

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<b>Power</b>	Lock until <b>CLB</b>
<b>CLB</b>	Enter #50
<b>ISA</b>	Insert and hold the <b>RED SA KEY</b> to the reader
<b>INI</b>	Lock is initializing
<b>EOP</b>	Extend the bolt keeping door open

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<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> in the reader
<b>C00</b>	Record and report close seal

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<b>Power</b>	Lock
<b>EC</b>	Enter the activation combo
<b>IPI</b>	Insert the <b>YELLOW ROUTE KEY</b> in the reader
<b>OPR</b>	Retract the bolt
<b>Extend</b>	The bolt

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<b>IPI</b>	Insert the <b>YELLOW ROUTE KEY</b> in the reader
<b>C00</b>	Record and report the close seal

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## Activation from Route Mode to FLM Mode Swing Bolt

<b>Power</b>	Lock
<b>EC</b>	Enter <b>FLM</b> combination
<b>IPI</b>	Insert <b>YELLOW ROUTE KEY</b> in the reader
<b>OPR</b>	Open right to retract bolt
<b>Open</b>	Door

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<b>Power</b>	Lock until <b>CLB</b>
<b>CLB</b>	Enter #50
<b>ISA</b>	Insert and hold the <b>RED SA KEY</b> to the reader
<b>INI</b>	Lock is initializing
<b>EOP</b>	Extend the bolt keeping door open

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<b>IPI</b>	Insert the <b>YELLOW ROUTE KEY</b> in the reader
<b>C00</b>	Record and report close seal

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<b>Power</b>	Lock
<b>EC</b>	Enter the activation combo
<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> in the reader
<b>OPR</b>	Retract the bolt
<b>Extend</b>	The bolt

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<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> in the reader
<b>C00</b>	Record and report the close seal

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## Shelving from FLM And/Or Route Modes Swing Bolt

<b>Power</b>	Lock
<b>EC</b>	Enter shelving combination
<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> or <b>YELLOW ROUTE KEY</b> in the reader
<b>OPR</b>	Open right to retract bolt
<b>Open</b>	Door

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<b>Power</b>	Lock until <b>CLB</b>
<b>CLB</b>	Enter #50
<b>ISA</b>	Insert and hold the <b>RED SA KEY</b> to the reader
<b>SHL</b>	Lock is shelving
<b>EOP</b>	Extend the bolt

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<b>IPI</b>	Insert the <b>BLUE FLM KEY</b> or <b>YELLOW ROUTE KEY</b> used to open the lock
<b>C00</b>	Record and report close seal

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## Lock Menu Command List

Below is a list of the various Keypad Commands that are accessed beginning with the (#) symbol.

### Command Function

# #	Display Mode's Audit Count (opening count) by user key.
# 0	Perform administrative operations. (audit download, resync, clock set, bank user table download, etc.)
# 1	Display lock code and hardware levels.
# 2	Display Lock Serial Number.
# 3	Display lock opening odometer (Total Audit Count)
# 4	Get last close seal, based on user key's mode
# 6	Reserved.
# 8	Change shelved-mode combination or bank user's combination.
# 9	Reserved.
# 55	Displays a list of the last 15 error codes

### Command Function/Generation 2

# 70	Display active modes and identification of the activating company
# 71	Display the base UTC/GMT date and time
# 72	Display the local date and time according to user key's mode
# 73	Display key type and key serial number for the key presented.
# 74	Display door contact switch status.
# 76	Display software level the mode was activated with by user key.
# 77	Display internal UTC/GMT key time on DS1994 FLM and Route and DS1427 Bank keys
# 78	Display last opening local date/time by user key's mode
# 79	Display activation local date/time by user key's mode

**Note:** Some displayed data will repeat until the lock powers down (after 40 seconds) or the\* key is held down.

### Display Prompts

OC	Dual Mode User Key – time window mismatch
ECF	Enter Current combination (shelved mode)
ENF	Enter New combination (shelved mode)
CNF	Confirm New combination (shelved mode)
CC	Confirm Combination (Bank mode)
ADD	Adding new user (Bank mode)
DEL	Deleting user (Bank mode)
ECC	Enter Current Combination (Bank mode)
ENC	Enter new Combination (Bank mode)
CNC	Confirm new Combination (Bank mode)
D35	Delay Time 35 minutes (Bank mode)
SN-	Serial Number; shown after pressing #2
LL-	Lock code Level; shown after #1 pressed
HL-	Hardware Level; shown after #1 pressed
AC-	Total opening Count in All modes; shown after #3 pressed
SC-	Seal Count** for active mode by user key; after #4
SS-	Seal count** for Shelved mode by user key; after #4

\*\*Seal count, Opening Count, and Audit Count are terms used interchangeably throughout the documentation.

**Display Prompts Found Only on Gen 2:**

<b>G2</b>	Indication during power-up of Gen2 lock firmware
<b>CEC</b>	At EC power up, alerts that Clock was reset (need clock set key)
<b>CLB</b>	Virtual Change Key for Swing and Motorized Dead Bolt
<b>CLS</b>	Clock Set operation is in process
<b>RLO</b>	Remote Lock Out; combination entry is prevented
<b>C12 34</b>	4-digit Close Seal
<b>DLY</b>	5-minute Delay because of audit restrictions
<b>BEC</b>	Change Battery Notification during EC prompt
<b>IFL</b>	Single FLM Mode activated
<b>2FL</b>	After #70 – Dual FLM Mode activated
<b>IRO</b>	After #70 – Single Route Mode activated
<b>2RO</b>	After #70 – Dual Route Mode activated
<b>IBA</b>	After #70 – Single Bank Mode activated
<b>2BA</b>	After #70 – Dual Bank Mode activated
<b>CN</b>	After #70 – Company Identifier that activated mode
<b>BN</b>	After #70 – USB box number that activated mode
<b>UTC</b>	After #71 – UTC/GMT date and time
<b>LCL</b>	After #72 – local date and time, based on user key's mode
<b>YR</b>	Date being displayed, starting with Year, then Month, then Day
<b>HR</b>	Time being displayed, starting with Hour, then Minute, then Second
<b>CL</b>	After #73 -Cencon SmartKey Type
<b>CS</b>	After #73 – Cencon SmartKey Serial Number
<b>OPD</b>	After #74 – Open Door
<b>CLD</b>	After #74 – Closed Door
<b>NCC</b>	After #74 – No door Contact Connection
<b>SL</b>	After #76 – Software Level of user key's mode that activated this lock
<b>LOP</b>	After #78 – Last Opening date and time (local), based on user key
<b>ACT</b>	After #79 – Activation date & time (local), of user key
<b>UDP</b>	Download bank users
<b>UPA</b>	Update activate

## When Attempting to Open Lock

Error Code	Error	Notes
02	<b>Failed Attempts/Sessions</b>	See LCO (below).
03	<b>Key/Mode Mismatch</b>	The wrong key type has been presented for the mode(s) in which the lock is active.
04 or ALS	<b>Silent Alarm Reset</b>	Hold-up or duress alarm.
05	<b>Dual Combination Access Error</b>	When asked for a dual combination entry, the same combination and key were used for the 2nd entry as for the 1st.
06	<b>Wrong Key Type</b>	The wrong key type has been presented. Make sure to use the appropriate key type for the appropriate function. Have the Supervisor display the user key information at the PC system to check the key serial number, user ID, customer # and company #. Possible bad key contact.
07	<b>Data Read Error</b>	Key data not accessible.
08	<b>Initialization</b>	Factory initialization, CRC bad (information in key is corrupt).
09	<b>CenBank</b>	User key is not authorized to enter lock.
0C	<b>Time Window Mismatch</b>	Error in the key time data.
0D	<b>User Out of Time Window</b>	The user is attempting to access the lock at a time that does not fall within the defined lock access time on the key. Have the Supervisor display the the user key information at the PC system to check the Window Opening Information, thus verifying when the user is able to access the lock.
0F	<b>Audit Buffer</b>	Error writing audit data
<b>Symbol Only</b>	<b>See the Notes Column</b>	<p><b>Incorrect Combination Entered</b> An incorrect combination was entered. Clear the lightning bolt error display by pressing * and try the combination entry again. Note: If the combination is forgotten, the call into the dispatcher to retrieve the combination at the PC system.</p> <p><b>Incorrect Lock Serial Number and Name</b> A call was dispatched for the wrong lock. Check at the PC to see if the call was dispatched for the correct lock.</p> <p><b>Incorrect User ID</b> A call was dispatched for the wrong User ID or the wrong user key is being inserted into the key reader at the lock. Try a different user key if another user is on this call. If that is not successful, check at the PC to see if the call was dispatched for the correct User.</p> <p><b>Audit Count Mismatch</b> The audit count in the lock does not match the lock audit count in software at the PC. If the count is higher at the lock, use the user key to get the last close seal from lock and call it in to the PC. If the audit count is higher at the PC, get the next to last combo and use it along with the appropriate user key to open and close the lock. It is not necessary to report the close seal at this point since the call has already been closed at the PC.</p>
<b>LCO</b>	<b>5 Failed Lock Entry Attempts</b>	<p>The combination was entered incorrectly 5 times. The lock has now gone into a "lockout" mode. Review the items in the previous section (Lightning Bolt Only) to try and determine the cause for the failed attempts.</p> <p>Wait at least 4.5 minutes without powering the lock and then enter a valid combination and present the appropriate key.</p> <p><b>Gen2 Locks</b> If there is a problem with the battery in the Gen2 lock when a lockout occurs, the lock must have power for the full timeout period. The display will alternately flash <b>-DL</b> and <b>LCO</b> to indicate this.</p>



## When Attempting to Activate/Shelve Lock with SA Key

Error Code	Error	Notes
03	<b>Lock Mode Mismatch</b>	The lock is already active in the mode that you are attempting to activate.
06	<b>See the Notes Column</b>	<p><b>Wrong Key Type</b> The wrong key type has been presented. Make sure to use the appropriate key type for the appropriate function.</p> <p><b>Unable to Read SA Key Information</b> There is no information in the key or the key has been bounced and the key is corrupt. If the audit count at the lock and the PC match, use combination. Otherwise contact Kaba Mas Customer Service get a close seal and try operation again with a re-programmed key.</p>
09	<b>CenBank</b>	Lock is already active in CenBank mode.
0A	<b>See the Notes Column</b>	<p><b>Last Audit Record Not "Open"</b> An attempt is being made to activate or shelve the lock but the last record showing in the Audit trail is not an "Open". This might be caused by the the bolt being extended before the Change Key is inserted. If the lock is in Shelved Mode, enter the Shelved Mode combination, retract the bolt, insert the Change Key and continue with the procedure. If the lock is active in another mode, close the call and have another call dispatched to open the lock and insert the Change Key and then continue with the procedure.</p> <p><b>Lock Mode Already Active/Shelved</b> The lock is already active or shelved in the mode you are trying to activate or shelve.</p>
0B	<b>Bad Processor Reset</b>	An internal error has occurred while trying to reset the processor in the lock. Clear the lightning bolt error display by pressing * and try the operation again (note that these failures are counted toward the five entry attempt limit). If you continue to get the error indicator, contact Kaba Mas Customer Service for assistance at 1 (800) 950-4744

## Lock Read/Write

Error Code	Error
<b>60</b>	Eprom factory initialize
<b>61</b>	Drill
<b>62</b>	Eprom housekeeping Write
<b>63</b>	One mode of the lock is corrupted. Try another and remove from service. If all modes give 63 Drill. If powers up 63 then Drill.
<b>64</b>	Eprom Cust. Initialize
<b>65</b>	Eprom Error List Read
<b>66</b>	Eprom Error List Write
<b>67</b>	One mode of the lock is corrupted. Try another mode and remove from service. If all modes give 67 drill. If powers up 67 then Drill.
<b>68</b>	Eprom SMCS Write
<b>69</b>	Eprom Bank User Read (Lock could not read the key to memory)
<b>6A</b>	Eprom Bank User Write (Lock could not write the opening into memory)
<b>6B</b>	Occurs with older model of lock. User key-different key closing lock than which opened the lock. Some are key specific some are mode specific.
<b>6C</b>	One mode of the lock is corrupted. If all modes give 6C drill. Try another mode once opened remove from service. If powers up 6C then Drill.
<b>6D</b>	One mode of the lock is corrupted. If all modes give 6C drill. Try another mode once opened remove from service. If powers up 6C then Drill.
<b>6E</b>	Eprom Delay-Data Write
<b>6F</b>	Eprom Factory Initialize Read

## Key Read/Write

Error Code	Error
71	Key is dead. Issue new key.
72	Touch Memory – House Keeping Write
73	Bad time in the key. Verify audit, lock will be one ahead. Close and issue new combo to that key for that lock and have the tech open and close. It will correct the time in the key.
74	Bad key Contact, Try again and if the error still appears clean key and key reader
75	Touch Memory – Initialize/ Shelve Rec1 Read
76	Only while supershelving, shelving or activating. Is like a 7F for a supershelve/SA key. Use supershelve key again within 6 seconds and finish.
77	Touch Memory – Initialize Rec2 Read
78	Touch Memory – Initialize Rec2 Write
79	Touch Memory – Initialize RecX Read
7A	Touch Memory – Initialize RecX Write
7B	Touch Memory – Supershelve Read
7C	Touch Memory – Supershelve
7D	Touch Memory – Cannot read the key
7E	Error reading/writing Time Window record (Out of time windows)
7F	Bad key Contact, try again

## Gen2 Codes

Error Code	Error
9003	Time windows user denied access due to clock failed/reset condition
9005	iButton family code lookup error
9006	Audit key was not formatted for a Gen2 lock
9007	Clock failed
96NN	Memory error
97NN	iButton error
9B00	Lock firmware error

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