

PROGRAMMING KEYPAD-ONLY STANDALONE ELECTROMECHANICAL LOCKS

BY JERRY LEVINE

It has been more than 15 years, since I first wrote about standalone, single door electromechanical locks. These first locks were equipped with only a keypad as the credential required for gaining access. They were programmed at the door; some could only program one user at a time. They have different types and numbers of batteries to release the locking mechanism. No time, no date, no audit trail or intranet connection for most of them. Only the master code and/or programming code or sometimes sub-masters or supervisors codes and the user codes operate these standalone electromechanical keypad programmed and operated locks.

These self-contained single door access control units are comprised of two components; the electronics and the modified leverset. The electronics include the keypad, circuit board, LED's, battery pack and the locking/unlocking mechanism. The modified leverset was usually like a Storeroom function, keyed outside and free egress. When the lock was unlocked electronically, the outside lever was rotated to gain access. Using the mechanical override, rotating the key in the lock cylinder would retract the latch, the outside lever was usually not unlocked.

A number of these locks are still in daily use. Locksmiths will get service calls to program or be asked for help in order to program one or more of these locks. The purpose of this article is to provide general information and programming information on these keypad programmed locks.

Locks discussed are the Alarm Lock DL2700, Arrow Revolution, Code Locks CL5000, Kaba Ilco E-plex 4000, Marks i-Que, Sargent KP, Schlage Cobra, Securitron SABL™ and Yale eBoss. A photo will be included for each lock as not all locks have their name and model number visible for easy identification.

Note: I have attempted to choose the oldest lock available from each of these manufacturers. Some of these locks have been discontinued or are in the process of being discontinued, but are still in daily operation.

I have developed a chart for listing the basic information for each manufacturer's product. General information will include ANSI/BHMA Grade, UL/cUL Fire Rating, available lock configurations, lever handing, key override option, keypad layout and button construction. Some of these features will help to identify the product as well as provide needed information for servicing and re-installation.

For example, the Marks i-Que Metro has a 16-button keypad. The buttons are arranged in four rows, four buttons per row. The 16 button layout is:

Top row	123i
Upper Row	456Q
Lower row	789u
Bottom row	*0#e

The four buttons on the right side vertical spell "iQue." They can be used as part of the PIN.

The next section of each chart will include information on the Master, Sub-Masters and "use" Codes. A "use" code unlocks the lock and includes User Codes, Emergency Codes and Service (single use) Codes. The Emergency Codes normally have an extended length unlock time for those individuals who need more time to access the lock. An Emergency Code can for some manufacturers provide access when the batteries are almost exhausted. The Service Code is a one-time User Code that erases itself immediately after use. It is normally programmed like any User Code. The Code section will include the number of codes, their hierarchy, digits per code, default codes, and user groups.

For example, the Alarm Lock DL2700

has one Master Code that can be configured from three to five digits. The hierarchy has one Management Code and the User Codes. The length of the Master Code determines the Management and User Codes/Service Code lengths. The Master and Management Codes program the lock as well as operate the lock.

The Service Code is a single "use" code that is designed for service personnel, vendors, etc. For most locks, the single "use" code is programmed and disappears after it has been used. Only a Master and/or the Submaster Code can program the Service Code. The Code-locks CL5000 Series can have up to ten single "use" codes in addition to the regular User Codes.

Battery life varies by lock. Each manufacturer uses the number and size of batteries they believe will provide maximum cycle life. Most manufacturers use "AA" batteries. One manufacturer uses "C" batteries. Each manufacturer provides the number of cycles. Even though these cycle numbers may last longer than one year's operation, most manufacturers recommend replacing batteries every year to insure uninterrupted operation.

All of the manufacturers recommend using alkaline batteries. Lithium batteries are not recommended. Some lock manufacturers have a two stage warning. For example, Securitron SABL low battery warning begins with two short beeps and flash of the LED's at first keystroke. The second stage warning is two short beeps and the LED flash at each keystroke.

And finally, what might be the most important programming set of instructions, the instructions for resetting the lock when the master code is lost. We have condensed the basic programming operations; for detailed instructions, contact the lock manufacturer.

ALARM LOCK DL2700

Categories	Alarm Lock DL 2700
ANSI/BHMA A156.2	Grade 1
Cylindrical Lock Grade	
UL/ULC fire rating	3 Hours, "A" labeled doors
Cylindrical or mortise	Cylindrical
Clutched Lever	Yes
Lever Handing	non-handed
(field reversible)	Yes
Key Override	Yes
Optional	No
Keypad Layout	Telephone Style, 12 button
Button Construction	Metal
Code Hierarchy	Master, Management, User Codes
Master Code	One
Number Of Digits	3 to 5
Factory Default Master	1-2-3-4-5
Note: Changing Master erases all codes	
Sub-Master Codes no.	1
Number Of Digits	Same as Master
User Codes	Up to 15
number of digits	Same as Master
Single use code (Service Code)	Up to 2
Successful entry	Beeps sounds, Green LED flashes
User code groups	3, 5 codes per group
Levels of access	Code Required, Passage, User, Group or All Lock-out
Lock-out Override	Master or Management
Programming Capabilities:	
Master Code	All
Sub-Masters	Limited
Anti-Tamper	3 invalid code entries shuts down lock for approximately 20 seconds 2 beeps when reactivated
Battery Life	Up to 175,000 cycles
Weatherized model	Optional
Low Batteries Warning	5 second dual tone when any key is pressed
Batteries	5AA Alkaline
Battery Location	Interior Housing, Screw at bottom

The Factory Master Code (12345) may not be used for programming; a new Master Code must first be programmed into the lock. All other codes must have the same number of digits (3-5) as the new Master Code.

Programming New Master Code: Enter existing Master Code, then Program Address before unit relocks. Enter new Master Code, then press [AL]. Verify as follows.

Press 12354 (factory master code), hear beep, [AL] [1] [AL], new master code number, [AL] again. To verify, enter new master code again and you should hear 6 beeps.

Management Code: Enter Master Code, then [AL] [2] [AL] (before unit relocks). Enter Management Code. You should hear 6 beeps.

User 1 Code: Enter Master or Management Code, then [AL] [1] [1] [AL], then enter User 1 Code. Again, 6 beeps means programming was successful.

User 2 Code: [AL] [1] [2] [AL], User 2 Code

User 3 Code: [AL] [1] [3] [AL], User 3 Code

User 4 Code: [AL] [1] [4] [AL], User 4 Code

User 5 Code: [AL] [1] [5] [AL], User 5 Code

User 6 Code: [AL] [2] [1] [AL], User 6 Code

User 7 Code: [AL] [2] [2] [AL], User 7 Code

User 8 Code: [AL] [2] [3] [AL], User 8 Code

User 9 Code: [AL] [2] [4] [AL], User 9 Code

User 10 Code: [AL] [2] [5] [AL], User 10 Code

User 11 Code: [AL] [3] [1] [AL], User 11 Code

User 12 Code: [AL] [3] [2] [AL], User 12 Code

User 13 Code: [AL] [3] [3] [AL], User 13 Code

User 14 Code: [AL] [3] [4] [AL], User 14

Code

User 15 Code: [AL] [3] [5] [AL], User 15 Code

Service Code: [AL] [3] [AL], Service Code

User Code provides entry only. To disable any user, enter Master or Manager Code, respective program address, but no User Code. Allow unit to relock.

FUNCTIONS

To program the following functions, first enter Master or Management Code, then respective program address before unit relocks.

Disable Bank 1 Users: [AL] [5] [1] [AL]

Disable Bank 2 Users: [AL] [5] [2] [AL]

Disable Bank 3 Users: [AL] [5] [3] [AL]

Disable Banks 1-3: [AL] [5] [5] [AL]

Re-enable Bank 1: [AL] [4] [1] [AL]

Re-enable Bank 2: [AL] [4] [2] [AL]

Re-enable Bank 3: [AL] [4] [3] [AL]

Re-enable Banks 1-3: [AL] [4] [4] [AL]

Enable Passage: [AL] [4] [AL], programmable by Master only

Disable Passage: [AL] [5] [AL], programmable by Master only

Battery Replacement: Must be replaced within two minutes to avoid losing memory. Do not press any buttons when replacing batteries

RESET PROGRAMMING TO FACTORY DEFAULT:

Remove batteries and press any button



ARROW REVOLUTION

PIN CODE PROGRAMMING EASY MODE

PIN code programming in the Easy Mode requires the "I" button to enter the programming mode. Adding or changing codes deletes all existing PIN codes.

1. Unscrew battery cover hex screw using tool provided. Slide battery cover up and off to reveal the "I" button located above the batteries.
 2. Press the "I" button once. Lock response: Register User code. Enter 1 Supervisor then up to 8 users. Enter 4 to 12-digit PIN, followed by "#" key. Press "I" button to complete.
 3. Enter the new Supervisor PIN (4 to 12 digits) followed by the "#" key.
- Lock Response:** Sounds a tone for each PIN digit with digits flashing in the sequence entered to confirm the entry. Chime signals when playback is complete.
4. Enter the first User PIN code (4 to 12 digits) followed by the "#" key. Lock Response: Same as 3.
 5. Enter additional User PIN codes (4 to 12 digits) followed by "#" key. Up to 8 User PINs can be entered.
 6. Press "I" button to complete the process after the last playback sequence. Lock Response: "Registered."

Notes: The "*" key is used to enter or accept an entry, and also to conclude a programming session. The "#" key is used to enter or to continue additional steps in a programming sequence.

RESET PROGRAMMING TO FACTORY DEFAULT:

Remove inside lever. Remove battery cover using Allen wrench provided with lock. Remove batteries. Remove screw from battery housing. Remove inside escutcheon.

On PC board, change position of EASY/ADVANCED switch. This deletes all prior programming.



The Arrow Revolution can be programmed in the Advanced Mode having up to 1,000 Users. The Advanced Mode includes a Master Code for programming, not access. This mode divides Users into 20 Supervisor Groups of 50 per group.

Categories	Arrow Revolution
ANSI/BHMA A156.2	Grade 2
Cylindrical Lock Grade	
UL/ULC fire rating	UL - cUL Fire Label for all functions up to 2 hours
Outside Lever	Free Wheeling
Notes:	Outside lever disengages when locked
Cylindrical or mortise?	Cylindrical, mortise
Lever Handing	Non-Handed
Field reversible?	Yes
Key Override	Yes
Optional	Yes
Keypad Layout	12-Button telephone style
Button Type	Touch screen
Code Hierarchy	Easy Mode (Nine Users), Supervisor, Users
Master Code	Supervisor PIN
Number Of Digits	Four to 12
Factory Default	1-2-3-4-5-6-7-8-9-0
Master Code	Supervisor PIN
Notes:	Factory default setting is Easy Mode. Arrow uses PIN instead of code
Sub-master Codes	Not in Easy Mode
User Codes no.	up to 8
number of digits	Four to 12 digits
Note: When adding or changing PINS, all existing PINs are deleted and must be re-entered.	
Single use (service code)	n/a
Successful Entry	When correct code and "*" or palm touch is entered, the illuminated display roles upward, like a window blind opening.
User code groups	n/a
Levels of access	Code Required, Passage, Lockout
Lock-out/down	Advanced mode only
Programming Capabilities:	
Codes on hold	n/a
Anti-Tamper	Five unsuccessful attempts at entering a valid PIN code the unit will shut down and not allow operation.
Weatherized model	Weather resistant
Battery Life	Approximately 20,000 operations
Low Batteries Warning	n/a
Batteries	Four AA Alkaline Batteries
Battery Location	Inside back cover
Battery Replacement	3/32" hex wrench
Information Warnings	9 Volt battery connections under front of exterior escutcheon for emergency power

SPECIAL PROGRAMMING SECTION:

CODELOCKS CL5000

CHANGE MASTER CODE KEY

Key Sequence: # Master Code: Enter length of Master Code Followed by new Master Code (eg 6, 123456) Confirm length of Master Code followed by new Master Code (eg 6, 123456) Result: Master Code now changed to #123456. Note: If the length of the Master Code is changed, then all previous User Codes will be deleted

Add/Change Sub-Master: (Program 13)

Key Sequence: #Master Code, 13, Sub-Master Code (eg 2468) Result: A Sub-Master Code #2468 has been entered

Delete Sub-Master Code: (Program 14)

Key Sequence: #Master Code, 14, 14. Result: Sub-Master Code has been deleted

Enter New User Code: (Program 01)

Key Sequence: #Master Code, 01, User Code ID (eg 05), New Code (eg 4321) Result: New Code 4321 entered as User Code ID 05 (when user enters code)

One Time User Codes: (Program 07)

Key Sequence: #Master Code, 07, One time code ID (eg 81), One time Code (eg 4321) Result: Code 4321 in position 81 will work once and then be removed from memory Note: ID Positions 81 to 90 reserved for program functions, allowing up to 10 One-Time User Codes.

Suspend User Code: (Program 02)

Key Sequence: #Master Code, 02, User Code ID (eg 05) Result: User Code at ID 05 suspended (when user 05 enters code)

Restore User Code: (Program 03)

Key Sequence: #Master Code, 03, User Code ID (eg 05)

Result: User Code at ID 05 restored (when user 05 enters code)

Suspend All User Codes: (Program 04)

Key Sequence: #Master Code, 04. Result: All User Codes suspended (when all users enter code)

Restore All User Codes: (Program 05)

Key Sequence: #Master Code, 05. Result: All User Codes restored (when all users enter code)

Delete All User Codes: (Program 12)

Key Sequence: #Master Code, 12, 12, (7 secs). Result: All User Codes will be cleared from the memory

Set Passage Mode: (Program 08)

Key Sequence: #Master Code, 08. Result: Lock will be continuously unlocked

Cancel Passage Mode: (Program 09)

Key Sequence: #Master Code, 09. Result: Lock will revert to normal operation

RESET TO FACTORY DEFAULT:

Remove 1 battery. Press and hold '0' button. Blue LED will flash twice, and beep will sound twice. Release the '0' button. Within 3 seconds, press the '*' button 3 times.

Blue LED will light continuously for 7 seconds, then 2 beeps will sound. lock will revert to factory set Master, #1-2-3-4, and all other settings will be erased.

ANSI/BHMA Grade	n/a
UL/ULC fire rating	Listed
Clutched Lever	Freely rotates until proper code is entered
Available as	Cylindrical
Lever Handing	Non-handed
Field reversible?	Yes
Key Override:	Yes
Optional:	No
Key Function:	Lock cylinder provides emergency override and change between passage and code required
Keypad Layout	Telephone Style, 12-button
Button Construction	Stamped stainless steel
Code Hierarchy	Master, Sub-master (optional), User Codes
Master Code	1, must start with #
Number Of Digits	4, 5 or 6
Factory Default Master	#-1-2-3-4
Sub-master Codes	One, must start with #
Number Of Digits	Same as Master Code
User Codes.	Up to 80
number of digits	Same as Master Code
Single use (Service code)	Up to 10
Successful Entry	Blue LED blinks twice and two beeps
Levels of access	Code Required, Passage, Lockout
Lock-out/down	Suspend all users
Overridden by	Master or Sub-master
Programming Capabilities	Master Code cannot gain entrance
Master	All functions/Sub-Master optional

Notes: Programming a code each button press must be entered in 5 seconds, or red LED will flash, beep and lock will revert to normal.

Codes on hold Suspend all users
Anti-Tamper Entering 3 incorrect User codes will cause lock to suspend activity for 10-second penalty

Weatherized model Weather resistant
Battery Life Over 200,000 operations
Low Battery Warning Red LED will flash 5 times before the Blue LED blinks twice and beeps twice to signal acceptance of the code. Batteries should be changed as soon as this happens.

Batteries Four AA Alkaline
Battery Location Inside back cover
Warning: Non-volatile memory



UNICAN 4000

Disable Users:

0, 00#, all code (except Master)
0, 0M#, Manager of Group M (1-6)
0, GO#, All users in Group G (1-6)
0, GU#, User U (1-9) in Group G (1-6)
0, 77#, Service access code

Activate Users:

1, 00#, All codes except master
1, 0M#, Manager of Group M (1-6)
1, GO#, All users in Group G (1-6)
1, GU#, User U (1-9) in Group G (1-6)
1, 77#, Service access code

Delete Users:

3, 00#, all codes (except Master)
3, 0M#, Manager of Group M (1-6)
3, GO#, All users in Group G (1-6)
3, GU#, User U (1-9) in Group G (1-6)
3, 77#, Service access code

Passage Mode:

4, 00#, Off – Normal Operation
4, 01#, On – No code required to open door

Lockout Mode:

4, 90#, Off – Normal Operation
4, 91#, all codes, On, All user access codes temporarily locked out, Master & Manager Codes still accepted for programming

Unlock time setup: 5, SS#, select 1-20 sec to turn handle after entering valid code

Factory Defaults: 9, 99#, restores factory default settings and erases all codes except the Master Code.

Note: There is a programming time limit. More than 5 seconds between key strokes

exits programming mode

Battery Replacement: Remove shrink wrap on old batteries if necessary. If lock in passage mode, lock reverts to locked mode.

RESET TO FACTORY DEFAULT:

To reset programming to factory default, remove inside housing from door. Press and hold reset button for one second.



Add/Modify Users:

2, 0M#, Manager of Group M (1-6)
2, KKKKKKK#, enter 7-digit code
2, GU#, User U (1-9) in Group G (1-6)
2, KKK(KKK)#, enter 3-8 digit code, same length as all other access codes
2, 77#, Service access code
2, 99#, Master authorization code
2, MMMMMMMM, enter 8-digit code, M#, re-enter 8-digit code to confirm, MMMMMMMM

Categories	Unican 4000
ANSI/BHMA A156.2	Grade 1
Cylindrical Lock Grade	
UL/ULC fire rating	3 Hours, "A" labeled doors
Available as	Cylindrical/Mortise
Clutched Lever	Yes
Lever Handling	non-handed
Field reversible?	Yes
Key Override	Yes
Optional	No
Keypad Layout	Telephone Style, 12-button
Button Construction	Metal
Code Hierarchy	Master, Manager, Privileged User, User
Master Code	One
Number Of Digits	8
Factory Default	1-2-3-4-5-6-7-8
Master Code	
Notes: Lock will not accept factory default	
Master Code	
Sub-master Codes	6
Number Of Digits	7
User Codes	Up to 54
number of digits	3 to 6
Notes: 1st User Code determines length	
Single use code (Service Code)	1
Successful entry	Clutch engages, Green LED flashes continuously, ½ second beep
User code groups	6, up to 9 users per group
Levels of access	Code required, Passage, Privacy/lockout, lockout
Lock-out/down Override	Master or Manager Code
Programming Capabilities:	
Master Code	All
Sub-Masters	Limited
Time Limit	More than 5 sec btn keystrokes exits programming mode
Codes on hold	Users Lockout
Anti-Tamper	After 3-6 invalid codes, all User Codes locked out 30 secs - 15 min. Entering codes during
Weatherized model	Weather resistant
Low Batteries Warning	Alternating green and red LED and buzz when access is granted
Batteries	4AA Alkaline
Battery Location	Interior Housing, 2 5/64" hex screws

MARKS I-QUE METRO

Categories	Metro
ANSI/BHMA A156.2	Grade 1
Grade Certification	
UL/ULC fire rating	'A' Label doors
Clutched Lever	Yes
Cylindrical or mortise?	Cylindrical/Mortise, Exit Trim/Tubular
Lever Handing	non-handed
field reversible?	Yes
Key Override	Yes
Optional	No
Keypad Type	16 buttons
Button Construction	123i, 456Q, 789u, *0#e
Code Hierarchy	System Manager/GGM, Choice of lower levels, User Codes
Master Code	Great Grand Master (GGM) Code
# Characters	5-10, Combination of UID + PIN
Factory Default	9991234, Factory Code becomes GGM
Sub-master Codes #	"GM" "M"
# Characters	Same as the GGM
User Codes	up to 32
# Characters	Same as the GGM
Single use code	No
Successful Entry	Green LED, 1 sec double beep
User code groups	Up to 99, Users in the same group have same access rights
Levels of access	Passage, Code Required, Multiple Code Entry, Deny Access by Group
Lock-out/down	
Overridden by Programming	Master Code
Capabilities	System Manager program only, "GGM", "GM", "M" no change own UID
Codes on hold	Deny Access
Anti-Tamper	3 wrong codes, keypad locked out for 20 seconds, then increases to 40
Battery Life	80,000 to 90,000 operations
Low Battery Warning	First stage: double beep & yellow LED when code entered
	Second stage: adds a double beep every hour till batteries fail.
Batteries	4 AA Alkaline
Battery Location	Interior battery cover
Battery Replacement	Must be replaced within 10 minutes or memory affected

1. INITIALIZE LOCK. Initializing the lock with a unique 6-digit code assigns a LOCK ID number to each specific lock. Using keypad, enter the FACTORY CODE 9991234, the #key, and the 6-digit LOCK ID (usually starting with 000001), and finally, the #key. This code will NOT open the lock.

2. Create GREAT GRAND MASTER (GGM). This code is required by the SYSTEM MANAGER to perform all programming functions. In any lock system, the number of digits used for the UID of each User must be the same. Example: If the UID is 3 digits, all Users must have a 3 digit UID code. Also, the number of digits used for the PIN of each User must be the same.

Example: If the GGM's PIN is 5 digits, all Users must have a 5-digit PIN code.

Using keypad, enter the FACTORY CODE 9991234, the * key, the UID of the system manager (either 2,3 or 4 digits), the #key, the PIN of the system manager (either 3,4,5 or 6 digits), and finally, the #key.

Factory Code	*	UID (2, 3 or 4 digits)	PIN (3, 4, 5 or 6 digits) #
9-9-9-1-2-3-4	*	1-2-3 #	1-2-3-4-5 #

The GGM is now established for the SYSTEM MANAGER only a combination of their UID followed by their PIN. Lock is now initialized.

System Manager's Access to the Lock: Enter UID plus PIN, then the *key. Example: 1-2-3-1-2-3-4-5 *, GGM *.

Function 01, Adding & Deleting User Codes. Min. Group Number 03

To Add Users: Enter YOUR CODE (UID and PIN), the #key, FUNCTION NUMBER (01), the * key, the Users UID you want to include in the GROUP, the * key, the 2 digit GROUP NUMBER, the * key, the User's PIN, the * key twice.

Example: 1-2-3-1-2-3-4-5 # (your code), followed by 01 * (function #), 678 * (UID), 04 * (Group number), 5678 * (PIN), *

To Delete Users: Enter YOUR CODE (UID and PIN), the #key, FUNCTION NUMBER (01), the *key, the Users UID you want to delete, the *key, the 0 key in place of the GROUP NO., the *key twice.

Example: 1-2-3-1-2-3-4-5 #, 01 *, 678 *, 0 * *

The System Manager Code establishes the GGM and performs all programming functions. Higher Groups can override access functions of lower Groups.

All Users must be assigned to a Group. Each assigned Group can have different User restrictions.

When programming a Marks i-Que Metro, important keys are:

TERMINATOR KEY (*): Acts like the "Enter" key on a computer and is used to add or confirm codes on the keypad.

PROGRAMMING KEY (#): After a valid PROGRAMMING CODE is entered, this key is depressed to enter the programming mode. This key can also be used as a time saving feature, allowing the entry of multiple functions.

At the end of any PROGRAMMING INSTRUCTION, replace the last * with a # to return to FUNCTION NUMBER input, eliminating the need to reenter YOUR CODE.

RESET PROGRAMMING TO FACTORY DEFAULT:

Unplug battery pack. Find black and yellow wire connector. Make wire "U" and insert into connector. Plug in battery pack, LED red then green. Lock should relock. Remove "U" wire. Re-assemble lock.



SPECIAL PROGRAMMING SECTION:

SARGENT KP LOCK

Sargent KP Lock factory Master Code is "1234." Entering 1234* unlocks and allows lever to retract latchbolt.

All of the following procedures start with 99# to enter programming mode.

Change Master Code: 1234* (Yellow LED Begins to Blink Slowly). This example uses the Factory Default Master Code

50# 1# 01# New Master Code* (Yellow LED Blinks Quickly) .

New Master Code* (Yellow LED Blinks Slowly) * (Yellow LED Goes Out)

Enter Emergency Code: (Unlock Duration Factory Set at 10 Sec)

Master Code* (Yellow LED begins to blink slowly)

50# 1# 02# Emergency Code* (Yellow LED blinks quickly)

Emergency Code* (Yellow LED Blinks Slowly) * (Yellow LED goes out)

Enter Supervisory Code: Master Code* (Yellow LED begins to blink slowly)

50# 1# 03# Supervisory Code* (Yellow LED blinks quickly)

Supervisory Code* (Yellow LED Blinks Slowly) * (Yellow LED goes out)

Enter User Code: Supervisory or Master Code* (Yellow LED begins to blink slowly)

50# 1# User Number (04-97)# User Code* (Yellow LED blinks quickly)

User Code* (Yellow LED blinks slowly)* (Yellow LED goes out)

Enter Passage (Maintained Mode) Code: Supervisory or Master Code* (Yellow LED Begins to blink slowly)

50# 2# User Number (04-97)# User Code* (Yellow LED blinks quickly)

User Code* (Yellow LED Blinks Slowly)* (Yellow LED goes out)

Enter One-Time User Code: Supervisory or Master Code* (Yellow LED begins to blink slowly)

50# 3# User Number# User Code* (Yellow LED blinks quickly)

User Code* (Yellow LED Blinks Slowly) * (Yellow LED goes out)

Clear Entire Memory: Master Code* (Yellow LED Begins to Blink Slowly)

46# 00000# 00000# (Yellow LED Continues to Blink Slowly)

* (Yellow LED Blinks Quickly)

* (No Beep on Depression and Yellow LED Goes Out)

PAUSE, Yellow LED Begins to Blink Again

* (Yellow LED Goes Out)

Note: This deletes ALL codes, including Master, Emergency and Supervisory. Master Code is set back to 1234, Door Number to 0001 and Unlock time 5 Sec.

If the Master Code is unknown, Factory Assistance will be required to clear the memory. Call 1-800-810-WIRE



Categories	Sargent KP
ANSI/BHMA A156.2	Grade 1
Lock Cylinder Grade	
UL/ULC fire rating	3 hour 'A' label doors
Clutched Lever	n/a
Available as	Cylindrical, Mortise or Exit Device Trim
Lever Handing	Some non-Handed
Field Reversible?	Yes
Key Override	Yes
Optional	No
Keypad Layout	Telephone-Style 12-button
Button Construction	ultraviolet stable textured material
Code Hierarchy	Master, Emergency, Supervisor, Users
Master Code # Digits	2-6,
Notes: Can repeat numbers or start with "0".	Yellow indicates programming
Factory Default Master	1-2-3-4
Notes: Only Master code deletes Users.	
Sub-master Codes #	1 Emergency, 1 Supervisor
Number Of Digits	2-6
User Codes no.	up to 96
# of digits	1-6
Notes: Can be different lengths, Can repeat numbers. Two User Codes have 10 sec open time (98, 99)	
Single use code	Up to 96
Successful Entry	Green LED, passage mode, flashing green LED
User code groups	n/a
Notes: When Passage Mode is activated, same User Code must be used to re-lock Lock.	
Levels of access	Code required, passage
Programming Capabilities	Master Code: all, Emergency Code :10 second unlock time
Supervisor Code	limited, No Users deleted by Supervisor Code
Codes on hold	Temporary Lockout
Anti-Tamper	3 wrong codes in succession disables all codes for 10 seconds
Battery Life	Minimum 40,000 cycles
Low Batteries Warning	Four chirps after each code entry
Batteries	Four "C"
Battery Location	Inside of Battery cover, secured with 8-32 hex head security screw
Battery Information Warnings	Non-volatile solid state memory
Notes: If a mistake is made during any programming procedure, depress the "*" several times until the yellow LED goes out. If no keystroke is made in a 30 seconds, the unfinished programming up to that point will default and you will have to start over. If after the last "*" is depressed, the yellow LED does not go out, depress "*" once more.	

SCHLAGE COBRA

The Cobra lock does not have Master or Sub-Master Codes. Instead, application codes include:

Normal Codes, Toggle Codes that either unlock (passage mode) or relock (Code required) and Freeze/Lockout Codes that unlock or relock locks, and prevents other codes from operating the locks.

One Use Codes unlock lock only once for the unlocked time. Supervised Codes requires two different codes to unlock lock for the unlock time. Pass Thru Codes will unlock the door for the unlock time even in lockout mode.

Add Normal User Code: Enter Program Code *, 3 *, Enter New Code, *. To add more, enter new code *. To end, *.

Add One-Time User Code: Enter Program Code *, 33 *, 113 *, enter new code, **. To add more, enter new code **. To end, *.

Add Toggle Code: Enter Program Code *, 33 *, 191, *. Enter new code, **. To add more, enter new code **. To end, *.

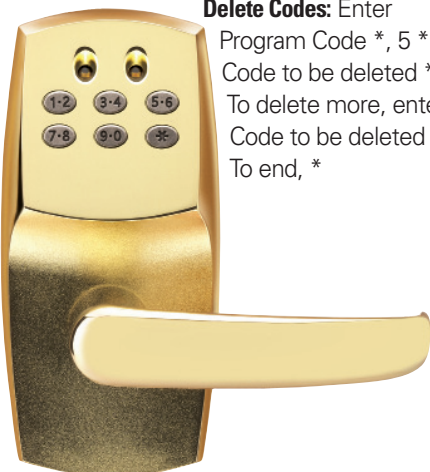
Add Freeze/Lockout Code: Enter Program Code *, 33 *, 115 *, New Code, **. To add more, enter New code, **. To end, *.

Add Supervised Code: Enter Program Code *, 33 *, 117, * New Code, **. To add more, enter New Code, **. To end, *.

Add Pass Through Code: Enter Program Code *, 33 *, 119*. Enter New Code **. To add more, enter New Code **. To end, *.

Change Programming Code: Enter Program Code *, 7 *, New Program Code, *, Enter New Program Code again, *.

Delete Codes: Enter Program Code *, 5 *, Code to be deleted *. To delete more, enter Code to be deleted *. To end, *.



Categories	MPC Cobra Lock
ANSI/BHMA A156.2 Cylindrical Lock Grade	Grade 1
UL/ULC fire rating	UL - cUL Fire Label for all functions up to 3 hours
Clutched Lever	n/a
Available as	Cylindrical
Lever Handling	Non-handed
Field reversible?	Yes
Key Override	Yes
Optional	No
Notes: Standard cylinder or 7-pin IC	
Keypad Layout	6 buttons, 2 rows, 1-2, 3-4, 5-6, 7-8, 9-0, *
Notes: Each keypad button represents two numbers. For example, code 246 is identical to code 135)	
Button Construction	Metal
Code Hierarchy	Programming Code, Normal Code, Toggle Code, Freeze/Lockout Code, One Use, Supervised, Pass Thru
Master Code	Programming Code
Number Of Digits	5-8 digits
Factory Default	97531
Notes:	Only programs codes
	Cannot unlock door
Sub-master Codes no.	n/a
User Codes.	Up to 99
number of digits	3-8
Notes:	Six types of User Codes. Each has special applications
Single use (Service Code)	up to 99
Successful Entry	Green LED flashes during unlock time, rotate handle to retract latch
User code groups	n/a
Levels of access	One
Lock-out/down overridden by	Freeze/Lockout Code
Programming Capabilities	Program Code only
Codes on hold	Freeze/Lockout Code
Anti-Tamper	n/a
Weatherized model	n/a
Battery Life	Approximately 80,000 cycles
Low Batteries Warning	First code entered, red LED flashes 12 times before the command executed.
After about 500 cycles, lock goes into "Low Battery Lockout" mode. Freeze/Lockout Code required to gain access	
Batteries	Four AA
Battery Location	Inside escutcheon cover, Four hi-Security Snake Eyes Screws
Battery Replacement Warning	Must replace batteries within 10 min

TO RESET FACTORY DEFAULT:

Clearing memory will delete all programmed codes and restore factory default codes. If the memory needs to be erased, follow these steps.

1. Remove inside escutcheon and remove one battery
2. Press any key
3. Hold down * key and reinstall battery. Continue holding the * key down until red LED flashes a few times and then stays on.
4. Release * key
5. Install inside escutcheon.

To return to factory default relock time delay, do steps 1-4 twice in a row.

SPECIAL PROGRAMMING SECTION:

SECURITRON SABL



Categories	Securiton SABL
ANSI/BHMA A156.2	Grade 1
Cylindrical Lock	
UL/ULC fire rating	3-hour 'A' Label doors
Clutched Lever	Clutched Exterior Lever
Available as	Cylindrical Lock
Lever Handing	Non-handed
(field reversible)	Yes
Key Override	Yes
Optional	No
Keypad Layout	11 buttons, 1-0 and "E"
Button Construction	EPDM rubber keys
Code Hierarchy	Program Code, User Codes
Master Code	Program Code
Number Of Digits	5-7, only for programming
Factory Default Master	Created Program Code is stored at address "00". Must press "PRGM" button adjacent to batteries
Sub-master Codes	n/a
User Codes no.	up to 55, 2-7 digits
Single use code	n/a
Successful Code Entry (lock/unlocked)	Flash once per second red LED. Can be reversed to green LED
Levels of access	Code Required, Passage, Lock-out
Lock-out Override	User locations 58 and 59. Code required to enter and exit Lock-out
Anti-Tamper	After 16 wrong digits entered, keypad will lock for 15 seconds, beeper sounds continuously
Weatherized	Fully sealed exterior electronics
Battery Life	Over 100,000 cycles
Low Batteries Warning	Two short beeps and flash of LEDs at first keystroke. Second, two short beeps and LED flash at each keystroke
Batteries	6 AA Alkaline
Battery Location	Inside battery cover, 3/32" hex (Allen) wrench
Replacement	Non-volatile EEPROM memory, no time limitation

CREATING THE PROGRAM CODE

The Program Code is the pass-word used to change programming. The program code is stored in address "00".

1. Remove the battery access cover to gain access to the "PRGM" button.
2. Press "PRGM" button.
3. Yellow light on keypad will flash rapidly indicating program mode. While in the program mode, yellow light will continue to flash until exit the program mode or after a 30-second timeout period where there is no keystroke.
4. Press "00" for program code address.
5. Enter new 5 - 7 digit Program Code within 5 seconds.
6. When new Program Code is entered, wait for the red light to flash twice confirming valid entry. A long red flash indicates an error.

SET USER CODES

User codes are stored in addresses "01" through "55". SABL must be in Program Mode to add or delete User Codes.

1. Enter Program Code.
2. Press "E" button.
3. Yellow keypad light will flash rapidly indicating program mode.
4. Press two digit prefix for new User Code address.
5. Enter new 1- 7 digit User Code within 5 seconds.
6. Wait for red light to flash twice to confirm valid entry.
7. Press "E" to exit program mode.

To delete individual user codes, enter "79" then any User Code.

To delete all users codes, enter "88" (not program or hard code).

PASSAGE CODES OR LOCKOUT CODES

The passage codes are stored in addresses "56" and "57". Lockout codes are stored in addresses "58" and "59".

1. Enter Program Code.
2. Press the "E" button.
3. Yellow keypad light will flash rapidly indicating program mode.
4. Enter "56" for passage code or "58" for lockout code within 5 seconds.
5. When desired code is entered, wait for red light to flash twice confirming valid entry.
6. Press "E" to exit program mode.

To reverse passage or lockout code: Repeat above steps entering "57" to exit passage or "59" to exit lockout code within 5 sec. Red light flash twice confirming valid entry. Press "E" to exit program mode.

RESET TO FACTORY DEFAULT, MASTER CODE UNKNOWN:

Press "HARD" button on CPU board for 1 second

Flashing yellow LED. Press "E" key until flashing stops

Confirm two (2) red flashes. Press the "PRGM" button on CPU board for one second. Confirm flashing yellow LED

Enter 0-0 followed by "E" key. Confirm two (2) red flashes.

Enter 8-8 followed by "E" key. Confirm two (2) red flashes.

Enter 8-9 followed by "E" key. Confirm two (2) red flashes.

Press the "E" key to end yellow flashing LED.

Lock is back to default values

Categories	Yale eBoss
ANSI/BHMA A156.2	Grade 1
Cylindrical Grade	
UL/ULC fire rating	3 hours 'A' label doors
Clutched Lever	Free wheeling only on Cylindrical and Exit Trim
Available as	Cyl/Mort/ET
Lever Handing	Non-handed
Field reversible?	Yes
Key Override:	Yes
Optional	Yes
Keypad Layout	Telephone-style 12-button
Button Construction	Stainless steel
Code Hierarchy	Master, Supervisor, User, Emergency, Lockout, Passage Code
Master Code	4-7 digits plus *,
Programming	No access
Factory Default Codes	Master Code 1-2-3-4. Emergency Code 4-3-2-1
Notes: Factory master and emergency preset codes must change before codes can be programmed	
Sub-master Codes	Supervisor, Lock-out, Passage
Number Of Digits	4-7 plus *
User Codes	up to 94, 4-7 digits plus *
Single use code	n/a
Successful Entry	Green LED flash once per second upon entry of a correct User code
User code groups	n/a
Levels of access	Code Required Passage
Lock-out/down	Supervisor and Emergency
Override	Codes
Programming Capabilities	
Master Code	All programming
Supervisor Code	All programming except to change Master Code
Lock-out Code	Enables/disables lock-out for User Codes
Passage Code	Enables/disables passage mode
Emergency Code	Unlocks lock for ten seconds handicap
Anti-Tamper (Default)	After 3 successive invalid entries, 1 long red flash and tone. 10-sec keypad lockout, 1 short beep per sec
Weatherized model	Weather resistant keypad
Battery Life	100,000 cycles
Low Batteries Warning	First, four beeps allows entry Blackout mode four beeps four tones Lock operates only with Supervisor and Emergency Codes
Batteries	Six AA Alkaline
Battery Location	Inside beneath battery escutcheon
Replacement Info	Non-volatile memory

Change Master Code. EXAMPLE:

Change from 1234 (factory default) to 3131.

Hold # depressed until Yellow LED blinks continuously.

Enter current Master Code (1234#). Yellow LED blinks.

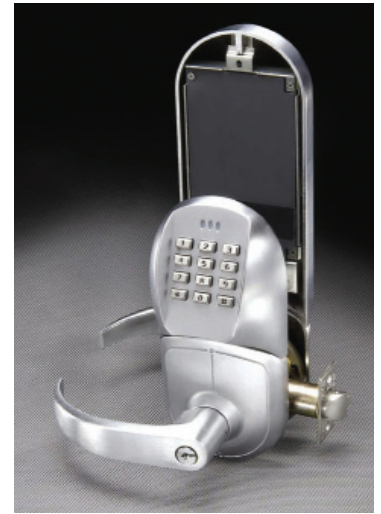
Enter Program Command Code (PCC). (51#) Yellow LED blinks

Enter User Number (1#) Yellow LED blinks

Enter New Master Code (3131#). Note: Master codes must be 4-7 digits Yellow LED blinks

Re-enter New Master Code (3131#) Green LED Blinks

If Master Code is unknown, Red LED will flash instead of Yellow. Refer to step 3.



User Programming Commands.

These Program Modes and User Codes can be programmed with the Supervisor Code (SC) or the Master Code (MC)

Enter Master Code: # (Hold), MC#, 51#, 1#, (4-7 Digits)#, (4-7 Digits)#

Enter Emergency Code: # (Hold), MC#, 51#, 2#, (4-7 Digits)#, (4-7 Digits)#

Enter Supervisor Code: # (Hold), MC#, 51#, 3#, (4-7 Digits)#, (4-7 Digits)#

Enter Lockout Code: # (Hold), MC#, 51#, 4#, (4-7 Digits)#, (4-7 Digits)#

Enter Passage Code: # (Hold), MC#, 51#, 5#, (4-7 Digits)#, (4-7 Digits)#

Enter Normal User Code: # (Hold) MC#, 51#, (6 through 99)#, (2-7 Digits) #, (2-7 Digits)#

To delete all users (Deletes all codes back to defaults): #Hold, MC#, 60#, 60#

To delete individual User Code: #Hold, MC#, 61# (6 through 99)#

To delete block Of Users: #Hold, MC#, 62#, 1st LOC #, 2nd LOC #

User Setting Reset: resets all programming commands to default. #Hold, MC#, 72#, 72#

TO RESET PROGRAMMING TO FACTORY DEFAULT:

To reset programming to factory default (master code unknown), Remove inside escutcheon. Press and hold “#” button until yellow LED blinks. Press PRGM button at top of controller.

Enter 51#. Yellow LED blinks. Enter 1 #. Yellow LED blinks again.

Enter new master code #. Yellow LED blinks. Re-enter new Master Code #. Yellow LED blinks. Green LED blinks. Lock back to default.