Manually Program User Credentials *(see reverse for +PIN)*

- **After each step of a procedure, the red and green LEDs will alternately flash several times**, indicating the step was performed successfully. WAIT for the flashing to stop before continuing.
- **If at any time the red LED remains on while the green LED flashes, an error has occurred**
  A green flashing error code is repeated three times (with a pause in between each set of flashes). Count the number of green flashes to determine error code, then consult Error Code chart below.
- When adding a user credential (iButton, Mag Card, or Prox) a code (3-8 digits) is entered just prior to presenting the credential (the red LED stays on while waiting for the credential). This code becomes an *identifier code* used to identify the credential (this allows a credential to be deleted by simply deleting the identifier code - without physically having the credential to be deleted). Identifier codes will NOT operate the lock (unless lock also has some computer programmed user data - not recommended).
- Entered codes must be 3-8 digits in length. **Keep a log of all issued codes**. Issue codes exclusively with all odd or all even numbers, this practice will make it easier to spot duplicate codes - since most keypad buttons represent two numbers (for example, code 246 is identical to code 135).

Add **Normal Use** *credential* ⇩	*Add* **Toggle** *credential* ⇩	*Add* **Freeze/Lockout** *credential* ⇩	*Add* **One Time Use** *credential* ⇩	*Add* **Supervised** *credential* ⇩	*Add* **Pass Thru** *credential* ⇩
> > > > > > > > > > > Enter **Programming Code** ✱, OR present **Programming Credential** < < < < < < < < < < <					
3 ✱	33 ✱	33 ✱	33 ✱	33 ✱	33 ✱
	191 ✱	115 ✱	113 ✱	117 ✱	119 ✱
NewCode ✱	NewCode ✱	NewCode ✱	NewCode ✱	NewCode ✱	NewCode ✱
present new user credential or press ✱ for User Code only	present new user credential or press ✱ for User Code only	present new user credential or press ✱ for User Code only	present new user credential or press ✱ for User Code only	present new user credential or press ✱ for User Code only	present new user credential or press ✱ for User Code only
to add more	to add more	to add more	to add more	to add more	to add more
✱ to complete	✱ to complete	✱ to complete	✱ to complete	✱ to complete	✱ to complete

Change **Programming Credential** ⇨	*Change* **Programming Code** *(5 Digit min)* ⇨	*Delete* **a credential** ⇩	*Change* **Relock Time** ⇩
>> Enter **Programming Code** ✱, OR present **Programming Credential** <<			
7 ✱	7 ✱	5 ✱	99 ✱
present new Programming Credential	NewCode ✱	OldCode ✱	1 ✱
	NewCode ✱	delete more	Press and release 1 for each sec. and / or 5 for every 5 sec.
Completed	Completed	✱ to complete	✱ ✱ to complete

Flashes	Error Code Description	Flashes	Error Code Description
2	Code too long, 8 digits max.	7	Code to be deleted does not exist
3	Memory full, must delete some codes	8	Code too short, 3 digit min.
4	Use *Change Programming* procedure	9	Duplicate code or credential
5	Second entry did not match first	10	Manual programming disabled
6	Invalid entry, start over (verify any codes entered prior to this error, they may operate the lock)		

Manually Program +PIN Credentials *(see reverse for no +PIN)*
(iButton+PIN, MagCard+PIN, Prox+PIN)

- **After each step of a procedure, the red and green LEDs will alternately flash several times,** indicating the step was performed successfully. WAIT for the flashing to stop before continuing.
- After the linked PIN has been entered, the red LED will remain on - indicating the lock is waiting for the credential to be presented.
- **If at any time the red LED remains on while the green LED flashes, an error has occurred**
  A green flashing error code is repeated three times (with a pause in between each set of flashes). Count the number of green flashes to determine error code, then consult Error Code chart below.
- The same credential may be programmed to perform a variety of functions by linking different PINs to each different function. Each PIN must be 3-8 digits in length
- **Keep a log of all issued PINs.** Issue PINs exclusively with all odd or all even numbers, this practice will make it easier to spot duplicate PINs since most keypad buttons represent two numbers
  (for example, code 246 is identical to code 135).

Add *Normal Use* credential ⇩	*Add* *Toggle* credential ⇩	*Add* *Freeze/Lockout* credential ⇩	*Add* *One Time Use* credential ⇩	*Add* *Supervised* credential ⇩	*Add* *Pass Thru* credential ⇩
> > > > > > > > > > > Enter **Programming Code ✳**, OR present **Programming Credential** < < < < < < < < < <					
3 3 ✳	3 3 ✳	3 3 ✳	3 3 ✳	3 3 ✳	3 3 ✳
3 1 1 ✳	3 9 1 ✳	3 1 5 ✳	3 1 3 ✳	3 1 7 ✳	3 1 9 ✳
PIN ✳	PIN ✳	PIN ✳	PIN ✳	PIN ✳	PIN ✳
Present Linked Credential	Present Linked Credential	Present Linked Credential	Present Linked Credential	Present Linked Credential	Present Linked Credential
to add more	to add more	to add more	to add more	to add more	to add more
✳ to complete	✳ to complete	✳ to complete	✳ to complete	✳ to complete	✳ to complete

Change *Programming Credential* ⇩	*Change* *Programming Code* *(3 Digit min.)* ⇩	*Delete* a credential ⇩	*Change* *Relock Time* ⇩
>> Enter **Programming Code ✳**, OR present **Programming Credential** <<			
7 ✳	7 ✳	5 ✳	9 9 ✳
present new Programming Credential	NewCode ✳ NewCode ✳	PIN ✳ delete more	1 ✳ Press and release 1 for each sec. and / or 5 for every 5 sec
Completed	Completed	✳ to complete	✳ to complete

Flashes	Error Code Description	Flashes	Error Code Description
2	Code too long. 8 digits max.	7	Code to be deleted does not exist
3	Memory full, must delete some codes	8	Code too short, 3 digit min.
4	Use *Change Programming* procedure	9	Duplicate code or credential
5	Second entry did not match first	10	Manual programming disabled
6	Invalid entry, start over (verify any codes entered prior to this error. they may operate the lock)		

Clearing Memory

Clearing memory **deletes** all user data and **restores** the factory default codes. Clearing memory a second time restores timer/relay defaults.

1. On the electronics board, press and release the pushbutton labeled **CLR**, three times. *The red LED lights for about 10 sec — all user data is cleared.*

2. Before adding any new users, repeat step 1 to reset any timers/relays back to their factory default values.

Creating a Programming Credential

Creating a Programming credential deletes all factory codes. Using a Prog credential puts the lock in a Programming Mode, it will not release the lock.

Only one Programming credential is allowed, any of which can be used to manually program any user credential. (To make a Programming credential directly from the keypad/reader, see the inside programming chart.)

1. On the electronics board, press and release the **INI** button, **three times**. *The red LED will light, and remain on.*

2. Present the credential to the reader. *The green and red LEDs will alternately flash indicating acceptance, then the red LED remains on.*

3. Press and release the **INI** button, one time. *The red LED will go out.*

Low Battery Indications

Battery powered products have built-in low battery indications. A lock with low batteries will act differently, allowing the appropriate support personnel to be notified of the locks differing behavior. **Changing batteries does not affect any programmed data.** Battery voltage can be checked with meter on the metal iButton ports (6.2 volts=full power, 4.5 volts=replace batteries)

There are two phases of low battery indications:

A. When a valid credential is used on a lock with weak batteries (below 4.5v), the red LED will flash twelve times before the green LED flashes and the lock is released. This is an indication to **replace the batteries** at this time. The lock will operate in this manner for about 500 cycles.

B. After 500 cycles of the lock operating as described in Step A, when a valid credential is used, the red LED will flash twelve times and the lock will not release – the lock automatically goes into a **Lockout Mode** A Freeze/Lockout must be used to reset the lock to an accessible state and then a Normal credential must be used to gain access. The lock will operate in this dual credential manner for about 200 cycles. Then the mechanical override key must be used to gain access (if the lock is so equipped).

Credential Functions

All keypad products have four default factory codes detailed below.

Factory Default	Function	Description
13579	*Normal*	releases a lock for a configurable amount of relock time, while lock is released green LED will flash quickly
135135	*Toggle*	releases a lock, the lock remains released until any Toggle credential is used to return the lock to a secured state
9115	*Freeze / Lockout*	freezes the lock in its current state, until any Freeze/Lockout credential is entered to reset the lock to an accessible state (when a valid code is entered while the lock is in Freeze/Lockout mode the red LED flashes 12 times indicating access is not permitted at this time) Also required to reset a lock ignored beyond the initial low battery indication (see *Low Battery Indications*).
none	*Pass Thru*	releases lock even if the lock is in a frozen secured state (Lockout Mode), then lock returns to its Lockout Mode
none	*One Use*	will only release the lock one time
none	*Supervised*	two Supervised credentials must be entered within approximately five seconds to release the lock
97531	*Program-ming*	puts the lock in a Programming Mode

When a Programming Code plus ✱ is entered or a Programming credential is presented, the LEDs alternately flash several times indicating the lock is in a Programming Mode. If more than 30 seconds pass in between programming entries, the lock returns to a normal operational state.

For security reasons the factory default codes should be deleted. To automatically delete all default factory codes change the default Programming Code (see chart inside). For locks without keypads see *Creating a Programming Credential* instructions on reverse.

When entering codes, if a wrong button is pressed, press ✱ to clear the keypad then re-enter the entire code. The keypad will clear itself if no button is pressed within approximately ten seconds.

If any keypad buttons are pressed 20 times in succession, without a valid code being entered, the keypad will shutdown for 30 seconds.

LOCKNETICS   **SCHLAGE**   **VON DUPRIN**

Battery Products Troubleshooting Guide

Low battery indication, change batteries (no data is lost) ← *Red LED blinks many times before lock is released*

Are you using a valid Normal use credential that has been programmed into the lock? → **No / Not Sure** → Clear memory to return to factory defaults (13579 default Normal code), all previously programmed data will be erased

Yes

A Linked Access credential has been presented, enter linked PIN code ← *Red and Green LED's flash, Green LED stays on for five seconds*

What occurs on the keypad/reader when a Normal credential is used?

Red LED flashes many times, lock does not release → Lockout mode, use Freeze / Lockout credential to return to lock to normal (if continues, check batteries)

User attempting to access a door outside of assigned Time Zone. ← *Red LED blinks 2-3 times after a valid credential is presented*

Red and Green LED light as a button is pressed, lock remains unlocked → Lock toggled open, or an AutoUnlock was scheduled to unlocked door – to secure lock use a Toggle credential, or wait for AutoUnlock end time

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No LEDs light when any credential is used

Ensure credential is used properly:
• **iButton** - touch both metal posts
• **MagCard** - stripe faces right
• **Prox** - placed near in reader area
• **Code** - press & release buttons firmly (press ✱ prior to entering code if other buttons have been pressed, this will reset keypad)

↓

Verify keypad/reader is properly connected

↓

Verify batteries are installed properly and total voltage is greater than 4.6 Volts

Voltage may be checked with a meter on the iButton reader ports

↓

Replace keypad / reader

↓

Replace electronics

Green LED flashes multiple times indicating acceptance, but lock does not release

On the electronics board, press Lock and Unlock buttons (or REX button for battery Strikes and Cabinet Locks), does the lock respond properly?

Yes → Replace electronics ↓ Replace keypad-reader

No → Verify proper installation

↓

For Locksets and Trim check and / or replace
• spindles in front/rear housing
• entire front housing assembly
• latch/clutch/mortise assembly

↓

Replace Lock

• **Code**: Red LED lights for each button, no Green LED acceptance
• **iButton, MagCard or Prox**: Red LED blinks once, no Green LED

Do other similar credentials operate the lock?

Yes → Un-programmed or bad credential, try reprogramming

No ↓

Are you certain you are successfully programming the credentials into the lock?

Yes → Verify keypad / reader is properly connected ↓ Replace keypad/reader ↓ Replace electronics

No → Reprogram (Refer to guides) ↓ Contact your local IR SSC

(IR) Security & Safety