1000 User Products
Manual Programming Guide
Manually Program User Credentials

Important things to keep in mind:

a) A Code:
   - Must be 3-8 digits in length.
   - A log should be kept of every one issued.
   - Should always be all odd or all even numbers.
     > Reason why: Since most keypad buttons represent two numbers (for example, code 246 is identical to code 135),
       this practice will make it easier to spot duplicate codes.
   - Must be entered before presenting the credential (iButton, mag card, or prox card).
     > Red LED stays on while waiting for a credential.
   - Identifies credential and allows a credential to become ineffective when code is deleted.
     > No need to physically dispose of the credential.
   - Will not operate the lock unless lock also has some computer programmed user data, which is not recommended.

b) After each step, the red and green LEDs should alternately flash several times.
   - This indicates the step was performed successfully.
   - Always wait for the flashing to stop before continuing.

c) An error has occurred anytime the red LED stays on while the green LED flashes.
   - A green flashing error code repeats three times with a pause between each set of flashes.
   - To determine error:
     > count the green flashes
     > consult the Error Code Chart on page 5.

<table>
<thead>
<tr>
<th>Add Normal Use Credential</th>
<th>Add Toggle Credential</th>
<th>Add Freeze/Lockout Credential</th>
<th>Add One Time Use Credential</th>
<th>Add Supervis Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 *</td>
<td>33 *</td>
<td>33 *</td>
<td>33 *</td>
<td>33 *</td>
</tr>
<tr>
<td>present new user credential or press * for User Code only</td>
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</tr>
<tr>
<td>to add more</td>
<td>to add more</td>
<td>to add more</td>
<td>to add more</td>
<td>to add more</td>
</tr>
<tr>
<td>to complete</td>
<td>to complete</td>
<td>to complete</td>
<td>to complete</td>
<td>to complete</td>
</tr>
</tbody>
</table>
Manually Program Plus PIN Credentials

Important things to keep in mind:

a) A Personal Identification Number (PIN):
   - Must be 3-8 digits in length.
   - A log should be kept of every one issued.
   - When assigned to different functions, enables one credential to perform multiple functions.
   - Should always be all odd or all even numbers.
     > Reason why: Since most keypad buttons represent two numbers (for example, PIN 246 is identical to PIN 135), this practice will make it easier to spot duplicate PINs.
   - Must be entered before presenting the credential (iButton, mag card, or prox card).
     > Red LED stays on while waiting for a credential.

b) After each step, the red and green LEDs should alternately flash several times.
   - This indicates the step was performed successfully.
   - Always wait for the flashing to stop before continuing.

c) An error has occurred anytime the red LED stays on while the green LED flashes.
   - A green flashing error code repeats three times with a pause between each set of flashes.
   - To determine error:
     > count the green flashes
     > consult the Error Code Chart on page 5.

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<th>Add Toggle credential</th>
<th>Add Freeze/Lockout credential</th>
<th>Add One Time Use credential</th>
<th>Add Supervised credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 *</td>
<td>33 *</td>
<td>33 *</td>
<td>33 *</td>
<td>33 *</td>
</tr>
<tr>
<td>311 *</td>
<td>391 *</td>
<td>315 *</td>
<td>313 *</td>
<td>317 *</td>
</tr>
</tbody>
</table>

Present Linked Credential

- to add more

* to complete
Programming Credentials

- Creating a programming credential deletes all factory codes.
- Using a programming credential puts lock into the programming mode.
- Using a programming credential will not unlock the lock.
- Only one programming credential is allowed.
- Any programming credential can be used to manually program any user credential.

To Create a Programming Credential:
Refer to your lock’s installation manual when performing the following steps.
1. The inside escutcheon cover must be removed.
2. On the inside escutcheon PCB, press & release the INI button 3 times.
   > Red LED comes on and stays on.
3. Present the credential to the reader.
   > Green & red LEDs alternately flash, which indicates acceptance.
   > Green LED goes out, red LED stays on.
4. Press & release the INI button once.
   > Red LED goes out.

Beeper Settings

The factory default beeper setting is: OFF for all functions.

Turning the beeper ON for all functions:
- Programming Code * (or iButton), 99 *, 3 *, 7 *

Turning the beeper OFF for all functions:
- Programming Code * (or iButton), 99 *, 3 *, 0 *

The beeper can also be: ON for some functions and OFF for others.

To change the beeper settings, enter:
- Programming Code * (or iButton), 99 *, 3 *, refer to beeper setting number below, *

<table>
<thead>
<tr>
<th>beeper setting number</th>
<th>key press - user mode</th>
<th>key press - programming mode</th>
<th>motor running - lock or unlock</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (factory default)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>1</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>11</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>31</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>5</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>51</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>7</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

NOTE: There is no beeper during Error Code flashing regardless of beeper setting.
Clearing Memory

Clearing memory - first time:
  > All user data deleted.
  > Factory default codes restored.

Clearing memory - second time:
  > Time/relay defaults restored.

Low Battery Indications

Important things to keep in mind regarding the batteries in your lock:

- Replace the batteries at least every 2 years or when they get down to 4.5 VDC.
- A lock with low batteries will act differently.
- Battery powered products have built-in low battery indications.
- Low battery indications allow the appropriate support personnel to be notified.
- No data will be altered when you replace the batteries.
- Battery voltage can be checked at the two metal iButton ports with a DC voltmeter.

Your DC voltmeter should read:

- **6.2 VDC** = Batteries are fully charged
- **4.5 VDC and below** = Batteries need replacing

There are two phases of low battery indication:

a) When the batteries get down to 4.5 VDC and a valid credential is used, the red LED will flash 12 times before the green LED flashes and the lock unlocks. Although the lock will operate in this low battery condition for a limited number of cycles, this is the first indication to replace the batteries.

b) If the batteries are not replaced and get below 4.5 VDC, the red LED will flash 12 times when a valid credential is used, but the lock will not unlock. This indicates **Lockout Mode**. A **Freeze/Lockout** code must be used to reset the lock to an accessible state and then a credential must be used to unlock the lock. The lock will operate in this dual credential manner for a limited number of cycles. If the batteries are still not replaced after these final battery operated cycles, the lock will only unlock by using the mechanical key (if the lock is so equipped).

Error Code Chart

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

All keypad products have 2 factory default codes detailed below.

<table>
<thead>
<tr>
<th>Factory Default</th>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13579</td>
<td>Normal</td>
<td>Unlocks a lock for a configurable amount of relock time. Green LED flashes rapidly while lock is unlocked.</td>
</tr>
<tr>
<td>none</td>
<td>Toggle</td>
<td>Unlocks a lock. Lock stays unlocked until any Toggle credential is used to relock it.</td>
</tr>
<tr>
<td>none</td>
<td>Freeze/Lockout</td>
<td>Freezes the lock in it's current state and remains that way 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 the present time. Also required to reset a lock ignored beyond the initial low battery indication (see Low Battery Indications).</td>
</tr>
<tr>
<td>none</td>
<td>Pass Thru</td>
<td>Unlocks a lock even if the lock is in Lockout mode. Then lock returns to Lockout mode.</td>
</tr>
<tr>
<td>none</td>
<td>One Time Use</td>
<td>Will only unlock a lock a single time.</td>
</tr>
<tr>
<td>none</td>
<td>Supervised</td>
<td>2 Supervised credentials must be entered within approximately 5 seconds to unlock a lock.</td>
</tr>
<tr>
<td>97531</td>
<td>Programming</td>
<td>Puts the lock in a Programming mode.</td>
</tr>
</tbody>
</table>

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 must be deleted.** To automatically delete all factory default codes, change the default Programming Code (see procedure on page 2 or 3). For locks without keypads, see: *To Create a Programming Credential: on page 4*.

When entering codes and a wrong button is pressed, press the * button to clear the keypad. Then re-enter the entire code. The keypad will clear itself if no button is pressed within approximately 10 seconds.

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