The Sargent & Greenleaf A-Series with Display™ Locks (models 3006-2xx, 3007-2xx, 3028-2xx, and 3029-2xx) are designed to provide a high level of security combined with flexible features that allow multiple levels of control over normal operations and service access. Follow these instructions carefully to get the best possible use from your lock.

- For instructions in English, visit the website: www.sargentandgreenleaf.com/ASeriesWithDisplay/
- Für Anweisungen auf Deutsch besuchen Sie bitte die folgende website: www.sargentandgreenleaf.com/ASeriesWithDisplay/
- Pour obtenir les instructions en français, veuillez consulter le site ci-dessous: www.sargentandgreenleaf.com/ASeriesWithDisplay/
- Para obtener instrucciones en español, visite la siguiente página web: www.sargentandgreenleaf.com/ASeriesWithDisplay/

Introduction

- It is recommended you run the latest version of Lock Management System (LMS). Running an older version of LMS may not give you access to all features of lock firmware.

- S&G electronic safe locks incorporate sophisticated electronic circuitry. These locks are suitable for indoor use only.

- The keypad should only be cleaned with a soft, dry cloth. Avoid using solvents or liquids.

- Never attempt to lubricate the lock or keypad components. Service should only be performed by a qualified technician.

- Anytime the keypad is removed from its mounting base, either disconnect the lock cable or support the keypad so that it does not hang by the cable. This could adversely affect the cable connector or the keypad receptacle.

- Each time a button is pressed and the lock accepts the input, it will emit a beep, the red LED on the keypad will flash momentarily, and a * will be displayed on the screen.

- All the letters of the English alphabet are displayed on the keypad. This allows you to devise numeric, alphanumeric, or word-based codes. Use whatever approach works best for you.

- All codes end with #. This signals to the lock that you have finished entering all digits of the code.

- Personal data directly related to a code holder, such as a birthdate, should not be used in making up a lock code. Avoid codes that can be easily guessed.

- After the lock is changed to a new code, check the lock function by locking and unlocking at least 3 times with the container door open. Make sure the lock functions correctly before closing the door.

- The audit features, peripheral devices and accessories, software features, one-time code functionality, USB functionality, and other additional features are beyond the scope of the UL 2058 standard and are not a part of the UL Listing.

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 – About Your Locking System

The S&G A-Series with Display™ Electronic Lock has the following hardware components:

Lock – There are four different lock models available for the A-Series with Display™ Platform. These models include the 3006 (Pivot Bolt), 3007 (Direct Drive), 3028 (Motor Driven, Dead Latching), and 3029 (Motor Driven, Push / Pull). The lock is housed within the container.

Digital Platform (DP) Keypad (31KP Series) – The 12-key alphanumeric keypad on the front of the container used to enter PIN codes and programming commands. The keypad will contain three LEDs (red, green, yellow), a beeper to indicate the different states of the lock, and a display module. The keypad also contains a USB connector that will allow a flash drive to be connected.

The * key is used with Programming Command Codes. It may also be used to clear the keypad if there is an input error by entering the * key twice.

Each time you press a number, letter, or other character on the keypad, it beeps and the keypad's red LED flashes. If there is no beep or flash, check the batteries and try again (See section 2.10 — Changing the Batteries).

The # key acts as an enter function and must be used after each code entry.

> ⚠ The lock responds with different beep sequences to indicate different conditions. The beeps are indicated in the examples by the symbol ♩. For example, five beeps are indicated by ♩♩♩♩♩. You should always wait for each set of beeps to end before entering another number or letter, or you will interrupt the lock's instructions.

1.2 — Factory Default Settings

The A-Series with Display™ Lock is shipped from Sargent & Greenleaf with factory default settings:

- Bank Mode – enabled (Service Mode disabled)
- Multiple User Mode – enabled (Time Delay – 0 minutes; Duress – disabled)
- Positions 00, 02, and 10 have default PIN Codes set at the factory:
    1. Programmer Code (00) - 00123456
    2. Manager Code (02) - 02020202
    3. User Code (10) - 10101010

The Programmer Code (PC) can only set up the operating parameters of the lock and download the audit trail data. The Programmer Code cannot open the container.

The A-Series with Display™ Lock has the capacity for up to 30 PIN Code positions: 1 Programmer, 3 Managers, 6 Supervisors who manage the lock programs, and up to 20 Users. PIN Codes 01-29 can open the lock.

To open the lock, use the factory setting for PIN position 10 with PIN Code 10101010. Enter 10101010# and the lock should open. (If the lock does not open and beep patterns were heard after pressing the # key, check section 2.3 "Beep Patterns" to identify condition.)

We recommend that Users change their PIN Codes immediately after the PIN positions are assigned (Changing a PIN Code – Section 3.10).

2. OPERATING THE LOCK

2.1 — Operating Mode, PIN Positions, and User Codes

The A-Series with Display™ Lock has a code hierarchy of
- Programmer (PIN position 00)
- Managers (PIN positions 01, 02, 03)
- Supervisors (PIN positions 04-09)
- Users (PIN positions 10 through 29)

See Tables A & B on page 5 and 6 for access privileges.

The lock can be configured to operate in five different User access modes.
- **Multiple User mode** — Any valid code (Supervisor, Manager, or User) can open the lock.

- **Manager/Employee mode** — The Managers or Supervisors enable/disable the access privilege of individual User Codes. When in this mode, the Manager and Supervisor Codes do not open the lock.

- **Dual Control mode**— Two independent User Codes are needed to open the lock. Manager and Supervisor Codes can be used to open the lock in this mode.

- **Day/Night mode #1** — Two independent User Codes are needed to open the lock in "night" mode, and any valid code (Supervisor, Manager or User) can open the lock in "day" mode.

- **Day/Night mode #2** — Any valid code (Supervisor, Manager or User) can open the lock in "day" mode. The lock cannot be opened in "night" mode.

2.2 — PIN Positions and Access Responsibilities (Bank Mode)

This section defines each PIN position and the respective User functions as summarized in Tables A & B.

PIN position 00, the Programmer position, can only configure the lock and download the audit trail. The Programmer cannot open any locks.

Each User is assigned a 2-digit PIN (Personal Identification Number) position and an 8-digit PIN Code. The PIN position identifies the type of User (Programmer, User, etc.) The PIN Code allows the User to access the lock. Please note that the PIN position is not part of the code that is entered. Each User can change their own PIN Code but not PIN position. Users will always enter their 8-digit PIN Code, followed by the # key.

Example: 0 2 0 2 0 2 0 2 #

TABLE A: Programmer Code

PIN Position	Position Description	Activity
00	Programmer Code	Cannot open lock.
		Cannot add/delete other PIN Codes.
		Can change their PIN code.
		Send duress alarm (when programmed).
		Can be used to program the lock functions (audit downloads, time delay, set time and date).

TABLE B: User Groups

PIN Position	Position Description	Activity
01 – 03	Managers	Open the lock.
		Add new Users.
		Delete Users.
		Start time delay (when programmed).
		Send duress alarm (when programmed).
		Change their PIN Code.
04 – 09	Supervisors	Open the lock.
		Delete Users.
		Start time delay (when programmed).
		Send duress alarm (when programmed).
		Change their PIN Code.
10 – 29	Users	Open the lock.
		Start time delay (when programmed).
		Send duress alarm (when programmed).
		Change their PIN Code.

2.3 — Beep Patterns

The following table lists the beep patterns heard when using the A-Series with Display™ Lock.

*** beep1 is the sound emitted when any single button is pressed
*** beep2 is pitched lower than beep1
*** brap is the long error signal

TABLE C: Beep Patterns

Action/Condition	Tone & Keypad LED	LED Color	Duration
Normal Condition	-	-	-
Each Keystroke	1 beep1	-	1 cycle
Low Battery Warning	2 beep1	Red	5 cycles
Low Battery Lockout	20 beep1	Red	1 cycle
Start Time Delay	3 quick beep1	Red	1 cycle
Time Delay Countdown	1 beep1	Red	Every 10 seconds
Time Delay Expired	10 quick beep1	Green	1 cycle
Opening Window Countdown	2 beep1	Green	Every 10 seconds
Bolt Extension	1 beep2 + 1 beep1	Red	1 cycle
Code Input – Lock in Penalty Time	2 brap	Red	1 cycle
Code Input – Lock Disabled	2 beep2	Red	1 cycle
Enable Lock (Mgr/Emp Mode)	4 beep1	Green	1 cycle
Disable Lock (Mgr/Emp Mode)	2 beep2	Red	1 cycle
Access to Program Modes	5 beep1	Green	1 cycle
Program Argument Confirmation	3 beep1	Green	1 cycle
Program Complete	3 beep1	Green	1 cycle
Mode 77 – PIN Used	1 beep2	Red	1 cycle
Mode 77 – PIN Empty	1 brap	Red	1 cycle
Wrong Input/Access Denied	1 brap	Red	1 cycle

CAUTION: During normal entry, don't wait more than 10 seconds between entries, or the lock will clear and you will have to start over.

2.4 — Opening the Lock

Time Delay —The lock may be programmed with a time delay from 0 - 99 minutes with an opening window of 1 minute to 99 minutes.

If your lock does not use the time delay:

> Enter: Your 8-digit PIN Code #

Turn the safe handle to the unlocked position within 6 seconds.

If your lock uses the time delay:

> Enter: Your 8-digit PIN Code # ♪♪♪
> (signals start of time delay)

The pre-set time delay period begins after you enter your code. During the time delay period, the lock beeps once every 10 seconds. At the end of the time delay, the lock will beep rapidly 10 times to signal the start of the opening window, the period during which you can open the lock.

During the opening window, the lock beeps twice every 10 seconds. You must now:
> Enter: Your 8-digit PIN Code again #

Turn the safe handle to the unlocked position within 6 seconds.

2.5 — Keypad Input Errors and Clearing the Lock

If you make a mistake while entering a User Code, press * twice at any time to clear the lock and start over. If you hear a brap after entering the # key, you have made an error.

Press * key twice to clear and try again, or you can wait 10 seconds and the lock will clear itself.

2.6 — Penalty Time (Bank Mode & Service Mode)

If you enter 5 incorrect codes in a row, the lock goes into a 10-minute penalty time and cannot be opened. Once in penalty time, additional input does not affect the lock, and you must wait 10 minutes before any valid code entry will be accepted.

2.7 — Lockout (Service Mode)

In the unlikely event that the lock is put into penalty time five times in a row, the lockout function will engage. When you attempt to enter a code, the lock will emit three braps but will not operate. The lock will have to be reset with a red management key. Contact your lock software administrator or dispatcher for the proper key and code.

2.8 — Bolt Extension Indicator

When the lock bolt extends to the locked position, you will hear one double beep (low pitch, then high pitch) and the red LED will flash.

2.9 — Low Battery Indicator

If you enter a correct User Code and hear 5 double beeps when the lock opens, the batteries are low. Change the batteries. You will also see the following icon on the screen:

If the batteries are so low that the lock can't open, the lock will beep 20 times when a User code is entered. Change the batteries right away and re-enter a User code to open the lock.

Please note that the 9V batteries are located inside the keypad.

2.10 — Changing the Batteries

The lock will not lose any codes or program settings while you replace the batteries. Your lock uses two 9-volt alkaline batteries. We recommend Duracell® alkaline batteries.

To change the batteries, carefully pull the keypad housing away from the door. Move the spring clips under each battery to release the battery. Insert the new batteries into the compartment and move the spring clips back into place. Please note that the polarity of the battery is designated on the inside of the compartment. Press the keypad housing firmly back onto the base.

2.11 — iButton Touch Key

The iButton touch key allows you to transfer the audit trail from the lock to your computer. The audit trail is a time and date stamped record of all lock activity. The touch key is also used in the authorization of Service Mode Users at the lock.

The S&G Lock Management System or Audit Manager software must be installed on your computer before you can upload and use the audit trail information stored in your lock.

2.12 — USB Flash Drive (optional – for Audit Trail download)

A connector for a USB flash drive is provided on the front of the keypad. This connection allows a flash drive to be inserted into the key so that the audit trail can be downloaded.

3. PROGRAMMING THE LOCK

These programming commands allow you to perform a variety of lock functions.

Command	Description/Function
0 0 *	Enable/disable manual secure
0 3 *	Set Daylight Savings Time – time change
0 4 *	Set Daylight Savings Time – start date
0 5 *	Set Daylight Savings Time – end date
0 6 *	Verify Daylight Savings Time – enabled/disabled
1 0 *	Enable Daylight Savings Time
1 1 *	Set date
1 2 *	Set time
1 3 *	Start clock
2 2 *	Change PIN code (same function as 3 3 *)
2 8 *	Download the audit trail
3 2 *	Set the mode of operation
3 3 *	Change PIN code (same function as 2 2 *)
3 8 *	Enable/disable duress
4 2 *	Identify the type of lock
4 3 *	Identify the lock mechanics
4 4 *	Identify the operating mode
4 5 *	Initialize the lock (into service mode)
4 6 *	Setup time delay override (TDO) type
4 7 *	Setup time delay value
4 8 *	Setup opening window value
5 4 *	Initialize the lock (into service mode)
5 5 *	Enable/disable lock (manager/employee mode)
5 6 *	Manager/employee mode type
5 7 *	Manager/employee mode – opening settings
5 8 *	Enable/disable day/night mode
5 9 *	Set opening window for day/night mode
7 3 *	Set date
7 5 *	Adding a code
7 6 *	Deleting a code
7 7 *	Verify PIN positions
7 8 *	Set date
7 9 *	Identify the firmware version
8 2 *	Verify the iButton touch key
8 3 *	Disable time delay override (TDO)
9 0 *	Display lock serial number
9 6 *	Check battery level
9 7 *	Display current time & date

3.1 — Command 00: Enable/Disable Manual Secure Mode

You can enable or disable the motor behavior in the 3006/3028/3029 locks. This will keep the lock motor in the retracted or unlocked position until you enter the 00# command, causing the lock motor/bolt to return to the secure position. This should be performed before initialization. To enable/disable manual secure mode, perform the following steps:

Step 1   Enter: 0 0 *
Step 2   Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪
Step 3   Enter: 1 - ON or 0 - OFF# ♪♪♪
Step 4   Enter: 1 - ON or 0 - OFF# ♪♪♪

```
+---------------------+   +---------------------+   +---------------------+
|   Manual Secure     |   |   Manual Secure     |   |      Confirm        |
|   Enter Code        |   |   1-ON 0-OFF        |   |    1-ON 0-OFF       |
|   ********          |   |                     |   |                     |
+---------------------+   +---------------------+   +---------------------+
```

3.2 — Command 03: Set Daylight Savings Time – Time Change

When implementing Daylight Savings Time (DST) features, you must setup the hour of the day when the DST changes will be made. This is the time when the clock inside the lock will increment 1 hour or decrement 1 hour, depending on the dates when DST is enabled. To setup the DST time change, perform the following steps:

Step 1   Enter: 0 3 *
Step 2   Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪
Step 3   Enter: Time in HH format (always 2 digits)# ♪♪♪
Step 4   Enter: Time in HH format (always 2 digits)# ♪♪♪

```
+---------------------+   +---------------------+   +---------------------+
|   DST Change Time   |   |    Enter Time       |   |   Confirm Time      |
|   Enter Code        |   |       HH            |   |       HH            |
|   ********          |   |                     |   |                     |
+---------------------+   +---------------------+   +---------------------+
```

Example
To set the DST change time to 2 AM (using the factory default Codes):

Step 1   Enter: 0 3 *
Step 2   Enter: 0 0 1 2 3 4 5 6 #♪♪♪♪♪
Step 3   Enter: 0 2 # ♪♪♪
Step 4   Enter: 0 2 # ♪♪♪

```
+---------------------+   +---------------------+   +---------------------+
|   DST Change Time   |   |    Enter Time       |   |   Confirm Time      |
|   Enter Code        |   |       02            |   |       02            |
|   ********          |   |                     |   |                     |
+---------------------+   +---------------------+   +---------------------+
```

3.3 — Command 04: Set Daylight Savings Time – Start Day

When implementing Daylight Savings Time (DST), you must set the Week, Day, and Month in which DST is set to begin. This is the date when the lock will increment 1 hour. The range for the Week setting is 1-5. The range for the Day setting is 1-7 (Sunday – Saturday). The range for the Month setting is 1-12 (January – December). To set the start date, perform the following steps:

Step 1   Enter: 0 4 *
Step 2   Enter: 8-digit Programmer # ♪♪♪♪♪
Step 3   Enter: Week/Day/Month #   ♪♪♪
Step 4   Enter: Week/Day/Month #   ♪♪♪

```
+---------------------+   +---------------------+   +---------------------+
|   DST Start Day     |   |    Enter Day        |   |   Confirm Day       |
|   Enter Code        |   |   WK/DD/MM          |   |   WK/DD/MM          |
|   ********          |   |   **/**/**          |   |   **/**/**          |
+---------------------+   +---------------------+   +---------------------+
```

Example

To set the start day to the last Sunday in March:

         Step 1   Enter: 0 4 *
         Step 2   Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
         Step 3   Enter: 0 4 0 1 0 3 # ♪♪♪
         Step 4   Enter: 0 4 0 1 0 3 # ♪♪♪

```
┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│  DST Start Day   │   │    Enter Day     │   │   Confirm Day    │
│   Enter Code     │   │    WK/DD/MM      │   │    WK/DD/MM      │
│   ********       │   │    **/**/**      │   │    **/**/**      │
└──────────────────┘   └──────────────────┘   └──────────────────┘
```

3.4 — Command 05: Set Daylight Savings Time – End Day

When implementing Daylight Savings Time (DST), you must set the Week, Day, and Month in which DST is set to end. This is the date when the lock will decrement 1 hour. The range for the Week setting is 1-5. The range for the Day setting is 1-7 (Sunday – Saturday). The range for the Month setting is 1-12 (January – December). To set the end date, perform the following steps:

         Step 1   Enter: 0 5 *
         Step 2   Enter: 8-digit Programmer # ♪♪♪♪♪
         Step 3   Enter: Week/Day/Month # ♪♪♪
         Step 4   Enter: Week/Day/Month # ♪♪♪

```
┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│   DST End Day    │   │    Enter Day     │   │   Confirm Day    │
│   Enter Code     │   │    WK/DD/MM      │   │    WK/DD/MM      │
│   ********       │   │    **/**/**      │   │    **/**/**      │
└──────────────────┘   └──────────────────┘   └──────────────────┘
```

Example

To set the end day to the First Sunday in November:

         Step 1   Enter: 0 5 *
         Step 2   Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
         Step 3   Enter: 0 1 0 1 1 1 # ♪♪♪
         Step 4   Enter: 0 1 0 1 1 1 # ♪♪♪

```
┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│   DST End Day    │   │    Enter Day     │   │   Confirm Day    │
│   Enter Code     │   │    WK/DD/MM      │   │    WK/DD/MM      │
│   ********       │   │    01/01/11      │   │    01/01/11      │
└──────────────────┘   └──────────────────┘   └──────────────────┘
```

3.5 — Command 06: Verify Daylight Savings Mode Settings

To verify the lock has disabled or enabled DST setting, perform the following:

         Step 1   Enter: 0 6 *

```
┌──────────────────┐   ┌──────────────────┐
│   DST Disabled   │   │  S:WK/DD/MM      │
│                  │   │  E:WK/DD/MM - HH │
└──────────────────┘   └──────────────────┘
```

3.6 — Command 10: Enable Daylight Savings Time

In order to implement Daylight Savings Time (DST) features, you must enable the DST feature. Once the DST features have been enabled, the lock will automatically update the time to match the settings that were entered with the 03 – 05 commands. All DST options must be setup before the DST feature can be enabled. DST can be configured before the initialization process or after bank mode has been enabled. LMS will use Standard Time for code generation.

To enable the DST features, perform the following steps:

      Step 1   Enter: 1 0 *
      Step 2   Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪
      Step 3   Enter: 1 # (to enable) or 0 # (to disable) ♪♪♪
      Step 4   Enter: 1 # (to enable) or 0 # (to disable) ♪♪♪

```
 DST ON / Off          ENABLE DST           CONFIRM DST
 Enter Code           1-ON  0-OFF           1-ON  0-OFF
 ********
```

Example
To enable the DST features (using the factory default Codes):

      Step 1   Enter: 1 0 *
      Step 2   Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
      Step 3   Enter: 1 # ♪♪♪
      Step 4   Enter: 1 # ♪♪♪

```
 DST ON / Off          ENABLE DST           CONFIRM DST
 Enter Code           1-ON  0-OFF           1-ON  0-OFF
 ********                  1                    1
```

3.7 — Command 11: Set Date

You must set the date to use Service Mode or audit trail functions. The date should be entered in DDMMYY format, where DD = day, MM = month, and YY = year. The Date should be set before initializing the lock. To set the date, perform the following steps:

      Step 1   Enter: 1 1 *
      Step 2   Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪
      Step 3   Enter: Date in DDMMYY format # ♪♪♪
      Step 4   Enter: Date in DDMMYY format # ♪♪♪

```
 Set Date             Enter Date           Confirm Date
 Enter Code           DD/MM/YY             DD/MM/YY
 ********             **/**/**             **/**/**
```

Example
To set the date as May 25, 2017 (using the factory default Codes):

      Step 1 Enter: 1 1 *
      Step 2 Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
      Step 3 Enter: 2 5 0 5 1 7 # ♪♪♪
      Step 4 Enter: 2 5 0 5 1 7 # ♪♪♪

```
 Set Date             Enter Date           Confirm Date
 Enter Code           DD/MM/YY             DD/MM/YY
 ********             25/05/17             25/05/17
```

⚠️ The time & date must be set and the clock started (13*) before the settings are saved by the lock.

3.8 — Command 12: Set Time

You must set the time to use Service Mode and audit trail functions. The time should be set in HHmm format based on a 24-hour clock, where HH = hours and mm = minutes. The time should be set before initializing the lock. The time is to always be set in local standard time. Local standard time must be set, even though Daylight Savings Time may be in effect. To set the time, perform the following steps:

Step 1   Enter: 1 2 *
Step 2   Enter: 8-digit Programmer PIN Code (00) # ♫♫♫♫
Step 3   Enter: Time in HHmm format # ♫♫♪
Step 4   Enter: Time in HHmm format # ♫♪♪

```
   Set Time              Enter Time             Confirm Time
  Enter Code               HH:MM                   HH:MM
  ********                 **:**                   **:**
```

Example
To set the time as 1:42 PM, use 13:42 (using the factory default Codes):

Step 1   Enter: 1 2 *
Step 2   Enter: 0 0 1 2 3 4 5 6 # ♫♫♫♫
Step 3   Enter: 1 3 4 2 # ♫♫♪
Step 4   Enter: 1 3 4 2 # ♫♪♪

```
   Set Time              Enter Time             Confirm Time
  Enter Code               HH:MM                   HH:MM
  ********                 13:42                   13:42
```

> ⚠ The time & date must be set and the clock started (13*) before the settings are saved by the lock.

3.9 — Command 13: Start the Clock

After setting the time and date values, you must use a separate command to start the clock. This step helps to match the time in the lock to your current time. To start the clock, perform the following steps (after programming time & date):

Step 1   Enter: 1 3 *
Step 2   Enter: 8-digit Programmer PIN Code (00) # ♫♫♫♫
Step 3   Enter: sequence to start the clock 1# ♫♫♪
Step 4   Enter: sequence to start the clock 1# ♫♪♪

```
  Start Clock            Enter 1                 Enter 1
  Enter Code          To Start Clock           to Confirm
  ********
```

3.10 — Command 22: Changing a PIN Code

Use command 22 to change your PIN Code. You should always leave the safe door open while changing codes. When changing any code, you will need to enter the new 8-digit PIN Code twice for confirmation. The PIN position does not change. Please note that command 33 performs the same function.

To change a PIN Code, perform the following steps (A PIN Code can contain any numbers/letters except # or *):

    Step 1   Enter: 2 2 *

    Step 2   Enter: 8-digit PIN Code # ♪♪♪♪♪

    Step 3   Enter: New 8-digit PIN Code # ♪♪♪

    Step 4   Enter: New 8-digit PIN Code again # ♪♪♪

```
+------------------+      +------------------+      +------------------+
|   Change  Code   |      |      Enter       |      |     Confirm      |
|   Enter  Code    |      |    New  Code     |      |    New  Code     |
|    ********       |      |    ********      |      |    ********       |
+------------------+      +------------------+      +------------------+
```

Example
To change the default PIN code of 0 2 0 2 0 2 0 2 to 2 1 2 1 2 1 2 1

    Step 1   Enter: 2 2 *

    Step 2   0 2 0 2 0 2 0 2 # ♪♪♪♪♪

    Step 3   2 1 2 1 2 1 2 1 # ♪♪♪

    Step 4   2 1 2 1 2 1 2 1 # ♪♪♪

```
+------------------+      +------------------+      +------------------+
|   Change Code    |      |      Enter       |      |     Confirm      |
|   Enter Code     |      |    New Code      |      |    New Code      |
|    ********       |      |    ********      |      |    ********       |
+------------------+      +------------------+      +------------------+
```

Example
To change the default PIN code of 1 0 1 0 1 0 1 0 to 2 0 1 5 2 0 1 5

    Step 1   Enter: 2 2 *

    Step 2   1 0 1 0 1 0 1 0 # ♪♪♪♪♪

    Step 3   2 0 1 5 2 0 1 5 # ♪♪♪

    Step 4   2 0 1 5 2 0 1 5 # ♪♪♪

```
+------------------+      +------------------+      +------------------+
|   Change Code    |      |      Enter       |      |     Confirm      |
|   Enter Code     |      |    New Code      |      |    New Code      |
|    ********       |      |    ********      |      |    ********       |
+------------------+      +------------------+      +------------------+
```

⚠   Try the new PIN Code at **least three times** to confirm operation before closing the safe door.
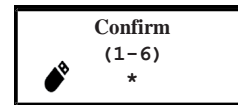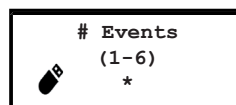
3.11 — Command 28: Audit Download

The A-Series with Display™ Lock Audit Trail can store as many as 1,000 events that include times & dates. Some examples of events are:

- Adding or deleting a PIN code.
- Changing a PIN code.
- Opening or closing the lock (bank mode & service mode).
- Programming commands, such as setting the date.

The audit trail can be downloaded to an approved USB flash drive using command 28 and then uploaded to a computer using the S&G Audit Lock Audit Trail Software or the LMS Software. Complete instructions are provided with the software.

To download the Audit Trail, perform the following steps:

Step 1   Enter: 2 8 *
Step 2   Enter: 8-digit Programmer or Manager PIN Code (00, 01, 02, 03) #
Step 3   Enter: The option for number of audit events to download (1 – 6)#
Step 4   Enter: The option for number of audit events to download (1 – 6)#
Step 5   Insert the USB flash drive into the corresponding port on the front of the keypad.
Step 6   The lock beeps 3 times (♪♪♪) when the download is complete.

```
┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
│ Audit Download  │   │    # Events     │   │    Confirm      │
│   Enter Code    │   │     (1-6)       │   │     (1-6)       │
│   ********      │   │ ⬤B     *        │   │ ⬤B     *        │
└─────────────────┘   └─────────────────┘   └─────────────────┘
```

The yellow LED on the keypad will remain on while the audit trail is being downloaded to the USB flash drive.
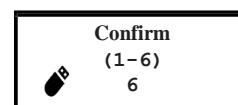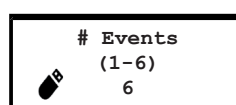Depending on the size of the Audit Trail, this could take up to 45 seconds.

If you hear a BRAP (one long continuous beep), the audit trail was not downloaded properly. You must start the download over, beginning with Step 1. After you've successfully downloaded the audit trail, it is stored in the Touch Key.

The available options for the number of events to download are as follows:

- ⬤ 1 – upload the first most recent event in the audit trail
- ⬤ 2 – upload the 8 most recent events in the audit trail
- ⬤ 3 – upload the 32 most recent events in the audit trail
- ⬤ 4 – upload the 64 most recent events in the audit trail
- ⬤ 5 – upload the 128 most recent events in the audit trail
- ⬤ 6 – upload all of the events in the audit trail (up to 1,000 events)

Example

Step 1   Enter: 2 8 *
Step 2   Enter: 0 0 1 2 3 4 5 6#
Step 3   6 #
Step 4   6 #
Step 5   Insert the USB flash drive into the corresponding port on the front of the keypad.
Step 6   The lock beeps 3 times (♪♪♪) when the download is complete.

```
┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
│ Audit Download  │   │    # Events     │   │    Confirm      │
│   Enter Code    │   │     (1-6)       │   │     (1-6)       │
│   ********      │   │ ⬤B     6        │   │ ⬤B     6        │
└─────────────────┘   └─────────────────┘   └─────────────────┘
```

Follow the instructions provided with the S&G Audit Trail Software to upload the data to your computer. A flash drive should be provided with the Audit Trail Software kit.

3.12 — Command 32: Setting the Operating Mode

Enable Manager/Employee Mode

The lock may be enabled for Manager/Employee mode by performing the following steps:

          Step 1   Enter: 3 2 *
          Step 2   Enter: 8-digit Programmer Code # ♪♪♪♪♪
          Step 3   Enter: 2 (Function Number) # ♪♪♪
          Step 4   Enter: 2 (Function Number) # ♪♪♪

```
  Set Lock Mode            Enter New             Confirm New
   Enter Code               Mode #                 Mode #
   ********                    2                      2
```

The lock now requires input of a Management PIN code to enable the User PIN codes.

Enable Dual Control Mode

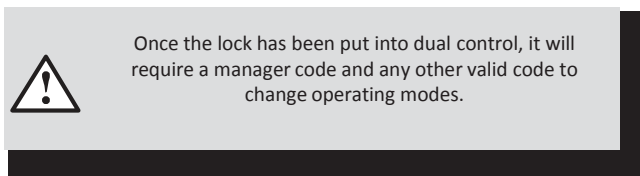The lock may be set for Dual Control mode operation by performing the following steps:

          Step 1   Enter: 3 2 *
          Step 2   Enter: 8-digit Programmer Code # ♪♪♪♪♪
          Step 3   Enter: 3 (Function Number)# ♪♪♪
          Step 4   Enter: 3 (Function Number)# ♪♪♪

```
  Set Lock Mode            Enter New             Confirm New
   Enter Code               Mode #                 Mode #
   ********                    3                      3
```

The lock is now set in Dual Control mode requiring two valid opening PIN codes to gain access.

> ⚠ Once the lock has been put into dual control, it will require a manager code and any other valid code to change operating modes.

Enable Multiple User Mode

The lock may be enabled for Multiple User mode by performing the following steps:

          Step 1   Enter: 3 2 *
          Step 2   Enter: 8-digit Programmer Code# ♪♪♪♪♪
          Step 3   Enter: 4 (Function Number)# ♪♪♪
          Step 4   Enter: 4 (Function Number)#♪♪♪

```
  Set Lock Mode            Enter New             Confirm New
   Enter Code               Mode #                 Mode #
   ********                    4                      4
```

The lock is set to Multiple User mode and can be opened using any valid opening PIN code.

Enable Day / Night Mode #1

For "Day / Night Mode #1", the customer can setup the lock so that there is an opening window where the lock can be opened using one valid user. The opening window is established using command 59.

Once in the opening window, the lock can be enabled for "day mode" use with command 58. When the lock is enabled for "day mode" use, a single code can be used to open the lock. The initial opening will have a 5-minute time delay countdown before the lock can be opened in "day mode".

At any point during "day mode", the user can manually switch the lock back to "night mode" using command 58, regardless of the current time or the opening window settings.

Outside of the opening window, the lock will be in "night mode". When the lock is in "night mode", the lock will always require two valid PIN codes to open the lock.

The lock may be set for Day / Night Mode #1 by performing the following steps:

Step 1	Enter: 3 2 *
Step 2	Enter: 8-digit Programmer Code # ♪♪♪♪♪
Step 3	Enter: 5 (Function Number) # ♪♪♪
Step 4	Enter: 5 (Function Number) # ♪♪♪

```
+---------------------+   +-------------------+   +-------------------+
|   Set Lock Mode     |   |    Enter New      |   |   Confirm New     |
|    Enter Code       |   |     Mode #        |   |     Mode #        |
|    ********         |   |       5           |   |       5           |
+---------------------+   +-------------------+   +-------------------+
```

The lock is now set in "Day / Night Mode #1". This setting requires two valid opening PIN codes to open the lock in "night" mode and one valid opening PIN code to open the lock in "day" mode (and enabled).

Enable Day / Night Mode #2

For "Day / Night Mode #2", the customer can setup the lock so that there is an opening window and the lock can only be opened during this opening window period. The opening window is established using command 59.

The user will setup the time when "day mode" begins and ends. Any valid code can be used to open the lock in "day mode" (i.e., during the opening window). Any opening attempt during "night mode" (i.e., outside the opening window) will result in 2 low beeps, and the lock will not open.

The lock may be set for Day / Night Mode #2 by performing the following steps:

Step 1	Enter: 3 2 *
Step 2	Enter: 8-digit Programmer Code # ♪♪♪♪♪
Step 3	Enter: 6 (Function Number) # ♪♪♪
Step 4	Enter: 6 (Function Number) # ♪♪♪

```
+---------------------+   +-------------------+   +-------------------+
|   Set Lock Mode     |   |    Enter New      |   |   Confirm New     |
|    Enter Code       |   |     Mode #        |   |     Mode #        |
|    ********         |   |       5           |   |       5           |
+---------------------+   +-------------------+   +-------------------+
```

The lock is now set in "Day / Night Mode #2," meaning that the lock can only be opened during "day" mode.

3.13 — Command 33: Changing a PIN Code

Use command 33 to change your PIN Code. You should always leave the safe door open while changing codes. When changing any code, you will need to enter the new 8-digit PIN Code twice for confirmation. The PIN position does not change. Please note that command 22 performs the same function.
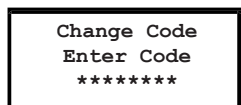
To change a PIN Code, perform the following steps (A PIN Code can contain any numbers/letters except # or *):

Step 1   Enter: 3 3 *
Step 2   Enter: 8-digit PIN Code # ♪♪♪♪♪
Step 3   Enter: New 8-digit PIN Code # ♪♪♪
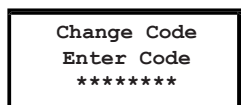Step 4   Enter: New 8-digit PIN Code again # ♪♪♪

| Change Code
Enter Code
******** | Enter
New Code
******** | Confirm
New Code
******** |

Example

Step 1 Enter: 3 3 *
Step 2 0 2 0 2 0 2 0 2 # ♪♪♪♪♪
Step 3 2 1 2 1 2 1 2 1 # ♪♪♪
Step 4 2 1 2 1 2 1 2 1 # ♪♪♪

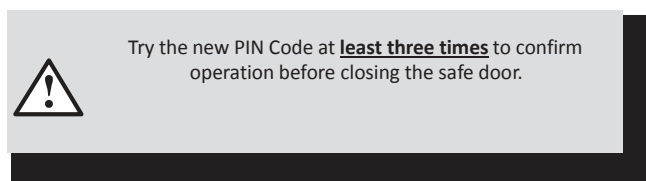| Change Code
Enter Code
******** | Enter
New Code
******** | Confirm
New Code
******** |

With the above example, the default PIN code of 0 2 0 2 0 2 0 2 has been changed to 2 1 2 1 2 1 2 1.

Example

Step 1 Enter: 3 3 *
Step 2 1 0 1 0 1 0 1 0 # ♪♪♪♪♪
Step 3 2 0 1 5 2 0 1 5 # ♪♪♪
Step 4 2 0 1 5 2 0 1 5 # ♪♪♪

| Change Code
Enter Code
******** | Enter
New Code
******** | Confirm
New Code
******** |

With the above example, the default PIN code of 1 0 1 0 1 0 1 0 has been changed to 2 0 1 5 2 0 1 5.

> ⚠️ Try the new PIN Code at **least three times** to confirm operation before closing the safe door.

3.14 — Command 38: Setting the Duress Alarm Feature

The A-Series with Display™ Lock has an optional duress, or silent alarm, option that can be configured.

Using the Duress Alarm Feature

To send a duress alarm to the alarm center, enter any code that is one number higher or lower than the last number of a normal PIN Code and press the # key.

For example, if the normal User Code is 94507853, the User can activate the duress alarm by entering 9450785**2** or 9450785**4**, followed by #. If the User Code ends in 0, use 1 or 9 to activate the duress alarm. The lock will operate normally when a duress code is entered.

All codes can send the duress signal at any time. It can also be sent during programming sequences.

Enable Duress Alarm Feature

After the lock is installed with the Duress Alarm Module, the duress feature must be enabled by performing the following steps:

       Step 1   Enter: 3 8 *

       Step 2   Enter: 8-digit Programmer PIN code (00) # ♪♪♪♪♪

       Step 3   Enter: 1, 2, or 3 #♪♪♪

       Step 4   Enter: 2 or 3 # ♪♪♪

       (OPTION 1 – disable, OPTION 2 – enable with module, OPTION 3 – enable with digital output)

```
 Duress Mode            Enter New            Confirm New
 Enter Code            Mode Number           Mode Number
 ********                   2                     2
```

The lock can now send a duress signal through the interface module.

Disabling the Duress Alarm Feature

The duress feature can be disabled without disconnecting the Duress Alarm Module by performing the following steps:

       Step 1 Enter: 3 8 *

       Step 2 Enter: 8-digit Programmer PIN code (00) # ♪♪♪♪♪

       Step 3 Enter: 0 # ♪♪♪

       Step 4 Enter: 0 # ♪♪♪

       (OPTION 1 – disable, OPTION 2 – enable with module, OPTION 3 – enable with digital output)

```
 Duress Mode            Enter New            Confirm New
 Enter Code            Mode Number           Mode Number
 ********                   0                     0
```

3.15 — Command 42: Identify Lock Type

Use command 42 to verify the lock type that has been setup for the lock.

       Step 1   Enter: 4 2 *

       Step 2   Listen for the beeps to determine the lock type.

```
  Lock Type
  A-Series
```

The lock will emit one low beep, one high beep, and one low beep to begin the sequence. The next set of beeps will indicate the type of lock being used. The lock type will also be shown on the display.

3.16 — Command 43: Identify Lock Mechanics

Use command 43 to verify the firmware version loaded into the lock.

        Step 1   Enter: 4 3 *

        Step 2   Listen for the beeps to determine the lock mechanics.

The lock will emit one low beep, one high beep, and one low beep to begin the sequence. The next set of beeps will indicate the type of lock mechanics being used. The lock mechanics will also be shown on the display.

- 1 beep = PIVOT BOLT
- 2 beeps = DIRECT DRIVE
- 3 beeps = MOTOR DRIVE
- 4 beeps = MOTOR GEAR

```
+---------------+     +---------------+
|   Lock Type   |     |   Lock Type   |
|  Pivot Bolt   |     |  Direct Drive |
+---------------+     +---------------+

+---------------+     +---------------+
|   Lock Type   |     |   Lock Type   |
|  Motor Drive  |     |  Motor Gear   |
+---------------+     +---------------+
```

3.17 — Command 44: Identify Operating Mode (Bank Mode)

Use command 44 to verify the firmware version loaded into the lock.

        Step 1   Enter: 4 4 *

        Step 2   Listen for the beeps to determine the operating mode.

The lock will emit one low beep, one high beep, and one low beep to begin the sequence. The next set of beeps will indicate the operating mode.

- 2 beeps = Manager/employee mode
- 3 beeps = Dual control mode
- 4 beeps = Multiple user mode

```
+---------------+     +---------------+
|   Multiple    |     |     Dual      |
|   User Mode   |     |   User Mode   |
+---------------+     +---------------+

       +---------------------+
       |  Manager/Employee   |
       |     User Mode       |
       +---------------------+
```

3.18 — Command 45: Initializing the Lock

The lock can be initialized into Service Mode using command 45 and a properly programmed management touch key. Please see Section 4.1 – Initializing the Lock for more information on initializing the lock.

3.19 — Command 46: Setting Up the Time Delay Override Options

When the time delay feature is enabled, the A-Series with Display™ Lock can be programmed with a time delay override (TDO) feature that will allow a specific user to bypass the time delay countdown. The time delay override code must always be setup in PIN position 29.

There are two types of TDO available. TDO TYPE 1 requires that the time delay override code is entered within the first minute of the time delay countdown. In other words, a User must start the time delay countdown by entering their code. If the time delay override code is entered within the first minute, then the lock will open.

TDO TYPE 2 will allow the lock to be opened by the time delay override code without requiring another User start the time delay countdown.

Enabling the Time Delay Override (TDO) Type

If the time delay has already been set, enter a User Code to start the time delay. When the time delay expires (the lock emits 10 rapid beeps) and the opening window has begun, immediately proceed to change the time delay by performing the following steps:

Step 1   Enter: 4 6 *
Step 2   Enter: 8-digit Programmer Code # ♫♫♫♫♫
Step 3   Enter: Time Delay Override Type (1 or 2) # ♫♫♫
Step 4   Enter: Time Delay Override Type (1 or 2) # ♫♫♫

```
  TDO Set Type          Enter Option          Confirm Option
  Enter Code            Enter 0,1,2           Enter 0,1,2
  ********
```

Example
To enable TDO type 2:

Step 1   Enter: 4 6 *
Step 2   Enter: 0 0 1 2 3 4 5 6 # ♫♫♫♫♫
Step 3   Enter: 2 # ♫♫♫
Step 4   Enter: 2 # ♫♫♫

```
  TDO Set Type          Enter Option          Confirm Option
  Enter Code            Enter 0,1,2           Enter 0,1,2
  ********                   2                     2
```

The TDO TYPE 2 function has now been enabled. The code in position 29 can now be used to open the lock without waiting for the time delay countdown.

⚠ If a time delay value has already been entered, then any changes to the time delay override feature must be made during the opening window.

3.20 — Command 47: Setting up the Time Delay

The A-Series with Display™ Lock can be programmed with a time delay feature. Time delay applies only to those users who can open the lock. The time delay can be set from 0 to 99 minutes. If the lock is in the time delay period, the red LED light on the keypad flashes and a single beep sounds every 10 seconds.

When the time delay expires, the lock emits 10 rapid beeps to indicate that the opening window has started and the lock can now be opened. During this opening window, the lock beeps and the red LED flashes twice every 10 seconds.

The opening window factory default is set for 2 minutes, and the opening window can be set from 1 to 99 minutes.

To open the lock when a time delay has been programmed, a User must enter their User Code to start the time delay period, wait the length of the time delay period, and then enter a valid User Code during the opening window.

If the lock is not opened during the open window period, it automatically resets and the process must be repeated. The lock comes from the factory with no time delay set. If the time delay has already been set, changes to the opening window and time delay duration can <u>only</u> be made during the opening window.

> ⚠️ Do not set the time delay until you have finished all other programming functions, or you will have to wait through the time delay before making any other programming changes.

Set time delay duration

If the time delay has already been set, enter a User Code to start the time delay. When the time delay expires (the lock emits 10 rapid beeps) and the opening window has begun, immediately proceed to change the time delay by performing the following steps:

Step 1   Enter: 4 7 *
Step 2   Enter: 8-digit Programmer PIN Code (00) # ♪♪♪♪♪
Step 3   Enter: Time delay minutes (0-99) # ♪♪♪
Step 4   Enter: Time delay minutes again (0-99) # ♪♪♪

```
 Time Delay          Enter Time          Confirm Time
 Enter Code          Delay (0-99)        Delay (0-99)
 ********               **                   **
```

Example

To set the time delay to 10 minutes:

Step 1   Enter: 4 7*
Step 2   Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
Step 3   Enter: 1 0 # ♪♪♪
Step 4   Enter: 1 0 # ♪♪♪

```
 Time Delay          Enter Time          Confirm Time
 Enter Code          Delay (0-99)        Delay (0-99)
 ********               10                   10
```

To eliminate the time delay period, enter 0 for the time delay minutes.

3.21 — Command 48: Setting Up the Opening Window

If the time delay has already been set, enter a User Code to start the time delay. When the time delay expires (the lock emits 10 rapid beeps) and the opening window has begun, immediately proceed to set the opening window minutes by performing the following steps:

Step 1 Enter: 4 8*

Step 2 Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪

Step 3 Enter: Opening window minutes (1-99) # ♪♪♪

Step 4 Enter: Opening window minutes again (1-99) # ♪♪♪

```
 Opening Window      Enter Opening       Confirm Opening
 Enter Code          Window (01-99)      Window (01-99)
 ********               **                   **
```

Example

To set the opening window to 5 minutes:

Step 1 Enter: 4 8 *
Step 2 Enter: 0 0 1 2 3 4 5 6 # (Programmer PIN Code) ♪♪♪♪♪
Step 3 Enter: 5 # ♪♪♪
Step 4 Enter: 5 # ♪♪♪

```
 Opening Window      Enter Opening       Confirm Opening
 Enter Code          Window (01-99)      Window (01-99)
 ********               5                    5
```

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If time delay has not been previously set, the opening window setting may begin immediately upon input of the correct code sequence.

3.22 — Command 54: Initializing the Lock

The lock can be initialized into Service Mode using command 54 and a properly programmed management touch key. Please see Section 4.1 – Initializing the Lock for more information on initializing the lock.

3.23 — Command 55: Enable / Disable the Lock (manager / employee mode)

The A-Series with Display™ Lock can be programmed to work in Manager/Employee mode. In this mode, Managers and Supervisors enable the lock and Users open the lock (only when enabled). Users can also be setup to disable the lock using this command (using command 56). Please note that this function is only available in manager/employee mode.

Enable / Disable the lock

When the lock is in Manager/Employee mode, the ability for Users to open the lock can be toggled by performing the following steps. If the lock is disabled, this function will enable the lock. If the lock is disabled, this function will enable the lock.

Step 1   Enter: 5 5 *
Step 2   Enter: 8-digit Manager or Supervisor PIN code (01 - 09)# ♪♪♪♪

NOTE: Four high beeps indicate the lock is now enabled and 2 low beeps indicate the lock
is now disabled.

Step 1   Enter: 5 5 *
Step 2   Enter: 0 2 0 2 0 2 0 2 # ♪♪♪♪

3.24 — Command 56: Enable/Disable User Disable Feature (Manager / Employee mode)

When the lock is in Manager/Employee mode, the lock can be setup to allow users to disable the lock. By default, only Managers and Supervisors can disable the lock. This function will also allow Users to disable the lock, but they will not be able to enable the lock.

Allow users to disable the lock (manager/employee mode only) by performing the following steps:

Step 1 Enter: 5 6 *
Step 2 Enter: 2-digit Programmer PIN position (00) # ♪♪♪♪♪
Step 3 Enter: 1 # ♪♪♪
Step 4 Enter: 1 # ♪♪♪
(OPTION 1 – user can disable the lock, OPTION 0 – users cannot disable)

```
 Disable Lock
  Enter Code
   ********
```

Example

Step 1 Enter: 5 6 *
Step 2 Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪
Step 3 Enter: 1 # ♪♪♪
Step 4 Enter: 1 # ♪♪♪

```
 Enable Lock
  Enter Code
   ********
```

Users will now have the ability to disable the lock in Manager/Employee mode.

3.25 — Command 57: Enable/Disable Managers and Supervisors to Open the Lock in Manager / Employee Mode

When the lock is in Manager/Employee mode, the lock can be setup to allow the Managers and Supervisors to open the lock. By default, Managers and Supervisors can enable & disable the lock. Command 57 allows Managers and Supervisors to open the lock in Manager/Employee mode or disable this ability. This can be completed by performing the following steps:

	Step 1	Enter: 5 7 *
	Step 2	Enter: 2-digit Programmer PIN position (00) # ♪♪♪♪♪
	Step 3	Enter: 1 # ♪♪♪
	Step 4	Enter: 1 # ♪♪♪
		(OPTION 1 – managers/supervisors can open the lock, 0 – managers/supervisors cannot open the lock)
Example		
	Step 1	Enter: 5 7 *
	Step 2	Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪♪
	Step 3	Enter: 1 # ♪♪♪
	Step 4	Enter: 1 # ♪♪♪

The Manager/Supervisor now has the ability to open the lock in Manager/Employee mode.

3.26 — Command 73: Set Date

You must set the date in order to use the Service Mode functions or the audit trail functions. The date should be entered in DDMMYY format, where DD = day, MM = month, and YY = year. The Date should be set when the lock is first set up and prepared for use. To set the date, perform the following steps:

Step 1 Enter: 7 3 *
Step 2 Enter: 8-digit Programmer PIN Code (00)# ♪♪♪♪♪
Step 3 Enter: Date in DDMMYY format # ♪♪♪
Step 4 Enter: Date in DDMMYY format # ♪♪♪

```
 Set Date
Enter Code
********
```
```
 Enter Date
 DD/MM/YY
 **/**/**
```
```
Confirm Date
 DD/MM/YY
 **/**/**
```

Example
To set the date as May 25, 2017 (using the factory default Codes):

Step 1 Enter: 7 3 *
Step 2 Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪
Step 3 Enter: 2 5 0 5 1 7 # ♪♪
Step 4 Enter: 2 5 0 5 1 7 # ♪♪

```
 Set Date
Enter Code
********
```
```
 Enter Date
 DD/MM/YY
 25/05/17
```
```
Confirm Date
 DD/MM/YY
 25/05/17
```

3.27 — Command 75: Adding Code Positions (Manager/Employee - Multi User Mode)

To add a user position, perform the following steps:

Step 1 Enter: 7 5 *

Step 2 Enter: 8-digit Manager PIN Code (01, 02, or 03) # ♪♪♪♪♪

Step 3 Enter: New 2-digit PIN position # ♪♪♪

Step 4 Enter: New 8-digit PIN Code # ♪♪♪

Step 5 Enter: New 8-digit PIN Code # ♪♪♪

```
  Add Code          Add Code           Add Code           Add Code
Enter Code        Enter Position     Enter New Code     Confirm Code
********              **               *******           ********
```

Example

To add User position 20 with a code of 21212121:

Step 1 Enter: 7 5 *

Step 2 0 2 0 2 0 2 0 2 # ♪♪♪♪♪

Step 3 2 0 # ♪♪♪

Step 4 2 1 2 1 2 1 2 1 # ♪♪♪

Step 5 2 1 2 1 2 1 2 1 # ♪♪♪

```
  Add Code          Add Code           Add Code           Add Code
Enter Code        Enter Position     Enter New Code     Confirm Code
********              20               *******           ********
```

With this example, a new user code of 21212121 has been added to position 20.

Command 75: Adding Code Positions (Dual User Mode)

To add a user position, perform the following steps:

Step 1 Enter: 7 5 *

Step 2   Enter: 8-digit Manager PIN Code (01, 02, or 03) # ♪♪♪♪♪

Step 2   Enter: 8-digit Valid Secondary PIN Code (01-29) # ♪♪♪♪♪

Step 3 Enter: New 2-digit PIN position # ♪♪♪

Step 4 Enter: New 8-digit PIN Code # ♪♪♪

Step 5 Enter: New 8-digit PIN Code # ♪♪♪

```
  Add Code        Add Code          Add Code          Add Code          Add Code
Enter Code      Enter 2nd Code    Enter Position    Enter New Code    Confirm Code
********         ********             20             *******           ********
```

Example

To add User position 20 with a code of 21212121:

Step 1 Enter: 7 5 *

Step 2 0 2 0 2 0 2 0 2 # ♪♪♪♪♪

Step 3 1 0 1 0 1 0 1 0 # ♪♪♪

Step 3 2 0 # ♪♪♪

Step 4 2 1 2 1 2 1 2 1 # ♪♪♪

Step 5 2 1 2 1 2 1 2 1 # ♪♪♪

```
  Add Code        Add Code          Add Code          Add Code          Add Code
Enter Code      Enter 2nd Code    Enter Position    Enter New Code    Confirm Code
********         ********             20             *******           ********
```

With this example, a new user code of 21212121 has been added to position 20.

3.28 — Command 76: Deleting Code Positions

To delete a user position, perform the following steps:

        Step 1 Enter: 7 6 *

        Step 2 Enter: 8-digit Manager PIN Code (01, 02, or 03) # ♪♪♪♪♪

        Step 3 Enter: New 2-digit PIN position to delete # ♪♪♪

        Step 4 Enter: The # key signifies the code deletion # ♪♪♪

        Step 5 Enter: The # key signifies the code deletion # ♪♪♪

```
    Add Code              Add Code              Add Code              Add Code
   Enter Code          Enter Position        Enter New Code        Confirm Code
   ********                  20                 *******             ********
```

Example

To delete User position 20:

        Step 1 Enter: 7 6 *

        Step 2 0 2 0 2 0 2 0 2 # ♪♪♪♪♪

        Step 3 2 0 #♪♪♪

        Step 4 #♪♪♪

        Step 5 #♪♪♪

```
   Delete Code           Delete Code           Delete Code           Delete Code
   Enter Code          Enter Position          # to Delete          # to Confirm
   ********                  20                     *                    *
```

With this example, user code in position 20 will be deleted.

3.29 — Command 77: PIN Position Verification

Use Command 77 to verify that a User has been assigned to a PIN position. For example, it will tell you whether PIN 07 has a PIN Code in this position. To manage the PIN User Codes, the PIN Code Position Verification Worksheet located on page 33 is recommended.

        Step 1 Enter: 7 7 *

        Step 2 Enter: PIN position to be verified and #

```
   Identify PIN
   Enter Code
```

One long beep means no Code is set for that position. One short beep means a Code is set.

*** *Please note that the lock will remain in this function until the * key is pressed or if there are 10 seconds between key presses.*

3.30 — Command 78: Set Time

You must set the time in order to use the Service Mode functions and audit trail functions. The time should be set in HHmm format based on a 24-hour clock, where HH = hours and mm = minutes. The time should be set when the lock is first set up. The time is to always be set in local standard time. Local standard time must be set, even though daylight savings time may be in effect. To set time, perform the following steps:

        Step 1 Enter: 7 8 *

        Step 2 Enter: 8-digit Programmer PIN Code (00) # ♪♪♪♪♪

        Step 3 Enter: Time in HHmm format # ♪♪♪

        Step 4 Enter: Time in HHmm format # ♪♪♪

```
    Set Time              Enter Time            Confirm Time
   Enter Code              HH:MM                   HH:MM
   ********                **:**                   **:**
```

Example

To set the time as 1:42 PM, use 13:42 (using the factory default Codes):

        Step 1 Enter: 7 8 *

        Step 2 Enter: 0 0 1 2 3 4 5 6 # ♪♪♪♪

        Step 3 Enter: 1 3 4 2 # ♪♪♪

        Step 4 Enter: 1 3 4 2 # ♪♪♪

```
+------------------+    +------------------+    +------------------+
|     Set Time     |    |    Enter Time    |    |   Confirm Time   |
|    Enter Code    |    |      HH:MM       |    |      HH:MM       |
|    ********      |    |      13:42       |    |      13:42       |
+------------------+    +------------------+    +------------------+
```

3.31 — Command 79: Identify Firmware Version

Use this code to verify that the firmware version loaded into the lock.

        Step 1 Enter: 7 9 *

        Step 2 Listen for the beeps to determine the firmware version.

```
+------------------+
|   Firmware Ver.  |
|      XX.XX       |
+------------------+
```

The lock will emit one low beep, one high beep, and one low beep to begin the sequence. The next set of beeps will indicate the firmware version.

3.32 — Command 82: Verify the iButton Touch Key (Service Mode)

Use this command to verify that the touch key has been programmed correctly.

        Step 1 Insert the user or management touch key into the touch key reader.

        Step 2 Enter: 8 2 *

The lock will show a message on the display indicating that the touch key is valid or an error message indicating a problem with the touch key.

3.33 — Command 83: Disabling the Time Delay Override Feature

If you do not want the Time Delay Override (TDO) function available, it can be permanently disabled, and all of the time delay override commands will no longer work.

⚠️ Please note that this is a permanent function. Once the TDO features have been disabled using command 83, there is no way to ever use time delay override with the lock changes window.
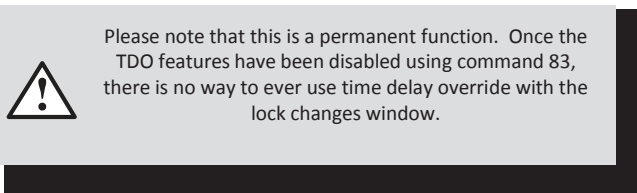
In order to permanently disable TDO functionality, perform the following steps:

        Step 1 Enter: 8 3 *

        Step 2 Enter: 8-digit Programmer PIN Code (00) # ♪♪♪♪

        Step 3 Enter: 1 (confirm TDO disable) # ♪♪♪

        Step 4 Enter: 1 (confirm TDO disable) # ♪♪♪

```
+------------------+    +------------------+    +------------------+
|   TDO Disable    |    |   TDO Disable    |    |   TDO Disable    |
|   Enter Code     |    |  1 to Disable    |    |  1 to Confirm    |
|   ********       |    |        1         |    |        1         |
+------------------+    +------------------+    +------------------+
```

3.34 — Command 90: Display Lock Serial Number

This command will allow the user to view the lock serial number on the display.

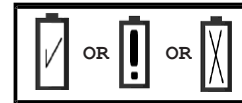   Step 1 Enter: 9 0 *

```
Lock Serial
|||||||||||||||
  12345678
```

3.35 — Command 96: Check Battery Level

This command will allow the user to check the estimated battery level. An icon will show the approximate battery level of the unit.
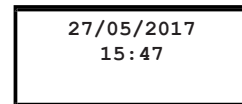
        Step 1   Enter: 9 6 *

3.36 — Command 97: Display Time & Date

This command will allow the user to view the lock's time and date on the display.

        Step 1   Enter: 9 7 *

```
27/05/2017
  15:47
```

4. SERVICE MODE OPERATION

4.1 — Service Mode Initialization (Single and Multiple)

To successfully operate the lock in Service Mode, the lock must first be initialized. A keypad extension with touch key reader must be connected to the lock. Lock initialization requires a management touch key prepared by the primary service company's Lock Management Software (LMS) system. This touch key will have been prepared for either single or multiple mode. It is important for the key provider to advise which mode is being used to whoever is performing initialization at the lock.

The management touch key is used in conjunction with a keypad command to initialize the lock. Lock initialization can only be completed after the date and time are set using the procedures outlined previously in this document. If initialization is attempted before time and date are set, the lock will sound two sets of 2 long beeps (braps). Always use local standard time at the lock's location. (If the lock is located in an area that observes daylight savings time and daylight savings time is presently being observed, the time must be adjusted back one hour in the lock's settings).

To initialize a single lock (Command 54):

        Step 1   Set the date & time using the appropriate procedures.
        Step 2   Snap the Management touch key into the keypad extension receptacle.
        Step 3   5 4 * 0 1 2 3 4 5 6 # ♪♪♪♪
        Step 4   The yellow LED will remain lit during the initialization process. This process will take up to 90 seconds to complete.
        Step 5   Upon successful initialization, the green LED will flash and the keypad will emit three beeps. If the initialization fails for any reason, the red LED will flash and the lock will emit one long beep.

```
Enable Service
  Enter Code
  ********
```

```
✓    1000
```
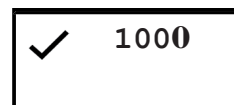
To initialize multiple locks or initialize locks remotely (Command 45):

Step 1   Set the date & time using the appropriate procedures.

Step 2   Snap the Management touch key into the keypad extension receptacle.

Step 3   4 5 * 0 1 2 3 4 5 6 # ♪♪♪♪♪

Step 4   The yellow LED will remain lit during the initialization process. This process will take up to 90 seconds to complete.

Step 5   Upon successful initialization, the green LED will flash and the keypad will emit three beeps. If the initialization fails for any reason, the red LED will flash and the lock will emit one long beep.

Step 6   The touch key can then be removed.

```
┌─────────────────┐      ┌─────────────┐      ┌─────────────────┐
│ Enable Service  │      │  ⌛  ⓘ       │      │  ✓      1000    │
│   Enter Code    │      │             │      │                 │
│   ********      │      │             │      │                 │
└─────────────────┘      └─────────────┘      └─────────────────┘
```
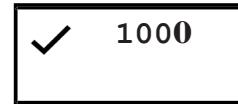
4.2 — Service Mode Operation

Service mode operations require the input of a Service User's four digit PIN code, an eight digit operation code, and presentation of a valid Service touch key. The presentation of the PIN, operation code, and the touch key must be made at the lock during the date and time window specified by the system operator when the operation code was generated.

The process to be utilized by the Service User at the lock when performing a Service Mode operation is:

Step 1   Insert the User or Manager touch key into the reader port on the keypad extension

Step 2   Input the User or Manager four digit PIN code and press the # key

```
┌─────────────┐
│  ⌛  ⓘ       │
│             │
└─────────────┘
```

Step 3   Input the eight digit operation code supplied by the Lock Management System software and press the # key. The lock will illuminate the yellow LED and show the iButton icon on the display to acknowledge the Service Mode request and will then process the requested operation. If the operation is verified and allowed by the lock, the green LED will flash and emit three beeps. If the request is denied, the red LED will be used in conjunction with a beep pattern to notify the User of the failure. The display will also show the error code.
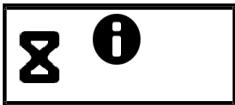
Step 4   The touch key may be removed if the operation is complete. If the operation was to access the lock, the lock will now be unlocked and access can be made. The User has approximately six seconds from acceptance of the operation code to open the door before the lock automatically attempts to re-lock.

Step 5   When access is granted, the lock will continue to monitor its "unsecured" status. When the door is closed and the lock is "secured", the User will be prompted to present the touch key to the reader again to capture a "secure" code from the lock.

> ⚠ The recommended procedure is for the User is to leave the touch key in the reader for the duration of the access and securing of the door or to place the touch key back in the reader prior to securing the door.

The yellow LED will be illuminated, the iButton icon will be displayed, and the green LED will flash in conjunction with a periodic beep. This beeping will prompt the User to present the touch key. The User will have approximately 15 seconds to present the touch key before the lock resets.

When the secure code is successfully captured by the User's touch key, the lock's green LED will flash and emit three beeps. The touch key may now be removed.

If the User's touch key is not presented to capture the secure code, the User's touch key will be disabled from further operation and will require an operation code to be issued from the Lock Management System to re-enable the touch key.

4.3 — Service Mode Operation Codes

Service Mode operation codes may only be generated by the Lock Management System for locks that have been previously initialized. The Operation codes are eight digits in length and valid for only one use. If the operation code is not used, the code will expire at the end of the time window specified by the operator of the Lock Management System at the time the code was generated.

Each operation code is specific to the lock being addressed, the user, their four digit PIN code, the touch key being presented, the request being made, and the date and time the code is valid. The operation process is as follows:

Step 1 Insert the Manager or User touch key into the touch key reader
Step 2 Input the Manager or User four-digit PIN code and press the # key
Step 3 Input the Manager or User eight-digit PIN code (supplied by the LMS software) and press the # key
Step 4 The yellow LED and iButton icon will turn on during processing of code
Step 5 After successful completion, the lock's green LED will flash and emit three beeps
Step 6 Remove the Manager or User touch key from the reader

4.3.1 — Open Lock

The lock management software can create an eight-digit code for Users. It is valid for only one use at a specified lock within a specified time window.

Example

Step 1 Insert the User touch key into the touch key reader
Step 2 Input the User four-digit PIN code and press the # key
Step 3 Input the User eight-digit PIN code (supplied by the LMS software) and press the # key
Step 4 The yellow LED and iButton icon will turn on during processing of code
Step 5 The lock's green LED will flash and emit three beeps. The "unlocked" icon will be displayed.
Step 6 The lock is now unlocked. The user may open the door and perform the desired function.
Step 7 When the door is closed, the lock prompts the user to present the touch key to capture the secure code
Step 8 The user places touch key in reader. The lock indicates the successful transfer of "secure" code to touch key with a green LED flash and three beeps. The display will show a successful message and the A Seal value.
Step 9 Remove the touch key from the reader
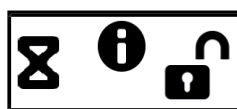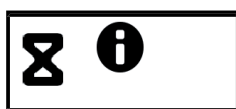
4.3.1.1 — Open Lock (Manual Secure)

If the lock has been configured for manual secure, the user will need to enter 00# to return the lock motor to the secured position. The Display interface will show a "00#" icon indicating to the user the lock has been configured for manual secure mode.   The opening process is the same. Please refer to 4.3.1 for open lock process.
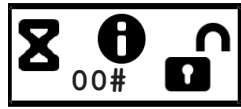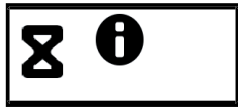
4.3.2 — Program Bank Features

This is a management operation code that sets the bank operational features of the lock. This code does not open the lock. The programmable features that may be set with this code are:
- Enable or disable Bank Mode.
- Time window of operation for bank users (if enabled).
- Access to audit log through bank operations.

4.3.3 — Reset User Touch Key

This operation code may be created for Users to reset a user's touch key in the event that the user did not successfully capture the "secure" code from the previous transaction. This code does not open the lock.

4.3.4 — Reset Lockout

This is a management operation code that resets a lock in lockout mode due to excessive unauthorized attempts to operate the lock with invalid operation codes or bank user PIN codes. This code will not open the lock.

4.3.5 — Revoke Dispatcher

This is a management operation code that transfers the identity of a subcontractor system to the lock's table to prevent the subcontractor from performing any subsequent operations at the lock. This code will not open the lock. Reinstating the revoked dispatcher requires an "Add Dispatcher" command.

4.3.6 — Add Dispatcher

This is a management operation code that resets the privileges of a subcontractor system that was previously revoked with the "Revoke Dispatcher" code. This code will not open the lock.

4.3.7 — Un-install Lock

This is a management operation code that returns the lock to its default Bank Operating Mode. Once this operation code is successfully performed, no new Service Mode operations are possible until the lock is initialized for Service Mode again.

4.3.8 — Using the Duress Alarm Feature

The optional Duress Alarm Module must be connected to the lock and your alarm system for this feature to work. A duress alarm is sent by entering a valid 5-digit PIN and entering the 4th PIN digit twice, followed by any valid operation code. If your PIN is 1234 and your operation code is 12345678, you would enter 12344# 12345678#. This would send a duress signal and store duress events in both the touch key audit trail and lock audit trail.

4.3.9 — Download Audit Log with Manager Key

This is a management operation code that downloads the audit log of the lock. This code does not open the lock. The lock's entire audit log (up to 400 events) is transferred to the touch key for uploading and reporting to the Lock Management System.

Example

    Step 1 Insert the Manager touch key into the touch key reader
    Step 2 Input the Manager four-digit PIN code and press the # key
    Step 3 Input the Manager eight-digit PIN code (supplied by the LMS software) and press the # key
    Step 4 The yellow LED and iButton icon turn on during processing of code. This will remain on during the transfer of the audit trail data. This step takes approximately 15 seconds.
    Step 5 At successful completion, the lock's green LED will flash and emit three beeps
    Step 6 Remove the touch key from the reader

4.3.10 — Set Clock Calendar

⚠️ Please note that time must be entered in standard time format.

This is a management operation code that resets the clock calendar setting inside the lock. This code operates under specific parameters detailed in the Lock Management System instructions. When this code is used, the lock will derive date information from the management touch key. However, the time must be input through the keypad by the user. The time should be set in HHmm format based on a 24-hour clock, where HH = hours and mm = minutes. The time to be set should be the local standard time at the lock location. This code will not open the lock.

Example

    Step 1 Insert the Manager touch key into the touch key reader
    Step 2 Input the Manager four-digit PIN code and press the # key
    Step 3 Input the Manager eight-digit PIN code (supplied by the LMS software) and press the # key
    Step 4 The yellow LED and iButton icon turn on during processing of code
    Step 5 At successful completion, the lock's green LED will flash and emit three beeps
    Step 6 User inputs new time on keypad in HHmm format and presses the # key
    Step 7 The lock's green LED will flash and emit three beeps
    Step 8 User inputs time on keypad (HHmm) and presses the # again to confirm
    Step 9 The lock's green LED will flash and emit three beeps
    Step 10 Remove the touch key from the reader

4.3.10.1 — Set Clock Calendar (No Key)

⚠️ Please note that time must be entered in standard time format.

This is a management operation code that resets the clock calendar setting inside the lock. This code operates under specific parameters detailed in the Lock Management System instructions. When this code is used, the lock will derive the date information from the code entered. However, the time must be input through the keypad by the user. The time should be set in HHmm format based on a 24-hour clock, where HH = hours and mm = minutes. The time to be set should be the local standard time at the lock location. This code will not open the lock.

Example

    Step 1 Input the four-digit PIN code generated by the software and press the # key
    Step 3 Input the eight-digit PIN code (supplied by the LMS software) and press the # key
    Step 4 The yellow LED and iButton icon turn on during processing of code
    Step 5 At successful completion, the lock's green LED will flash and emit three beeps
    Step 6 User inputs new time on keypad in HHmm format and presses the # key
    Step 7 The lock's green LED will flash and emit three beeps
    Step 8 User inputs time on keypad (HHmm) and presses the # again to confirm
    Step 9 The lock's green LED will flash and emit three beeps

5. PIN Code Verification Worksheet (Bank Mode)

Position	Description	Code Set? YES or NO	User Name/Initials
00	Programmer		
01	Manager		
02	Manager		
03	Manager		
04	Supervisor		
05	Supervisor		
06	Supervisor		
07	Supervisor		
08	Supervisor		
09	Supervisor		
10	User		
11	User		
12	User		
13	User		
14	User		
15	User		
16	User		
17	User		
18	User		
19	User		
20	User		
21	User		
22	User		
23	User		
24	User		
25	User		
26	User		
27	User		
28	User		
29	User/TDO Code (if enabled)		

APPENDIX A – Beep Patterns / Display Icons

Action / Description	Beep Response	Display Icon
Key Press	1 beep	----------
Lock Processing	--------------------	⌛
Penalty Time	2 BRAPs whenever key is pressed	----------
Time Delay	3 quick beeps at start of time delay 1 beep every 10 seconds during time delay -------------------- 10 quick beeps at start of opening window 2 beeps every 10 seconds during opening window	----------
Manager/Employee Mode	Lock enabled – 4 beeps Lock disabled – 2 low-tone beeps	----------
Dual Control Mode	First code entered – 4 beeps	----------
Lock Timed Out (programming)	--------------------	✖ 1002
Lock Programming – 11* Set Date	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Set Date Enter Code ------------------------- Enter Date MM/DD/YY / / ------------------------- Confirm Date MM/DD/YY / /
Lock Programming – 73* Set Date (legacy command)	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Set Date Enter Code ------------------------- Enter Date MM/DD/YY / / ------------------------- Confirm Date MM/DD/YY / /
Lock Programming – 12* Set Time	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Set Time Enter Code ------------------------- Enter Time HH:MM : ------------------------- Confirm Time HH:MM :

Action / Description	Beep Response	Display Icon
Lock Programming – 78* Set Time (legacy command)	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Set Time Enter Code ------------------------ Enter Time HH:MM : ------------------------ Confirm Time HH:MM :
Lock Programming – 13* Start Clock	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Start Clock Enter Code ------------------------ Enter 1 to Start Clock ------------------------ Enter 1 to Confirm
Lock Programming – 97* Display Time / Date	----------	10 / 26 / 18 14:20
Lock Programming – 03* Set DST Change Time	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	DST Change Time Enter Code ------------------------ Enter Change Time ------------------------ Confirm Change Time
Lock Programming – 04* Set DST Start	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	DST Start Enter Code ------------------------ Enter DST Start WW/DD/MM / / ------------------------ Confirm DST Start WW/DD/MM / /
Lock Programming – 05* Set DST End	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	DST End Enter Code ------------------------ Enter DST End WW/DD/MM / / ------------------------ Confirm DST End WW/DD/MM / /

Action / Description	Beep Response	Display Icon
Lock Programming – 06* Verify DST Settings	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	S: WW/DD/MM --------------------------- E: WW/DD/MM HHmm
Lock Programming – 10* Enable DST	5 beeps after valid Programmer Code is entered 3 beeps after each valid programming entry 1 BRAP after incorrect entry	Enable DST Enter Code --------------------------- Enter 1 To Start --------------------------- Enter 1 To Confirm

Action / Description	Beep Response	Display Icon
Lock Programming – 75* Add Code	5 beeps after valid authorization code is entered 3 beeps after position is entered 3 beeps after new code is entered 3 beeps after new code is entered / 1 BRAP if failed	Add Code Enter Auth Code -------------------------- Enter New Code Position -------------------------- Enter New Code -------------------------- Confirm New Code
Lock Programming – 76* Delete Code	5 beeps after valid authorization code is entered 3 beeps after position is entered 3 beeps after # is entered 3 beeps after # is entered / 1 BRAP if failed	Delete Code Enter Auth Code -------------------------- Enter Code Position -------------------------- Press # To Delete -------------------------- Press # To Confirm
Lock Programming – 22* or 33* Change Code	5 beeps after valid code is entered 3 beeps after new code is entered 3 beeps after new code is confirmed / 1 BRAP if failed	Change Code Enter Code -------------------------- Enter New Code -------------------------- Confirm New Code
Lock Programming – 32* Operating Mode	5 beeps after valid Programmer Code is entered 3 beeps after option is entered 3 beeps after option is confirmed / 1 BRAP if failed	Operating Mode Enter Code -------------------------- Enter New Mode # -------------------------- Confirm New Mode #
Lock Programming – 38* Duress	5 beeps after valid Programmer Code is entered 3 beeps after option is entered 3 beeps after option is confirmed / 1 BRAP if failed	Duress Mode Enter Code -------------------------- Enter Duress Option # -------------------------- Confirm Duress Option #

Action / Description	Beep Response	Display Icon
Lock Programming – 28* Audit Trail (Bank Mode)	5 beeps after valid Programmer code is entered 3 beeps after selection 3 beeps after selection / 1 BRAP if failed	Audit Download Enter Code ------------------------- # Events (1-6) ------------------------- Confirm (1-6)
Lock Programming – 47* Time Delay	5 beeps after valid Programmer code is entered 3 beeps after time delay is entered 3 beeps after time delay is entered / 1 BRAP if failed	TD Time Delay Enter Code ------------------------- Enter Time Delay (01-99) ------------------------- Confirm Time Delay (01-99)
Lock Programming – 48* Opening Window	5 beeps after valid Programmer code is entered 3 beeps after opening window is entered 3 beeps after opening window is confirmed / 1 BRAP if failed	TD Open Window Enter Code ------------------------- Enter Opening Window (01-99) ------------------------- Confirm Opening Window (01-99)
Lock Programming – 46* TDO Programming	5 beeps after valid Programmer code is entered 3 beeps after option is entered 3 beeps after option is confirmed / 1 BRAP if failed	TDO Set Type Enter Code ------------------------- Enter TDO Type (0-2) ------------------------- Confirm TDO Type (0-2)
Lock Programming – 83* Permanent TDO Disable	5 beeps after valid Programmer code is entered 3 beeps after option is entered 3 beeps after option is entered / 1 BRAP if failed	TDO Disable Enter Code ------------------------- Enter 1 to Disable TDO ------------------------- Enter 1 to Confirm
Display Serial Number – 90*	--------------	Lock Serial 25000123

Action / Description	Beep Response	Display Icon
Lock Programming – 45* Initialize	5 beeps after valid Programmer code is entered Yellow LED flashes (while reading touch key)	Enable Service Enter Code ------------------------ ⧗ ⓘ ----------------------------- ✓ 1001
Lock Programming – 54* Initialize	5 beeps after valid Programmer code is entered Yellow LED flashes (while reading touch key)	Enable Service Enter Code ------------------------ ⧗ ⓘ ----------------------------- ✓ 1001
Touch Key Required	Yellow LED flashes	
Successful Code Entry (Service Mode – management code)	Yellow LED flashes (while reading touch key)	✓ 1001
Service Mode Entry (8 digit operation code)	Yellow LED flashes (while reading touch key)	⧗ 🔓 ---------------------------- ✓ 1001
Service Mode Opening	Yellow LED flashes (while reading touch key)	⧗ ⓘ ----------------------------- ⧗ ⓘ 🔓 ----------------------------- ✓ 1001 641325 ‖‖‖‖‖‖‖‖‖
Display Time / Date – 97*	--------------	08/02/18 10:27
Service Mode Lockout (penalty lockout)	3 BRAPs	----------
Touch Key Security Bit Not Set	Yellow LED flashes (while reading touch key) ----------------------------- 1 BRAP	⧗ ⓘ ----------------------------- ✗ 1006

Touch Key Security Bit Not Set	Yellow LED flashes (while reading touch key) ---------------------------- 1 BRAP	

APPENDIX B – Error Codes

Result/Error Code	Description	Type
1002	Operation timeout	iButton
1003	Invalid touch key used	iButton
1004	Touch key header issue	iButton
1005	Touch key checksum error	iButton
1006	Touch key "unsecure"	iButton
1007	Owner block not found	iButton
1008	Unrecognized iButton/wrong iButton type	iButton
1009	General iButton error	iButton
1010	Touch key enable fail (during key enable)	iButton
1011	Touch key audit fail (during audit transfer)	iButton
1086	Blue dot reader not detected	iButton
1099	General lock/blue dot reader error	iButton
1100	General lock error	lock
1101	Set clock/calendar entry error	lock
1102	Set clock/calendar confirmation mismatch	lock
1103	Set clock/calendar canceled by user	lock
1104	Time/date not programmed	lock
1150	Penalty time	lock
1151	Service Mode lockout (LMS code required)	lock
1154	Error initializing into Service Mode	lock
1177	Already used operation code	lock
1186	Dispatcher has been revoked	lock
1196	Low battery lockout	lock
1199	OTC verification error/OTC not valid	lock

APPENDIX C – 1006/2006/3006 PivotBolt Specifications

Attaching Screws: Use only the screws provided with the lock. They must engage the mounting plate by at least four full threads. Do not use lock washers or thread sealing compounds.

Recommended Attaching Screw Torque: 30 to 40 inch-pounds (33.9 to 45.2 dNm)

Minimum Lock Cable (Spindle) Hole Diameter: 0.312 inch (7.9 mm)

Maximum Lock Cable (Spindle) Hole Diameter: 0.406 inch (10.3 mm)

Lock is Designed to Move: 0.0 lbs. (0 Newtons)

Lock Bolt Maximum Free Movement: 0.352 inch (8.95 mm); 0.109 inch outside the edge of the lock case

Maximum Bolt End Pressure: lock is designed to withstand at least 225 lbs. (1000 Newtons)

Maximum Bolt Side Pressure: safe and container boltwork or locking cam designs must never apply more than 225 lbs. (1000 Newtons) of side pressure on the lock bolt

Mounting Environment: The lock body is designed to be mounted inside a secure container. The container must be constructed to offer protection against physical attack directed at the lock. The amount of protection is dependent on the desired level of security for the system as a whole. Lock protection may include barrier materials, relock devices, thermal barriers, thermal relock components, or any combination of these. Relock device attaching screws must NOT be longer than the depth of the tapped hole provided in the lock case. A minimum distance of .150 inch (3.8 mm) is recommended between the end of the lock case and the closest approach of the safe's blocking bar or cam plate (which is normally blocked by the extended lock bolt). Maintaining this clearance will allow the lock to deliver optimum performance.

Code Restrictions: Personal data that can be related to a code holder, such as a birth date, street number, or phone number, should not be used in creating a lock code. Avoid codes that can be easily guessed (such as 1 2 3 4 5 6 or 1 1 1 1 1 1). The lock's factory default code must be changed to a unique, secure code when the lock is put into operation by the end user.

Note: Every installation of this product must comply with these requirements and those in the product installation instructions to qualify for the manufacturer's warranty and to comply with EN1300 requirements.

WARRANTY
A-Series with Display™ Electronic Safe Lock and Model 31KP Keypad Limited Warranty

Seller warrants that for two (2) years from the date of shipment from Seller's point of manufacture, the goods will be free from defects in material and workmanship, provided the goods are normally and properly used according to the Seller's written instructions.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. S&G DOES NOT WARRANT THAT THE GOODS ARE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE EXCEPT AS EXPRESSLY PROVIDED HEREIN.
Seller's entire liability and Buyer's exclusive remedy in the event that the goods do not conform to the foregoing warranty shall be Seller's repair or replacement of the goods (including payment of freight costs to and from point of manufacture).This warranty does not apply to batteries or damage from battery leakage.

SELLER SHALL HAVE NO LIABILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES. SELLER DOES NOT WARRANT ITS LOCK PRODUCTS TO BE IMPERVIOUS TO FORCIBLE OR SURREPTITIOUS ENTRY, AND SELLER SHALL HAVE NO LIABILITY FOR DAMAGE TO OR LOSS OF PROPERTY SOUGHT TO BE PROTECTED BY ANY SUCH LOCK.

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